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Himalayan Medicinal Plants Used For The Treatment Of Respiratory Disorders.

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Abstract:-

The present study documented the traditional knowledge of medicinal plants which is used for the treatment of respiratory disorders like asthma,respiratory tract infections in Himalayas by various tribal peoples. The present study is based on the literature survey from various sources like internet sources,reserch articles,journels and various data collected from locals inhabitants. It provides comprehensive knowledge About the use of plants and their various parts for the treatment of respiratory disorders like asthma etc-Medicinal uses of 22 plant species along with their botanical names, plant family, part used, mode of administration and distribution of the plants in India were documented.In Sanskrit, asthma is known as Svasaroga, Svasa means "breathing in and out," and roga means "disease." According to the ancient Ayurvedic text, the Charak Samhita, there are five types of Asthma: Mahasvasa, Urdhvasvasa, Chinnasvasa, tamakasvasa and Ksudrasvasa. Amongst these 5 kinds first 3 aren't curable. 'Tamak-shwas is controllable and is difficult to remedy. The ultimate one is curable.

Keywords:-Medicinal plants, Middle Himalayas,Respiratory Disorders,Asthma, tribes.

INTRODUCTION

In today's daily routine, it is likely to fall ill, and the habits are disease prone. Traditional medicines are still recognized as preferred primary health care system in many communities. Around 60% of the world's population and about 80% of the developing countries directly depends upon medicinal plants for medical purposes. The use of plants to cure several kinds of diseases has a long history. Most of the pharmaceutical's products, now-a-days, dispensed by physicians have a long history of using herbal medicines (Dash et al. 2018). Latest medicines today, uses compounds isolated from higher plants and around 80% of these compounds specify a positive inter-relationship between the modern therapeutic uses and the traditional uses. According to WHO (World Health Organization) Asthma is the most common chronic disease among children worldwide. More than 339 million people are living with asthma. Over 80% of asthma-related deaths occur in low-andlower-middle income countries. Treatment and effective management of asthma can save lives (Agarwal 1981). The synthetic drugs available in market are not cost-friendly toeveryone. So, attempt is just to find a way for cheaper and inexpensive treatment.

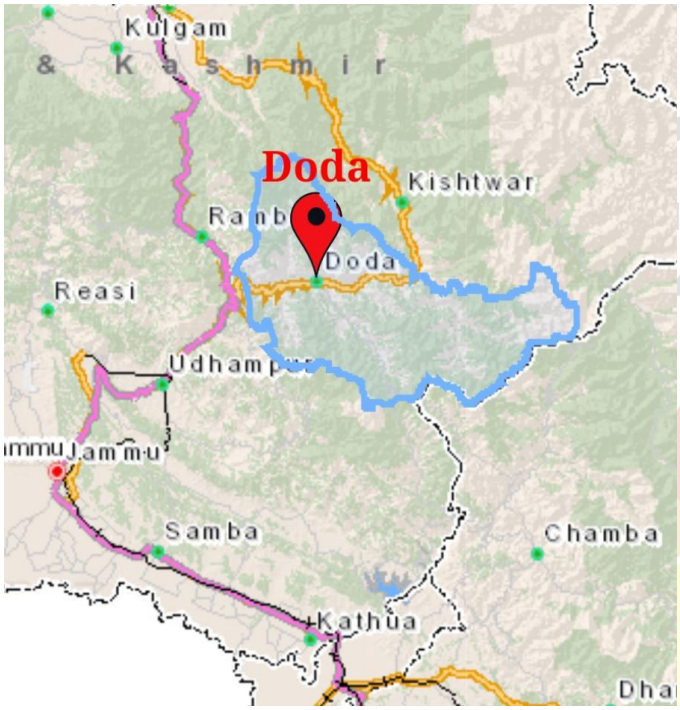
MATERIALS AND METHODS

Study Area:- Himalaya, being located at the bio-geographically vital position,consists of a unique biotic province in the northwestern extreme of the Himalayan range The region lies between coordinates 32o 17F to 37o20F North latitude and 73o 25F to 80o 30F Eastlongitude spreading over an area of about 2, 22, 235 km2 (Hussain, 2002). Comprised of rugged terrain mostly, except for small plains of Jammu and Valley of Kashmir, broadly four categories of biogeographic Biomes are recognized: Tundra, Alpine, Temperate an Subtropical (Rodgers & Panwar, 1988). Owing to the vast variety of edapho-climatic and physiographic factors, flora of the Kashmir Himalayas encompasses divergences of continental scale (Kant,1989).

Vegetation mainly constitutes of subtropical elements in the lower reaches, temperate in the middle valleys and dry temperate to alpine in the cold desert region (Singh et al., 1998). Geologically, the region is a recent formation richly endowed with almost all the time scale systems (de Terra, 1934). Soils are mostly loamy with little clay content. Diverse terrain zonations due to topological factors such as orography, altitude, relief and moisture patterns result into varied climatic changes from subtropical to subarctic. Whereas Jammu province receives annual precipitation up to 1700 mm through the south-west monsoon, the Valley of Kashmir receives about 1050 mm, mostly in the form of winter snow. The formidable walls of Trans-Himalayan ranges completely prevent rain clouds into the interior valleys of Ladakh causing Holarctic climate with bare minimum precipitation of 100 mm per annum. The Indus and its tributaries, including the Jehlum and the Chenab drain the region. Glaciers and lakes also represent drainage system conspicuously; lakes such as the Tso Morari and Wular are on the Ram Sar list.

