

The study of plants used by primitive and aboriginal people of Koshi Region of Bihar (India)

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Abstract:-

The term ethnobotany is the systematic study of the relationship between plants and people. It includes study of plants used by the primitive and aboriginal people. Poor and marginalized, who cannot afford or access formal health care systems, are especially dependent on these culturally familiar, technically simple, financially affordable and generally effective traditional medicines. As such, there is widespread interest in promoting traditional health systems to meet primary health care needs. The people living in scattered small villages of Koshi Region (Bihar) do not have any means of travelling to a hospital and they depend thoroughly on these medicinal plants and herbs for medication.

Keywords: Ethnobotany, Gynecological, Constipation, Koshi region, Traditional medicine and Medicinal Plant.

Introduction:-

Plants are used for their medicinal and economic properties since ancient times of human civilization. About 80% of the world depend on herbal based alternative system of medicine. Primitive man observed and appreciated the great diversity of plants available to him. An estimated 70,000 plants (including the lower plants) are used in medicine.

The first evidence of the use of medicinal plants as a health care system comes from China (2800 BC). The Chinese system depends 5757 plants listed in the Encyclopedia of Traditional Chinese Medicinal Substances. Japanese and Korean systems of medicine also include a large number of medicinal herbs.

Indian Ayurveda utilizes about 2000 plants to cure different ailments. Ayurveda originated from Atharva Veda and vedic era is considered to be the time when Ayurveda flourished as a medical science.

It is estimated that around 1000 BC, two principle text of Ayurveda, Charaka Samhita and Sushruta Samhita were composed. Chakra and Sushruta are respected names in the fields of medicine and surgery.

In the Early Vedic period (beginning with the entrance of the Vedic religion into South Asia about 1500 BC), several kingdoms existed in the plains of Bihar. North of the Ganges was Videha, one of the kings of which was the father of Princess Sita, the wife of Lord Rama in Ramayana, one of the two great Hindu epic poems of India. During the same period, the capital of the ancient kingdom of Magadha was Rajagriha (now Rajgir), about 45 miles (70 km) southeast of Patna; to the east was the kingdom of Anga, with its capital at Campa (near Bhagalpur). A new kingdom later arose in

southern Videha, with its capital at Vaishali. By about 700 BCE, the kingdoms of Vaishali and Videha were replaced by a confederacy of the Vrijji—said to be the first republican state known in history. It was in Magadha, in the 6th century BC, that the Buddha developed his religion and that Mahavira, who was born at Vaishali, promulgated and reformed the religion of Jainism.

The cultural regions of Bihar show a close affinity with the linguistic regions. Maithili is the language of old Mithila (the area of ancient Videha, now Tirhut), which is dominated by orthodoxy and the Maithil Brahman way of life. Maithili is the only Bihari language with a script of its own, called Tirhuta, and a strong literary history; one of the earliest and most celebrated writers in Maithili was Vidyapati (15th century), noted for his lyrics of love and devotion.

The study is based on Koshi region of Mithilanchal. Koshi region is a flood prone area and every monsoon the river overflows and the resources are depleted. In spite of this fact, there are still many medicinal plants that are used since a very time by the locals. The people living in scattered small villages do not have any means of travelling to a hospital and they depend thoroughly on these medicinal plants and herbs for medication.

Approximately 80% of the village population depend on traditional herbal medicine for primary healthcare as plant and plant based medication in the base of many of the today's pharmaceutical drugs used for various ailments. In India almost 95% of medications are plant based formulations from the traditional system of Ayurveda, Homeopathy and Siddha and their associate material largely depended on wild harvested plants.

In the villages of Saharsa, Supaul, Madhepura district of Bihar, Women are using medicinal plants to cure gynecological problems. Gynecology is a branch, which deals with the treatment of ailments among rural women for example abortion, menstrual trouble, menopause syndrome, morning sickness, leucorrhea, anti fertility, delivery problem, etc. Socio economic conditions force many women's seek abortion. In countries where abortion is illegal or where the health system can't provide sufficient care, women are left with option of inducing abortion.

According to WHO 'The health care of women is Crucial'. Women who live in hamlets economically and educationally very poor. Generally pregnant women of rural areas prefer a skilled village midwife to gynaecologist for delivery. It is not possible for them to go to the healthcare and multispecialty centers for lack of financial resources.

Methodology

The survey was conducted in 11 villages of Saharsa and Supaul districts of Bihar (India) like Panchgachhiya, Nawahatta, Sukhpur, Parsarma, Barail, Rahua, Bangaon, Bharauli, Mahishi, Kandaha and Chainpur. Ethnomedicinal information were collected from the field during the flowering and fruiting periods of 2011-2013. Traditional healers and knowledgeable persons were interviewed. Their knowledge regarding medicinal use of herb for application in different ailments were asked. While noting ethnobotanical information, every care was taken to record local names of the plants, parts used, method of drug preparation and uses. Photographs were taken for each specimen not only to confirm the taxonomic identification but also for future specimen record. The specimens were identified with the help of local flora (Hense, H.H. Botany vof Bihar and Orissa).

Result

Mostly people of remote area mainly depend on plants for the remedy from different diseases. However for some diseases like diabetes, blood pressure people of town area also utilise medicinal plants. Use of medicinal plants varies in different area . A particular plant is used for the remedy of different diseases in different area while different plants are used for the same disease.

