

Ethnobotanical Approach of Abdominal and Digestive Disorders in Children

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ABSTRACT:

Man has over time depended on plants for survival, particularly for food and medicinal purposes. Children are more susceptible to viral, bacterial, and fungal infections due to their low immune systems. Respiratory disorders, liver, urinary, and kidney disorders, gastrointestinal problems, dental-related anomalies, ear and nose throat (ENT) diseases, and eye infections are some of the common diseases that occur in children across the world.

The present study conducted in Parner Tehsil villages aims to identify and document the medicinal plants traditionally used to manage abdominal and digestive disorders in children by tribal communities like Thakar, Pardhi, and Bhill. More than 45 plant species are used in such disorders. Forty-five plants belonging to twenty-four families were documented along with their medicinal use in treating children's abdominal and digestive diseases e.g. *Acorus calamus* (AC) Linn. rhizome paste used for abdominal and gastric disorders. Information on various recipes was also documented, including their preparation, parts used, administration, and dosage. There is still the need for researchers to explore this vital information through scientific validation of the claim of the indigenous people.

Key-Words-Children, Ethnobotany, gastrointestinal, Thakar, Pardhi and Bhill, etc

INTRODUCTION

Man has over time depended on plants for survival, particularly for food and medicinal purposes. He acquired the knowledge of the usefulness of plants by trial and error and passed on the information from generation to generation and in our environment mostly without documentation. As, a result most of the Indigenous knowledge is lost over time. Note that the knowledge of useful as well as harmful plants becomes accumulated (Bassey et al, 2011). These medicines are safe and environmentally friendly. According to the WHO, about 80% of the world's population relies on traditional medicine for their primary health care (Behera, 2006). Phytotherapy seems to be an alternate system of medicine for the villagers residing in sub-urban/ rural areas (Nandan Kunjdam, 2006). A large number of plants are being used as medicinal agents all over the world (Chowdhury, et al., 2005). Limitations of synthesized compounds in treating chronic diseases and the potential of plant-based medicine as a more effective and cheaper alternative were probably responsible for the fast-growing industry of herbal medicine (Rojas et al., 1992).

India is endowed with a rich wealth of medicinal plants. Of the 340 plant medicines mentioned in the Charak Samhita (1000 B.C.), The Indian Pharmacopoeia (1966) recognizes only 85 medicinal plants used in various pharmaceutical preparations. Most of these continue to be gathered from the wild to meet the demand. The tribal depend on different

herbs for their treatment. The fieldwork documented about forty-five plant species used against stomach disorders and as digestive disorders in children by three different tribes, the Bhil, Thakar, and Pardhi of Parner Tehsil. Some of these have been known for ages for their medicinal properties, while, others have been recorded for the first time amongst these people. Some of the plants are reported to be in their wild state and others are domesticated. Natural products have been applied to human healthcare for thousands of years. Many drugs presently prescribed by physicians are either directly isolated from plants or are artificially modified versions of natural products (Wang, et al., 2007).

Now there is an urgent need to have a better knowledge of our medicinal plants to save them from extinction and for our health needs. Plants against stomach troubles and abdominal disorders are a common class of phytomedicines used in traditional health care systems. Artichoke Leaf, Turmeric, Banana Powder, caraway, chamomile, dill, fennel, etc., have been found useful in the treatment of dyspepsia (indigestion) and as carminatives (<http://www.jigsawhealth.com/nat.aspx?&chunkiid>). Powdered carom seeds and aniseeds are used by medicine men of Himachal Pradesh against stomach troubles (Bhasin, 2008). Inflorescence of *Typha angustata* Borey and Chaub. is used by medicine men of Ratnagiri, Maharashtra for the same purpose (Mokat and Deokule, 2006). *Begonia thomsonii* A. DC for diarrhoea by the Reang people of Tripura (Shil and Dutta Choudhury, 2009).

