

Ethnobotanical uses of Medicinal Plants of District Mastung Balochistan for Sore Throat, Cough and Fever

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ABSTRACT

The beneficial data is collected by interviewing the local residents of Mastung district Balochistan. Mastung is situated in the north west of the Balochistan. The city is bordered with Quetta in north. The famous mountains of Mastung are Chiltan, Ammach, Zehrigut. The beneficial study revealed that the Most common families were *Labiatae* (6 sp), *Asteraceae*, *Moraceae*, *Zygophyllaceae*, *Compositae*, *Piperaceae* (2/2 sp), While 1/1 plant of *Cupressaceae*, *Rutaceae*, *Umbliferae*, *Verbenaceae*, *Cruciferae*, *Papilionaceae*, *Anacardiaceae*, *Gramineae*, *Apiaceae*, *Rhamnaceae*, *Zingiberaceae*, *Lauraceae*, *Rosaceae*, *Myrtaceae*, *Solanaceae* were used to treat sore throat and cough by the native people. The study was conducted to record the indigenous knowledge of some endangered and critically threatened plant species collected from various areas of Mastung.

Keywords: Ethnobotany, Fever, Medicinal Plants, Sore Throat.

INTRODUCTION

Geographically Balochistan covers the area of about 3.49.190 sq kms (43.6%) and it is the largest province of Pakistan by area that represents only 5% of total population of country. Balochistan is considered as the Fruit basket of Pakistan. (Anonymous, 1997). It is a land of contrast as 50% areas are mountainous, it also has fertile and canal irrigating land. Climate of Balochistan is generally semi-arid to arid (Ahmad and Islam, 2012) with low rain fall. The mountains of Balochistan are rich in mines like copper, gold, coal, graphite, Sui gas and chromate etc. The province is also rich in wild species of plants that have ethnobotanical uses. (Haider *et al.*, 2018).

A lot of work has been done in the field of ethnobotany. Human beings always depend on plants of various purposes like medicines, food, livestock and fuel etc. Wild plants are being used by the local communities to cure and treat various ailments, and minimize the higher risks of chronic diseases like flu, fever and inflammation etc. (Rayan *et al* 2020)

Currently various useful and most prevailing drugs were obtained from medicinal plants. Medicinal plants are returning to protected upland areas. Women have to walk long distances to find medicinal plants or they go into Chiltan National Park. The park guards are local people who allow villagers to go into the park for plants and seasonal hunting. (Tahira *et al.*, 2014).

OBJECTIVES

Following objectives were investigated

1. To evaluate the ethnobotanical uses of medicinal plants of District
2. To study the Influence of excessive use of medicinal plants in terms of species endangerment.

MATERIALS & METHODOLOGY

The beneficial data is collected by interviewing the local residents of Mastung district Balochistan. The data was collected through recorded interviews, Questionnaire, personal observations and rapid appraisal approach.

RESULTS

A total of 31 plant species belonging to 21 families were examined for medicinal uses.

Labiatae was found to be the most dominant family used for sore throat, cough and fever. The roots and leaves were mainly used by the local communities.

Interview Material

1.

Gender: Female

Age: 104 years

Local name: Izbotk

Botanical name: *Eclipta alba*

Family: *Asteraceae*

Part use: Seed

How to use: Extract the juice from the seeds for high fever.

Method 2. Take a half-cooked tortilla and spread grinded seeds with mustard oil on to it. After that it is tied up on the head of the patient. At morning it is taken down, but it must be cured that the patient should not be exposed to wind and cold breeze.

2.

Gender: Female

Age: 46 years

Local name: Anjeer, Unab, Doda

Botanical name: *Fucus carica, Ziziphus jujuba, Papaver somniferum*

Family: *Moraceae, Rhamnaceae, Papaveraceae,*

Part use: Fruit

How to use: take the fruits and boil it thoroughly. Put a small piece of brown sugar (gurh) into it and then drink it. It is beneficial for fever and cough

3.

Gender: Female

Age: 72 years

Local name: Hapurhs

Botanical name: *Juniperus excelsa*

Family: *Cupressaceae*

Part use: Fruit

How to use: Two to three ripe fruits are taken orally for headache and fever.

