

STUDY ON TRADITIONAL THERAPY OF RURAL PEOPLE FROM SELECTED TALUKAS OF BANASKANTHA DISTRICT, NORTH GUJARAT

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ABSTRACT

Now the traditional Indian system of medicine can be broadly classified into the empirical forms of folk medicine which are village based, region-specific, indigenous herb based, local resources based and in many cases, community-specific. The other system called the Shastriya stream which includes the Ayurveda, Siddha and Yunani systems of medicine is more complicated and elaborate with theoretical and research findings. An ethno botanical survey of major ethnomedicinal plants was carried out in the study area, their knowledge and use by the local people was determined. Data was obtained through the use of interviewer administered questionnaires, distributed at random to the traditional people as the target respondents. Research shows that 35 various plant species from 21 families to have medicinal value. The leaves are predominantly used for the treatment of the various ailments. Decoction is the major mode of preparation for the cure of cough, kidney ailments, and stomach disorders such as diarrhea, ulcers and related ailments. In Banaskantha district, documentation of the claimed medicinal plants by local communities will not only provide a baseline data but also unlock opportunities for the discovery and development of new and less expensive plant-based medicines.

Keywords: *Ethno-Medicinal, Banaskantha*

INTRODUCTION

Tribal people have traditional knowledge of plant species used for different purposes such as food, beverages, colours, resins, gums and medicine. This knowledge was even passed through generation to generation and played an important role in the conservation and sustainable use of biodiversity. They also have knowledge about in situ conservation of numerous plant resources in the form of sacred groves. Plant-based traditional medical systems continue to provide the primary health care to more than three quarters of the world's population.

The World Health Organization has estimated that over 80% of the global populations rely chiefly on traditional medicine (Akerle, 1992). Indigenous herbal treatment is a part of the culture and dominant mode of therapy in most of the developing countries. These traditional phytoremedies with a considerable extent of effectiveness are socially and economically accepted. Still, one-third of the modern pharmaceutical preparations have botanical origin. International trade on medicinal plants is therefore increasing rapidly mainly as a result of intensified adoption of crude extracts for self medication by the general public in the developed countries. It was officially recognized that 2500 plant species have medicinal value while over 6000 plants are estimated to be explored in traditional, folk and herbal medicine (Huxley, 1984).

MATERIALS AND METHODS

Study Area

Banaskantha is one among the twenty-six districts of the Gujarat state of India. The administrative headquarters of the district is Palanpur is also a largest city. The District is surrounded by Marwad and Sirohi regions of Rajasthan State in the north, Sabarkantha District in the east, Mehshana District in the south and Patan District in the west. Border of Pakistan touches the desert. The main rivers in the district

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are Banas, Saraswati River and Sipu. Strategically, Banaskantha District is of much importance because of its sensitive borders. Being a border State of Gujarat, Banaskantha's problems demand urgency from military view point.

Banaskantha District includes the area around the Bank of Banas river. The District is situated between 23°33' to 24°45' north latitude and 72°15' to 73°87' east longitude. The Geographical area of the Banaskantha district is 12,70,300 Hect. The district has 12 talukas with 1250 villages namely (1) Palanpur (2) Deesa (3) Dantiwada (4) Danta (5) Vadgam (6) Amirgadh (7) Dhanera (8) Tharad (9) Vav (10) Bhabhar (11) Diodar (12) Kankrej. Among the twelve talukas we have selected 3 taluka viz Vadgam, Amirgadh and Danta for ethno-medicinal studies.

Data Collection

The extensive survey was conducted during the period of 2013 to 2015. The data were collected through questionnaires, discussions among the tribal people. The information on useful plant species, parts used, local names and mode of utilization was collected. Use of medicinal plants were obtained from local community by knowing name of plants, parts used, method of plant collection and method of use etc. Collected medicinal plants were identified by standard manual (Cooke, 1901-1908; Shah, 1978). The sorted information on ethno medicinal knowledge of tribal inhabitants is tabulated alphabetically by botanical names of plants, name of the family, vernacular names in Gujarati, habit, parts used and uses that includes medicinal purpose.

RESULTS AND DISCUSSION

A total of 35 plant species belonging to 33 genera and 21 families are identified as medicinal plants growing in cotton, maize and ground nut crop field. Which may be used by local people, of which 33 species and 2 species belonging to dicotyledonae and monocotyledonae respectively. Papilionaceae and Asteraceae were the most dominant family which is used by local communities to cure various diseases. Mostly herb species were used as various purposes like viz. Cough, fever, jaundice, asthma, wounds and skin diseases etc. by local people.

1) *Trianthema portulacastrum* L.

Local Name: Satodo

Family: Aizoaceae

Part Used: Whole Plant

- ↪ Used as spinach, good diuretic.
- ↪ The root applied to the eye cures corneal ulcers, itching, dimness of sight and night blindness.
- ↪ The plant has been used in the obstruction of the liver asthma, amenorrhoea, dropsy, edema, ascites and beri-beri.