FIELD INTERVIEWS

Before starting the ethnobotanical study, contacts were made with various offices (District administration, tourism, culture, agriculture development, traditional healers, and health affairs) to seek permission and to carry out the study. The present study was conducted from March 2022 to December 2023. 16 informants were interviewed using a questionnaire to obtain indigenous knowledge of children diseases in Parner Tehsil. The ethnobotanical data was collected from different villages of Parner Tehsil. A questionnaire was mainly focused on the ethnobotanical claims and traditional beliefs of native communities and nearby people. The record questionnaires used included two sections. Section 1 dealt with personal information including age, gender, and educational background. Section 2 was about their practice including the following information: (1) the vernacular name of the plants, (2) plant part/s used for therapeutic value, (3) the way of preparation of various recipes, (4) the nature of plant material, (5) relative abundance at the area, (6) habitat of the plant species, (7) mode of application, and (8) medicinal uses of a particular plant.

Interviews were performed in the local language. Research articles, books, and relevant web pages were also studied to accumulate data on phytochemical compounds present in the plants.

The present survey was conducted on tribal villages' communities belonging to the Parner Tehsil, Ahmednagar district of Maharashtra state. Various traditional phytomedicinal remedies used by these people against Abdominal and Digestive Disorders in children have been studied. The remedies for stomach troubles are used against dysentery, blood-dysentery, diarrhoea, dyspepsia, stomachache, jaundice, worms (anthelmintic), constipation, and as carminative and stomachic. The same plant has been, in many cases, found to be used for several symptoms while some others are disease-specific.

Materials and Methods

Field surveys have been undertaken to gather information on each species useful in tribal medicine. Plants have been collected in their flowering and fruiting stage as far as possible from the natural habitat and serially tagged with collection numbers. Thorough observations have been made on the spot collection of individual plant species and field data recorded as regards location, natural habitat, distribution pattern, nature of roots, tubers, bulbs or rhizomes, etc.

The characteristic features, that cannot be observed after drying the specimen, such as colour and scent in the case of flowers and fruits, etc., are recorded on the spot. Smaller herbaceous plants have been collected as a whole and in the case of shrubs, under shrubs, woody herbs, and climbers, respective twigs have been collected.

Methodologies as suggested by Schultes (1960 and 1962), and Jain (1964, 1967, 1987, 1989) have been followed using a collection of information on ethno-medical-botanical aspects. Information on medicinal plants has been collected mainly from the medicine men, village headmen, and aged, and experienced people. Queries have been made repeatedly, occasionally asking for help from interpreters for confirmation of data on each medicinal plant. For identification of the plants collected, several Floras and Monographs have been consulted, such as Flora of British India (Hooker, 1872-1897) Flora of Marathwada (V.N. Naik) Flora of Ahmednagar (Sing and Pradhan.)

Medicinal plants of Parner Tehsil. District Ahmednagar Maharashtra State used by local inhabitants for abdominal in children diseases.

1. Botanical Name-*Abrus precatorius* L.

Family- Fabaceae

Local Name- Gunj

Habit- Shrub

Plant Part Used-Leaves

Mode of Utilization- Juice

Rout of application-Juice is given in diarrhoea, dysentery, and flatulence of children, and as vermifuge (one teaspoonful twice or thrice daily for three days).

2. Botanical Name-*Acalypha indica* Linn.

Family- Euphorbiaceae

Local Name- Indian Copper, Kuppi, Khokali

Habit- Herb

Plant Part Used- Leaves

Mode of Utilization- Paste

Rout of application- Leaves paste given to children orally for worm treatment, Anthelmintic

3. Botanical Name-*Acacia nilotica* L.Corr.

Family- -Mimosaceae

Local Name- -Babhul

Habit- Tree

Plant Part Used- -Gum, Leaf.

Mode of Utilization- Gum, Paste

Rout of application) 5gm gum is dissolved in 1 cup of water and given orally in the morning on an empty stomach for 3 days to cure dysentery. ^[11]

2) About 2ml leaf bud paste mixed with a pinch of dried rhizome powder of *Zingiber officinale*. It is given with water orally twice a day for 2-3 days to cure diarrhoea ^[11]

4. Botanical Name-*Acorus calamus* Linn

Family- Acoraceae/Aracaceae

Local Name- Vekhand, Bajho.