4.

Gender: Female

Age: 59 years

Local name: Karhkawa

Botanical name: *Fagonia bruguieri*

Family: *Zygophyllaceae*

Part use: Flowers

How to use: Flowers are soaked in water all night (this process is known as ISTARI in local languages). The syrup is strained and drunk at morning, this process is continued for many days.

5.

Gender: Female

Age: 67 years

Local name: Ganderum

Botanical name: *Haplophyllum tuberculatum*

Family: *Rutaceae*

Part use: Flowers, Leaves, Root

How to use: Mix all parts together, boil and strain them and then drink. This procedure is followed once a time per day and repeated for one week. Very useful in fever and stomach problems.

6.

Gender: Female

Age: 62 years

Local name: Pehun phulli

Botanical name: *Matricaria chamomilla*

Family: *Asteraceae*

Part use: Flowers and leaves

How to use: Boil in water, strain and then drink. Used for high fever.

7.

Gender: Female

Age: 58 years

Local name: Gwatk

Botanical name: *Zosima absinthifolia (heracleum absinthifolium vent)*

Family: *Umbeliferae*

Part use: Aerial parts

How to use: Dried the aerial parts, grind them very well and make powder. This powder is soaked in water. Use the mixture two times per day (morning and evening). Use the medicine till the symptoms will not disappear.

8.

Gender: Female

Age: 47 years

Local name: Guanick

Botanical name: *Vitex agnus-castus L.*

Family: *Verbenaceae*

Part use: Seeds

How to use: Seeds are husked and the outer covering is removed and make a paste, than put a small piece of candied sugar (Misri). Take 1 spoon early morning before breakfast and 1 spoon after noon, repeat the procedure for 3 days at least.

9.

Gender: Female

Age: 53 years

Local name: Purchenk

Botanical name: *Mentha longifolia*

Family: *Labiataeae*

Part use: Leaves

How to use: Leaves are crushed and mixed with a small amount of water. Take juice and add some sugar and used 3 times per day for stomach diseases, lung diseases and chest infections.

10.

Gender: Male

Age: 64 years

Local name: Gul gider

Botanical name: *Ostostegia persica*

Family: *Labiataeae*

Part use: Aerial parts

How to use: Aerial parts are dried and mixed in the mustered oil and massage on the body. This procedure should continue for one week.

11.

Gender: Female

Age: 40 years

Local name: Talkha

Botanical name: *Centaurea repens L.*

Family: *Compositeae*

Part use: Leaves, Flowers, Shoot

How to use: Fresh/dried parts are boiled in water, strained and cold. Half glass of extract should use in morning and half glass at evening for fever and stomach diseases.

12.

Gender: Female

Age: 68 years

Local name: Roosh

Botanical name: *Sisymbrium leoselii L.*

Family: *Cruciferae*

Part use: Seed

How to use: crushed the seeds and add a small piece of candied sugar (Misri), then mixed it into the water. It is quite beneficial for chest infections.

13.

Gender: Female

Age: 39

Local name: Siah mirch

Botanical name: *Piper nigrum*

Family: *Piperaceae*

Part used: Seeds

How to use: boiled with green tea and drunk.

14.

Gender: Female

Age: 35 years

Local name: Khwazdar

Botanical name: *Glycyrrhiza glabra*

Family: *Papilionaceae*

Part use: Root

How to use: Suck the roots juice or chew roots for throat infections.

15.

Gender: Female

Age: 47 years

Local name: Gwan Guanjick

Botanical name: *Pistacia khinjik stocks*

Family: *Anacardiaceae*

Part use: Seed gum

How to use: Gum+ flour+ candied sugar mix these ingredients and inhale it. But be careful that the patient should not be exposed to air.

16.

Gender: Female

Age: 73 years

Local name: Matetaw

Botanical name: *Salvia cabulica Benth*

Family: *Labiatae*

Part use: Leaves

How to use: Dry leaves are boiled in water very well and on cold strained and drunk. Used for lung diseases, sore throat and asthma.

17.