Serial No.	Botanical name of the plant	Local name	Family	Medicinal use
01.	<i>Dalbargia sisoo</i>	Sisham	Pepilionaceae	Diarrhea and Dysentery
02.	<i>Eclipta proastrata</i>	Bhringi jhar	Compositae	Asthma, Scorpion sting and Jaundice.
03.	<i>Mimosa pudica</i>	Boohari jhar	Mimosaceae	Piles and Constipation
04.	<i>Azadirachta indica</i>	Neem	Meliaceae	Antiseptic, Antiviral, Eczema and Ulser
05.	<i>Argemone mexicana</i>	Pilikantaya	Papaveraceae	Syphilis, Tapeworm, Skin disease
06.	<i>Aegle mormelos</i>	Bel	Rutaceae	Dysentery, Diarrhea and Antibacterial
07.	<i>Embilica officinelis</i>	Amla	Euphorbiaceae	Toothache, Sore, Fever, Anemia and Hair problem
08.	<i>Euphorbia hirta</i>	Dudhi	Euphorbiaceae	Worms, Breast pain and Asthma
09.	<i>Ziziphus maurintiana</i>	Bair	Rhamnaceae	Diarrhea and Dysentery
10.	<i>Ipomoea batatas</i>	Shakarkand	Cunvolvulaceae	Urinary discharge, Skin problem
11.	<i>Ipomoea carnea</i>	Behaya	Convovulaceae	Antiseptic
12.	<i>Aloe Vera</i>	Ghrit kumari	Liliaceae	Liver and Spleen enlargement, Skin and Uterine problem
13.	<i>Ficus bengalensis</i>	Bargad	Moraceae	Leucorrhoea, Dysentery,

				Diarrhea and Diabetes
14.	<i>Calotropis procera</i>	Aak	Asclepiadaceae	Constipation, Loss of appetite and Dyspepsia
15.	<i>Chenopodium album</i>	Bathwa	Chenopodiaceae	Digestion and Stomach problem
16.	<i>Achyranthes</i>	Ulta chirchiri	Amarantaceae	Strengthen uterus, Snake bite, Dyspepsia and Gonorrhoea
17.	<i>Rauwolfia serpentine</i>	Sarpgandha	Apocynaceae	CNS disorder and RBC count
18.	<i>Mentha arvensis</i>	Pudina	Labiatae	Rheumatism, Diuretic and Antiseptic
19.	<i>Ocimum tenuiflorum</i>	Tulsi	Labiatae	Diaphoretic in Malarial fever, Eosinophils and viral Encephalitis

List of some common Medicinal plants in Koshi Region of Bihar (India)

Altogether 9 plants were recognised for the ailment of Gynaecological problems. Gynaecology is an important branch which deals with the treatment of ailments among women for example abortion, menstrual trouble, menopause syndrome, morning sickness, leucorrhoea, anti fertility, delivery problem. In rural areas of Koshi region mostly women are suffering from reproductive system disorder, respiratory diseases, dysentery, and diarrhea figure prominently among the causes of death. Cholera and malaria seldom occur and smallpox and bubonic plague have been eradicate.

Almost every woman suffers from one or the other gynaecological problem in her lifetime. Mostly, the cases are mild and are treatable, but some can be severe and lead to complications, such as affecting the fertility and even the quality of life. However, timely doctor visits and keeping your health in check can prevent several disorders. Women who live in hamlets economically and educationally very poor. Generally pregnant women of rural areas prefer a skilled village midwife to gynaecologist for delivery. It is not possible for them to go to the healthcare and multispecialty centers for lack of financial resources. The list of plants which are frequently used by local people of Koshi Region of Bihar (India) for the remedies of Gynaecological problems:

1. *Aloe vera* : It is used in absence of menstrual period in reproductive age.
2. *Asparagus racemosus* : It is used in white vaginal discharge and pelvic pain.
3. *Boerhaavia diffusa* : It is used in abnormally prolonged menstrual period.
4. *Beta vulgaris* : It is also used in abnormally prolonged menstrual period.
5. *Curcuma longa* : It is used in white vaginal discharge and pelvic pain.
6. *Foeniculum vulgare* : It is used in absence of menstrual period in reproductive age.
7. *Ficus glomerata* : It is used in abnormally prolonged menstrual period
8. *Mangifera indica* : It is used in white vaginal discharge and pelvic pain.
9. *Saraka ashoka* : It is used in abnormally prolonged period.
10. *Trigonella foenum* : It is used in abnormally prolonged menstrual period and thick white yellowish vaginal discharge.

Conclusion

Koshi region of Bihar has a large number of valuable medicinal plants naturally growing mostly in fragile ecosystems that are predominantly inhabited by rural poor and indigenous communities. The sustainable management of these traditionally used plants not only help conserve nationally and globally important biodiversity but also provide critical resources to sustain livelihoods. Selection of medicinal plant species for cultivation is an initial important step for the development of the medicinal plants sector. Medicinal plants sector can be improved if the agricultural support agencies would come forward to help strengthen the medicinal plants and interest of farmers, supportive government policies, assured markets, profitable price levels, access to simple and appropriate agro techniques, and availability of trained manpower are some of the key factors for successful medicinal plants cultivation.

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