Habit- Perennial herb

Plant Part Used- -Rhizome.

Mode of Utilization- Paste

Rout of application- Rhizome paste (1-2gm) with water and honey is given orally thrice a day for 2-3 days to cure diarrhoea and gastric disorder.

5. Botanical Name-*Achyranthes aspera* Linn

Family- Amaranthaceae

Local Name- Aghada

Habit- Herb

Plant Part Used- Root, Leaf

Mode of Utilization- Infusion

Rout of application- 1. Infusion of root given orally for abdominal distension.

2. The leaves are crushed or ground with paw-paw leaves and mixed with water and filtered and 200ml is given as an enema. ^[4]

6. Botanical Name-*Aegle marmelos* (L.) Corr.

Family-Rutaceae.

Local Name-Bel.

Habit-Tree

Plant part Use-Leaf, green, and ripe fruit.

Mode of Utilization-Pulp

Rout of application- 1) Powder of dried green fruit pulp with water is given orally for 3 days to treat dysentery (Patil) and diarrhoea.

2) Ripen fruit pulp is mixed with water and juice is prepared and given orally for 7-8 days constipation ^[11]

7. Botanical Name-*Aerva javanica* Juss.

Family-Amaranthaceae

Local Name-Desert Cotton

Habit-Herb

Plant part use-Aerial parts.

Mode of Utilization-Infusion

Rout of application- Half cup of infusion given orally before lunchtime for stomach disorders

8. Botanical Name-*Ageratum conyzoides* L.

Family- Asteraceae

Local Name -Osadi.

Plant part use-Whole plant

Mode of Utilization-Extract, Leaf Juice

Rout of application- 1) Plant extract 5 ml with a pinch of common salt is given twice a day for dysentery for two days 2) Leaf juice 5 ml is given for stomach pain. ^[14,15]

9. Botanical Name- *Aloe vera* (L.) Burm

Family-Liliaceae

Local Name- Korphad; Kumari

Habit-Herb

Plant part use-Leaf

Mode of Utilization-Leaf mucilage

Rout of application-1. It is an effective remedy for intestinal worms and Diarrhoea in children. ^[10]

2. Externally the juice is rubbed around the navel to open the bowels in young children.

10. Botanical Name- *Andrographis paniculata* (Burm.f.) Wall.ex Nees

Family-Acanthaceae

Local Name- Kalmegh

Habit-Herb

Plant part use- Whole plant

Mode of Utilization-Decoction

Rout of application- 1. The decoction is given orally as vermicide to children (one teaspoonful once daily for three days) for stomachache, and diarrhoea ^[3].

2. Decoction given for summer diarrhoea. Khare

11. Botanical Name- *Aristolochia indica* Linn.

Family-Aristolochiaceae

Local Name- Indian Birthwort, Badakphull, Gurudakkodi.

Habit-Creeper herb

Plant part use- Root

Mode of Utilization-Decoction

Rout of application- Decoction of root is orally administered for abdominal distension.

12. Botanical Name- *Asparagus racemosus* Willd.

Family- Liliaceae

Local Name- Shatavari.

Habit-Herb

Plant part use-Root

Mode of Utilization-Juice

Rout of application- Root juice about 20ml with water is used daily for 2-3 days to cure blood dysentery. Mulay

13. Botanical Name- *Azadirachta indica* A. Juss.

Family-Meliaceae

Local Name- Kaduneem

Habit-Tree

Plant part use- Bark

Mode of Utilization-Decoction

Rout of application- Half a cup of bark decoction is used orally to kill intestinal worms.

14. Botanical Name- *Bacopa monnieri* (L.) Penn.

Family- Scrophulariaceae.

Local Name- Nir-brahmi,

Habit-Herb

Plant part use- Leaf

Mode of Utilization-Fresh juice

Rout of application- A fresh leaf juice 10 ml (5 ml for children) - twice a day orally to constipation.
[14,15,17]

15. Botanical Name-*Butea monosperma* (Lam) Taub.

Family-Fabaceae

Local name- Palas

Habit-Tree

Plant part use- Fruit

Mode of Utilization-Extract

Rout of application- Extract with milk infusion given orally for Intestinal worms in children. (Patil)

2. Children aged 4 to 12 are given 20 to 30 milliliters of bark extract once a day for three days for intestinal worms. Mokat.