Gender: Female

Age: 43

Local name: Boi Madran

Botanical name: *Achillea wilhelmsii.C.*

Family: *Compositae*

Part used: Flowers, Stem, Leaves

How to use: Flowers are soaked in water and drunk two to three times per day.

18.

Gender: Male

Age: 55

Local name: Kalpura

Botanical name: *Teucrium stocksii anum*

Family: *Labiatae*

Part used: Leaves, Stem, Flowers

How to use: Boil in water and add a piece of gurh (Brown sugar) in it. Used for fever and digestive disorders.

19.

Gender: Female

Age: 77

Local name: Izghand

Botanical name: *Zataria multiflora Boiss*

Family: *Labiatae*

Part used: Aerial parts

How to use: All parts are soaked in water and the mixture is strained and drunk for high fever and cough and cold.

20.

Gender: Female

Age: 46

Local name: Simsok

Botanical name: *Nepeta juncea Benth*

Family: *Labiatae*

Part used: Stem and leaves

How to use: Stem and leaves are boiled in water very well for at least 30 minutes, when dense, the mixture is strained and give the patient at night for lung infections, chest problems and fever.

21.

Gender: Female

Age: 82

Local name: Hadval

Botanical name: *Andropogon jawarancusa* Jones.

Family: *Gramineae*

Part used: Upper parts

How to use: Upper parts of plants are boiled in water and the patient inhales the vapors. This procedure is followed once and twice per day for one week to get relief from fever and flu.

22.

Gender: Female

Age: 49

Local name: Shahtoot

Botanical name: *Morus nigra*

Family: *Moraceae*

Part used: Fruits

How to use: Fruits are used orally for cough, sore throat and chest infections

23.

Gender: Female

Age: 66

Local name: Ajwain

Botanical name: *Thymus serpyllum*

Family: *Apiaceae*

Part used: Fruits

How to use: Ajwain and brown sugar are boiled in water and take saps slowly two times per day. It is used to relief from sneeze and cold.

24.

Gender: Female

Age: 73

Local name: Unab

Botanical name: *Ziziphus jujuba*

Family: *Rhamnaceae*

Part used: Fruits

How to use: Fruit are boiled in water with a small piece of brown sugar and then drunk.

25.

Gender: Female

Age: 53

Local name: Bhalla phota

Botanical name: *Amomum sabulatum*

Family: *Zingiberaceae*

Part used: Seeds and Fruits

How to use: Mixed with green tea and boiled very well. It is used for cough.

26.

Gender: Female

Age: 64

Local name: Darchini

Botanical name: *Linnamomum zeylanicum*

Family: *Lauraceae*

Part used: Bark

How to use: Boiled in water and add brown sugar (gurh) in it than drunk.

27.

Gender: Female

Age: 79

Local name: Behedana

Botanical name: *Cydonia vulgaris*

Family: *Rosaceae*

Part used: Seeds

How to use: Boiled in water and added a small piece of gurh in it, useful for fever and typhoid.

28.

Gender: Female

Age: 51

Local name: Lwang

Botanical name: *Eugenia coryophyllata*

Family: *Myrtaceae*

Part used: Fruits

How to use: Boiled the fruits with green tea and then drunk for throat infection and sneeze.

29.

Gender: Female

Age: 39

Local name: Siah mirch

Botanical name: *Piper nigrum*

Family: *Piperaceae*

Part used: Seed

How to use: Boiled with green tea and drunk.

30.

Gender: Female

Age: 48

Local name: Gurgundick

Botanical name: *Tribulus longipetalus Viv*

Family: *Zygophyllaceae*

Part used: Fruits

How to use: Ripe fruits are grind to get a fine powder and used as snuff. Two or three applications per day are usually considered sufficient, but it can be used whenever needed.

31.

Gender: Female

Age: 74

Local name: Bartang

Botanical name: *Solarium incunum L*

Family name: *Solanaceae*

Part used: Seeds

How to use: Ripe seeds are boiled in water and then drunk intended for malaria fever.

CONCLUSION

The mountains of Balochistan are rich with medicinal plants and these plants are using by local people of the area. This study provides basis for the conservation of the local flora, its use as food and medicine. It also provides various socio-economic dimensions associated with the common people.

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