2) *Launaea procumbens* (Roxb.) Ram. & Raj.

Local Name: Moti Bhonpatri

Family: Asteraceae

Part Used: Whole plant

- ↪ The plant is grinded in water along with candy (*Misri*) and is given orally for painful micturation.
- ↪ The forage used for cattle is believed that it acts as galactagogue.

3) *Tridax procumbens* L.

Local Name: Pardesi Bhangro

Family: Asteraceae

Part Used: Leaf

- ↪ Leaf juice is applied to cure cuts and wounds. Paste of leaves is applied in case of eczema and boils.
- ↪ Spoonful of leaf extract is given at every morning for fifteen days to remove urinary bladder stone.
- ↪ It is also used in diarrhoea and dysentery.
- ↪ Leaf extracts were known to treat infectious skin diseases.

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4) *Vernonia cinerea* (L.) Less.

Local Name: Sahadevi

Family: Asteraceae

Part Used: Root, Leaf

- ↪ A root piece is tied on the head in the form of cap to get sound sleep.
- ↪ Decoction of leaves is given in fever and insomnia.
- ↪ The plant is a tonic, flowers cure fever and conjunctivitis; seeds used as anthelmintic.
- ↪ Decoction of roots, about half cup, is given once a day for diarrhoea.
- ↪ Roots are wrapped in black cloth and tied on wrist for seven days to cure high- temperature in fever.

5) *Tribulus terrestris* Linn.

Local Name: Bethu- Gokhru

Family: Zygophyllaceae

Parts Used: Plant

- ↪ 10 gm dried fruit powder is taken orally with water twice a day to cure urinary diseases specially Haematuria. The powder is also effective for promotion of urination and as a nerve tonic.
- ↪ The powdered root and dried fruit are used in preparation of tonic and given with milk to cure weakness.
- ↪ Take 5 gm powder prepared by grinding the dried whole plant, add some honey and take orally everyday in the morning to dissolve stone in kidney.

6) *Evolvulus alsinoides* L.

Local Name: Kali Shankhavali

Family: Convolvulaceae

Parts Used: Whole plant

- ↪ Take 10gm powder prepared by crushing whole dried plant with milk, once a day, to improve memory power. It is used as a “brain tonic”.

7) *Leucas cephalotes* (Roxb. ex. Roth)

Local Name: Dosino Kubo

Family: Lamiaceae

Parts Used: Leaves

- ↪ The whole plant is boiled in water and the steam (vapour) is inhaled to relive influenza fever.
- ↪ The juice of fresh leaves is given to cure cough.

8) *Andrographis echioides* (L.) Ness.

Local Name: Kariyatu

Family: Acanthaceae

Parts Used: Leaves

- ↪ The juice of fresh leaves mixed with a small amount of sugar is taken orally to cure fever and acidity.

9) *Hibiscus sabdariffa* L.

Local Name: Khati Bhindi

Family: Malvaceae

Parts Used: Seeds and inflorances part

- ↪ The juice of fresh seeds is taken to cure leucorrhoea.
- ↪ The fresh calyx and epicalyx part are taken to increase heamoglobin content in blood.

10) *Chrotolaria retusa* L.

Local Name: Gughro

Family: Papilionaceae

Parts Used: Leaves and stem bark

- ↪ The juice of fresh leaves is taken orally to cure Leucorrhoea and urine with bleeding.

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11) *Cleome viscosa* L.

Local Name: Pili Tilvan

Family: Capparaceae

Parts Used: Leaves

↪ Juice of leaves is poured in ears for infection, pain and defness.

↪ Leaves are coated with sesamum oil and warmed over fire, which are applied over pain and inflammation of the boils.

↪ The boiled water of leaves is applied over bleeding piles.

↪ Seeds are macerated into paste and are applied over ringworm.

12) *Cleome gynandra* L.

Local Name: Safed Tanmani

Family: Capparaceae

Parts Used: Seeds

↪ Seed decoction is given orally twice a day in dysentery of children.

13) *Portulaca oleracea* L.

Local Name: Motiluni

Family: Portulacaceae

Parts Used: Whole Plant

↪ It is used for vegetable salad.

↪ Leaves are used to treat insect or snake bites on the skin.

14) *Portulaca suffruticosa* Wt.

Local Name: Nani Luni

Family: Portulacaceae

Parts Used: Whole plant

↪ It is used locally as an anti-hemorrhagic, diuretic and remedy for bums and skin diseases.

15) *Triumfetta rotundifolia* Lam.

Local Name: Zipti

Family: Tiliaceae

Parts Used: Leaves

↪ Leaves are used for piles and dysentery.

16) *Indigofera linnaei* Ali.