16. Botanical Name-*Carica papaya hook*

Family-Caricaceae

Local name- Papaya

Habit-Monopodial softwood tree

Plant part use- Fruit.

Mode of Utilization-Juice.

Rout of application- Juice of fruit administered orally for constipation.

17. Botanical Name-*Cassia fistula* Herb. ex Olive.

Family-Leguminosae/Caesalpinaceae

Local name-Bahawa, Amaltaas

Habit-Tree

Plant part use- Fruit, Flower

Mode of Utilization-Pulp, Powder, Decoction.

Rout of application- 1) A small amount of fruit pulp with water is given orally to cure abdominal pain.
Shabnam Shaheen

2) Half a spoon of fruit pulp mixed in mother milk and given to infants orally for constipation.

3) Fruit powder with water is given to children orally for constipation⁽¹²⁾

4) 2 spoonfuls of flower decoction mixed with sugar and given for abdominal pain.

18. Botanical Name-*Carum copticum* (L.) Link

Family-APIACEAE

Local name-Ajwain, Owa

Habit-Herb

Plant part use- Seeds,

Mode of Utilization-Infusion, oil, paste

Rout of application- 1. Infusion of seeds administered orally for abdominal distension.

2. Administrative three drops of oil extracted from seeds to treat the gastrointestinal disorder.

3. Ajwain-kaphool treats for stomachache.^[11]

4. Apply the paste of ajwain on the stomach.

19. Botanical Name-*Centella asiatica* (L.) Urb.

Family-Apiaceae

Local Name-Brahmi, Mandukaparni,

Kariwana.

Habit-Herb

Plant part use- Leaves

Mode of Utilization-Juice

Rout of application -Leaf juice 5 ml twice daily for 2-3 days used orally to cure dysentery, diarrhoea, and constipation, [3,14,15]

2) Leaf infusion is given for Dysentery and constipation.

3) Juice from macerated leaves given for constipation.^[27]

20. Botanical Name- *Chenopodium album* L.

Family- Chenopodiaceae

Local Name- Chakawat.

Habit-Herb

Plant part use- Tender twig

Mode of Utilization-Juice

Rout of application- Uses: 1) 5-10 ml juice of tender twigs with a few ml of honey is given empty stomach in the morning for 3-4 days to kill and expel intestinal worms. [14,15]

21. Botanical Name-*Cissampelos mucronata* A. Rich

Family- Menispermaceae

Local Name-Dhakti Padwal, Lahan Padwal, Pahadmul.

Habit-Climber

Plant part use- Root

Mode of Utilization- Squeeze

Rout of application- Root is crushed and squeezed with water and one cup of water is given to children (milk feeding) orally for diarrhoea.

22. Botanical Name-*Citrullus colocynthis* (L.) Schrad

Family- Cucurbitaceae

Local name-Indrayan

Habit-Perennial herb

Plant part use- Fruit

Mode of Utilization- Fruit powder

Rout of application- 1) Dried fruit ground to make powder mixed with water and given orally to cure Dysentery Constipation Intestinal worms [12]

2) Dried fruit ground to make a powder and mixed with *Trachyspermum copticum* seed powder then made the paste and a tablet for dysentery, intestinal worms, and constipation. [22]

23. Botanical Name-*Coriandrum sativum* L.

Family- Apiaceae

Local Name-Coriander

Habit- Herb

Plant part use- Leaves

Mode of Utilization-Infusion

Rout of application–6 spoons of infusion are given at lunchtime orally to cure dysentery.

24. Botanical Name-*Cordia africana* Lam

Family-Boraginaceae

Local name- Sudan Teak

Habit- Small to medium-sized evergreen tree

Plant part use- Root bark

Mode of Utilization- Squeeze

Rout of application- Root bark is crushed squeezed with water and given orally to children (milk feeding) for diarrhoea.

25. Botanical Name-*Cucumis melo* Blanco

Family-Cucurbitaceae

Local name-Kharbuj, Chimbuda

Habit- Herb

Plant part use- Peel Fruit

Mode of Utilization- Powder

Rout of application- (1) Dried peel is ground to powder and given with honey (2) Fruit is given twice a day orally for constipation.

26. Botanical Name- *Cuminum cyminum*. Linn

Family-APIACEAE

Local name-Cummin, Jeera

Habit- Herb

Plant part use- Seeds

Mode of Utilization- Powder

Rout of application -Fried powder of seed mixed with lemon juice and sugar and administered orally for diarrhoea.

27. Botanical Name- *Curcuma domestica* Valetton

Family-Zingiberaceae

Local name- Haladi, Singanga

Habit- Herb

Plant part use-Rhizome

Mode of Utilization- Paste

Rout of application - About 10 gm of fresh rhizome paste is given orally to small children to cure intestinal worms.^[25]

28. Botanical Name-*Ferula asafoetida* Linn.

Family- Apiaceae

Local name-Hing

Habit- Herb

Plant part use- Rhizome, Root

Mode of Utilization- Powder, Paste

Rout of application- 1) Stir and dissolve in water and apply on & around the umbilicus.

2) 1 gm Hing fried in ghee with buttermilk

twice a day applied externally for abdominal pain² especially in children or infants.

3) Especially in children or infants where there is abdominal distention this is very helpful.

29. Botanical Name-*Ficus carica* L

Family-Moraceae

Local name-Anjeer

Habit- Tree

Plant part use- Fruit

Mode of Utilization- Fruit

Rout of application- 4–5 Fruits are given twice a day orally for constipation.

30. Botanical Name-*Ficus racemosa* L.

Family- Moraceae

Local name- Umber

Habit- Tree

Plant part use-Stem bark

Mode of Utilization- Paste

Rout of application- Stem bark paste in a mother's milk is given to a small child to cure diarrhoea and indigestion. Soumit Behara

31. Botanical Name-*Ficus sycomorus* L

Family-Moraceae

Local name-Fig-mulberry, sycamore

Habit- Tree

Plant part use- Root

Mode of Utilization- Crushed root.

Rout of Application-Root is crushed, and soaked in water and one cup is given to children (milk feeding) orally for diarrhoea.

32. Botanical Name-*Foeniculum vulgare* Hill

Family-Apiaceae

Local name-Fennel, Badishep

Habit- Herb

Plant part use- Fruit, seed

Mode of Utilization- Powder.

Rout of application-(1) Small amount of cooked fruit ground into powder mixed in milk and given to infants (2) half cup of decoction is given orally for Bellyache Dysentery Indigestion ^[12]

3) The fennel ark is used for stomach ache & indigestion.

4) Relief from constipation. ^[11]

33. Botanical Name-*Glycyrrhiza glabra*, Linn

Family-Fabaceae

Local name-Jesth-Madh

Habit- Herb

Plant part use- Root and Rhizome

Mode of Utilization- Fine powder.

Rout of application- Triturated with water and apply over the abdomen for abdominal distention and diarrhoea^[2]

34. Botanical Name- *Helicteres isora* L

Family- Sterculiaceae

Local name- Murud sheng.

Habit- Large shrub

Plant part use- Root, stem bark.

Mode of Utilization- Decoction

Rout of application -1) 5 ml Decoction of bark and pods once a day is effective for diarrhoea.

2) 3 ml, bark decoction twice a day is for asthma and cough.

3) Useful in the gripping of bowels and flatulence of children, [¹¹]

35. Botanical Name- *Hemidesmus indicus* (L.) Schult.

Family- Asclepiadaceae

Local name- Anantamul.

Habit- A perennial twine

Plant part use- Root

Mode of Utilization- 1) Root extract of about 5 ml is given twice a day for 2-3 days to treat diarrhoea.

2) Root decoction 5-10ml was given twice for two days to treat dysentery. [^{14,15}]

36. Botanical Name- *Jatropha curcas* L.

Family- Euphorbiaceae

Local name- Mogali erand

Habit- shrub or small tree

Plant part use-Leaf, stem latex

Mode of Utilization- Latex

Rout of application- 3-4 drops of latex are given along with sugar for 2-3 days to treat blood dysentery.