Local Name: Bhonygal

Family: Papilionaceae

Parts Used: Whole plant

↪ Plant is used in febrile eruptions and amenorrhea. The seeds are nutritive.

17) *Tephrosia purpurea* (L.) Pers.

Local Name: Sarpankho

Family: Papilionaceae

Parts Used: Root

↪ The root piece chewed and the juice is swallowed slowly once daily only to relieve gaseous problem and to cure abdominal pain.

18) *Sesbania bispinosa* (Jacq.)W. F.Wight.

Local Name: Ikad

Family: Papilionaceae

Parts Used: Root

↪ The root paste is applied on wounds to remove fotid smell and push.

19) *Alysicarpus longifolius* W. & A.

Local Name: Ghodasamervo

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Family: Papilionaceae

Parts Used: Leaves

↪ Paste is used in the treatment of skin eruptions of children.

20) *Desmodium triflorum* (L.) DC.

Family: Papilionaceae

Parts Used: Leaves

↪ Extract of leaves is given orally against diarrhoea and dysentery.

21) *Cassia occidentalis* L.

Local Name: Sundro

Family: Caesalpiniaceae

Parts Used: Leaves

↪ Leaves are boiled in tea is given for body pain.

↪ It is given to cattle for promotion of milk (lactagogue).

22) *Cucumis callosus* (Rottl.) Cogn.

Local Name: Kothimdu

Family: Cucurbitaceae

Parts Used: Fruit

↪ The ripened fruit is cut into pieces and dried, which is used as a condiment in cooking vegetables especially in carrot, acts as mild laxative.

23) *Borreria articularis* (L. f.) F.N. Will.

Local Name: Ganthiyu

Family: Rubiaceae

Parts Used: Leaves

↪ Paste of the leaves is applied on sores.

24) *Bidens bipinnata* L.

Local Name: Batakaniyu

Family: Asteraceae

Parts Used: Whole plant

↪ The decoction of root is given to cure Jaundice.

↪ The paste of fresh leaves or root is applied on boils and inflammation.

25) *Parthenium hysterophorus* L.

Local Name: Gajar Gas

Family: Asteraceae

Parts Used: Leaves

↪ Leaves juice is given orally in neuralgia and dysentery and it is given orally as a tonic.

26) *Trichodesma indicum* (L.) R. Br.

Local Name: Undha Fuli

Family: Boraginaceae

Parts Used: Leaves, Flowers

↪ 5 gm leaves and flowers are boiled in water and slightly sweetened with honey which is given in flue and cough to cure.

27) *Cressa cretica* L.

Local Name: Bokno

Family: Convolvulaceae

Parts Used: Whole plant

↪ The whole plant is crushed in water with few black pepper and candy (*Misri*) and obtained mixture few days to cure chronic fever and jaundice disease.

↪ Paste of the leaves is applied on sores.

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↪ The plant is good fodder for camel.

28) *Ipomoea pes-tigridis* L.

Local Name: Wagpadi

Family: Convolvulaceae

Parts Used: Leaves

↪ Leaves juice is given orally in neuralgia and dysentery and it is given orally as a tonic.

29) *Physalis minima* L.

Local Name: Sar Popata

Family: Solanaceae

Parts Used: Leaves

↪ The juice of fresh leaves is given to cure cough.

30) *Bacopa monnieri* (L.) Pennell

Local Name: Jalnaveri

Family: Scrophulariaceae

Parts Used: Whole plant

↪ The whole plant crushed in water with few black pepper and is given as blood purifier.

31) *Pedaliium murex* L.

Local Name: Ubhu Gokharu

Family: Pedaliaceae

Parts Used: Leaves

↪ Leaf extracts were known to treat infectious skin diseases.

↪ Decoction of leaves is given in fever and insomnia.

32) *Phyla nodiflora* (L.) Greene.

Local Name: Ratvelio

Family: Verbenaceae

Parts Used: Leaf

↪ Leaves are boiled with water for 5-10 minutes, then such warmed leaves spread over affected areas on the face. Repeat two or three times a day to cure infection and inflammation due to acne.

33) *Leucas aspera* (Willd.) Spr.

Local Name: Kubo

Family: Lamiaceae

Parts Used: Whole plant

↪ Decoction of leaves is given orally in fever twice a day.

↪ The plant is crushed in little quantity of water, when it turned into a paste then it is applied on inflamed parts to relieve pain and inflammation.

34) *Echinochloa colonum* (L.) Link.

Local Name: Samo

Family: Poaceae

Parts Used: Whole plant

↪ Decoction of leaves is given in fever and insomnia.

↪ The seed is cooked as a food.

35) *Cyperus cyperoides* (L.) O. Ktze.

Family: Cyperaceae

Parts Used: Whole plant

↪ Traditionally, it has been in use for wound healing, as anticoagulant, antifungal and insect repellent.

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