37. Botanical Name- *Lawsonia innermis* L

Family-Lythraceae

Local name-Heena, Mehendi

Habit- Shrub

Plant part use- Leaves

Mode of Utilization- Infusion

Rout of application- Half teaspoon Infusion of leaves given orally for diarrhoea.

38. Botanical Name- *Manihot esculanta* Crantz

Family-Euphorbiaceae

Local name-Cassava, Yuca, Shakarkand

Habit- Shrub

Plant part use- Leaves

Mode of Utilization- Juice.

Rout of application-15 ml leaves juice is given orally for Stomachach.

39. Botanical Name- *Mentha spicata* L.

Family-Lamiaceae

Local name-Mint, Pudina

Habit- Herb

Plant part use- Leaves

Mode of Utilization- Powder, Decoction

Rout of application-(1) 1 spoon of powder mixed in one cup of green tea and given.

(2) half cup decoction is given orally once a day for diarrhoea, to kill Intestinal worms. ^[12]

40.Botanical Name- *Mimosa pudica* L.

Family- Mimosaceae

Local name- Lajalu

Habit- Herb

Plant part use-Root

Mode of Utilization- Juice

Rout of application-2-3ml root juice with 10-20ml of water given twice a day for 2-3 days to treat blood dysentery. ^[14,15]

41.Botanical Name- *Momordica charantia* L.

Family-Cucurbitaceae

Local name-Bitter gourd, Karela

Habit- Herb

Plant part use- Seeds

Mode of Utilization- Powder

Rout of application- Seeds are ground to powder then one teaspoon is given with sugar orally to kill Intestinal worms ^[12]

42. Botanical Name- *Myristica fragrans* Houtt., Jatiphala)

Family-Myristicaceae

Local name-Nutmeg, Jaiphal

Habit-Tree

Plant part use- Seed, seed coat, oil.

Mode of Utilization-Paste

Rout of application- 1) Giving jaiphal paste with milk or water to the baby may prove to be beneficial for his tummy. ^[11]

2. A pinch of powder or fruit rubbed on a clean surface with milk or water should be given 3-4 times a day for diarrhoea in children 1

43.Botanical Name- *Nigella sativa* L.

Family-Ranunculaceae

Local name- Black seed or Black cumin

Habit- Herb

Plant part use- Seeds, Stem

Mode of Utilization- Decoction

Rout of application- Adding the seed into boiled water, add a small amount of sugar to the decoction, cool, and drink a teaspoon of the solution during abdominal pain.

44. Botanical Name- *Ocimum sanctum* Linn. (Black)

Family-Lamiaceae

Local name-Tulsi, Holy Basil

Habit- Herb

Plant part use- Leaves

Mode of Utilization- Juice

Rout of application- Juice of leaves administered for indigestion.

45. Botanical Name-*Oxalis corniculata* L.

Family-Oxalidaceae

Local name-Ambushi, Cangeri

Habit- Herb

Plant part use- Leaves, Whole plant.

Mode of Utilization- Extract

Rout of application-1. The whole plant is boiled with buttermilk.

2. Extracting a handful of green leaves and tender shoots in sheep's milk is given twice a day for 5-6 days for indigestion, diarrhoea, and dysentery ^[12].

3. 5 ml juice of aerial shoots with a pinch of common salt is given twice a day for 2-3 days to treat blood dysentery.

46. Botanical Name-*Phyllanthus fraternus* Webster

Family-Euphorbiaceae.

Local name- Bhui awala.

Habit- Herb

Plant part use-Whole plant

Mode of Utilization- Juice

Rout of application-: 1) Plant juice 7-10 ml is given once a day for 2-3 days to treat dysentery. ^[14,15]

2) Root powder with black pepper is taken with water to cure amoebic dysentery and diarrhoea in children. ^[25]

47. Botanical Name-*Piper nigrum* Beyr. ex Kunth

Family-Piperaceae

Local name- Black Pepper, Kali meeri

Habit- Herb

Plant part use-Seeds

Mode of Utilization- Powder

Rout of application- Half teaspoon of powder mixed with honey and given orally for diarrhoea ^[12]

48. Botanical Name-*Plantago ovata* Forssk.

Family-Plantaginaceae

Local name-Ispaghol

Habit- Herb

Plant part use-Seeds

Mode of Utilization- Soaked

Rout of application- Seed and husk soaked in water given orally for dysentery and constipation ^[12]

49. Botanical Name-*Psidium guajava* L.

Family-Myrtaceae

Local name-Guava

Habit- Small tree

Plant part use-Fruit

Mode of Utilization- Powder

Rout of application-1) Fruit is given orally for constipation ^[2,12]

2) A few tender leaves are boiled in 100 ml water till the water quantity becomes half, 10 ml decoction is given twice a day to treat diarrhoea. ^[14,15]

50. Botanical Name-*Punica granatum* L.

Family-Punicaceae

Local name-Anar, Dalimb, Pomogranate

Habit- Shrub

Plant part use-Fruit, Peel

Mode of Utilization- Juice

Rout of application- Fruits are given or squeezed to obtain juice and given twice a day for dysentery ^[12]

51. Botanical Name-*Pyrus malus* L.

Family-Rosaceae

Local name-Apple

Habit- Tree

Plant part use-Fruit

Mode of Utilization- Fruit

Rout of application- Fruit is given, as they needed for stomachache and dysentery ^[22]

52. Botanical Name-*Ricinus communis* L

Family-Euphorbiaceae

Local name- Castor, Erand

Habit- Shrub

Plant part use-Leaf, Seed

Mode of Utilization- Oil

Rout of application- Half a spoon of oil mixed with mother milk and given to infants orally for abdominal pain ^[12]

53. Botanical Name-*Syzygium cumini* (L.) Skeels

Family-Myrtaceae

Local name- Jamun

Habit- Tree

Plant part use-Fruit, Leaf

Mode of Utilization- Fruit, Leaf juice

Rout of application- 1) Fruits are given orally thrice a day for dysentery ^[22]

2) 5 ml of leaf juice with a pinch of common salt is given twice a day for 2-3 days to treat blood dysentery.

54. Botanical Name-*Tamarix aphylla* (L.) H.

Karst

Family- Tamaricaceae

Local name Athel pine

Habit- Tree

Plant part use-Leaves

Mode of Utilization- Decoction

Rout of application-1 cup of decoction with 2 spoons of honey given for dysentery^[12]

55. Botanical Name- *Thuja occidentalis* L.

Family- Cupressaceae

Local name White Cedar

Habit- Tree

Plant part use-Fruit

Mode of Utilization- Decoction

Rout of application- Half a cup of decoction is given with black pepper once a day for dysentery, and constipation^[12]

56. Botanical Name- *Trigonella foenum-graecum* L.

Family- Fabaceae

Local name- Fenugreek, Methi

Habit- Herb

Plant part use-seeds

Mode of Utilization- Powder

Rout of application- 1 teaspoon of powder with sugar given to children for dysentery^[12]

57. Botanical Name- *Withania coagulans* Dunal

Family- Solanaceae

Local name- Paneerbooti

Habit- Herb

Plant part use-seeds

Mode of Utilization- soaked seeds

Rout of application-2, 3 seeds soaked in mother milk, and after 1 hour milk is given to infants for abdominal pain and gas trouble^[12]

Result and Discussion-

Today according to the World Health Organization (WHO), as many as 80% of the world's people depend on traditional medicine for their primary healthcare needs. There are considerable economic benefits in the development of indigenous medicines and in the use of medicinal plants for the treatment of abdominal diseases. Ethnobotany is not new to India because of its rich ethnic diversity. In developed countries, 25 percent of medical drugs are based on plants and their derivatives. The plant parts used for the treatment of child abdominal diseases in this review 57 plants were found to be roots followed by leaves, fruits, and seeds used by tribals for abdominal diseases like gastritis, stomachache, dysentery, diarrhoea in which the leaf and root were the dominant plant parts used and the common route of administration was through orals.

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