Data Recording(Search Stretegy):-

A systematic review of medicinal plants used to treat respiratory disorders in Himalayan regions was conducted. The data for this review were collected from different published articles such as downloading them from web sources of, Science direct, Google scholar, and other related web sites following . Accordingly, studies reporting on medicinal plants used for traditional respiratory disorder treatment in Himalayan regions were gathered through different search approaches such as the Google search engine for published journal articles using international scientific databases including , Science Direct, Web of Science, and Google scholar.Survey was done in different rural areas of Himalayas particularly Doda lying in the Middle Himalaya and outer Himalayan ranges of Jammu regions of Jammu and Kashmir UT.It is located in the southern western (Punjab) Himalayas (the western segment of the vast Himalayas mountain range) on the Chenab River. Agriculture and mining are important in the surrounding area, which also contains stands of deodar pine. Pop. (2001) The district is surrounded



by **district Anatnag** of Kashmir Division on its North, district Kishtwar in the North-East, Chamba area of Himachal pardesh in the South, district, **Kathua** in the south, district Udhampur in the South-West and **district Ramban** in the West. The total geographical area of district Doda is approximately 4500 square kilometres. The District is surrounded by snow clad lofty **mountains** from all sides and mighty **Chenab River** flows through it. Due to its varying physical features, the district does not have a uniform **climate**. The climate is temperate in places like Bhaderwah and Gandoh and Sub-tropical in areas like Doda and **Thathri**.

RESULTS AND OBSERVATIONS

The results and observation obtained by scanning through different questionnaires that were obtained from different sources showed that there are about 22 different type of Medicinal Plants that are used in the treatment of respiratory Disorders such as asthma and are also used in traditional treatment of patient. These herbal Medicinal plants are profoundly used to treat Respiratory diseases like Asthma ,cough etc. These plants belongs to the families Zingiberaceae,Lamiaceae,piperaceae,Apiaceae,Solanaceae,Epheredraceae,Asteraceae,Violaceae,Araceae,Cannabinaceae,Acanthaceae,Asclepidiaceae,Moraceae,Taxaceae,Sexigragaceae,Fagaceae,Rosaceae.The description and use of common type of herbs that are used in the

1). Zingiber officinale Roscoe Family: Zingiberaceae

Vernacular name: Adrak /Shount(dried)

(Hindi); Ginger (English)

Mode of use

It is a herbaceous, perennial in nature. Its rhizome is widely used inthefoodandpharmaceutics. The extracted ginger juice mixed with honey was used to cure cough. By boiling 1-1/2 liters of water along with ginger powder and honey is an effective tonic to give relief and is extensively used to deal with asthma. Consumption of ginger tea is also an effective method.

2) Ocimum sanctum L.

Family: Lamiaceae

Vernacular name: Tulasi (kashmiri); Tulsi

(Hindi); Holy Basil (English)

Method of use

Tulsi provide strength to the immune system and is used in various ways for the treatment

of asthma. It is used in form of tulsi tea for 1-2 times a day is very effective and provides instant relief. The tonic prepared by using tulsi extract and one teaspoon of honey is very effective to treat asthma and cold. Moreover the tulsi leaves can be chewed directly which increases immunity and protects from cold and cough.

3. Piper nigrium L.

Family: Piperaceae

Vernacular name: marcx (kashmiri)kali mirch

(Hindi); black pepper (English)

Mode of use

The most valued part of the plant is its fruit. It is highly valued tonic to treat asthma. It

can be consume a prepared decoction by boiling 1-1/2 liter of water along with that

add some amount of jaggary to enhance its flavor. This helps to give relief from asthma.

04. Curcuma longa L. (Family: Zingiberaceae)

Vernacular name: kashmiri : lidder; Hindi: Haldi; Sanskrit:

Haridra; English: Turmeric

Mode of uses

To alleviate blocked bronchi turmeric must be interested by salt jumbled together hot water. Licking one teaspoon of turmeric alongside ½ tsp of honey additionally gives comfort

from congestion of bronchi. Blend turmeric powder, banana ash and barley powder in identical proportions at the side of honey have this paste 4 to 5 instances in a day to do away with phlegm.Blend

turmeric powder, ghee and black pepper powder to make a paste and rubdown the chest and throat place, the use of this paste to lessen inflammation of the bronchioles. Burn turmeric until purple hot and inhale the smoke. The smoke serves as a robust expectorant. Boil a small piece of turmeric in milk and for sweeten the milk add old jaggery and feature it to reap remedy from allergies.

05)Bunium persicum L Hindi name :-Kala zeera,Local name sia Zeera

Parts used:Seeds belongs to family Apiaceae

Mode of Use:-Seed as spice, appetiser,reduces cholesterol, anxiety anddepression, indigestion,dysentery, carminative,bronchitis, diseases of bloodand ear, leprosy and convulsions.

06) Atropa accuminata Royale Family:-Solanaceae

Vernacularname/Hindi name:-Jala kafal

Officially lart used:-Root

Anti-asthmatic, anti-spasmodic,

Mode of Use:-diuretic, tonic and aphrodisiac

07) Ephedra gegardiana Wall.ExStapf(Family:-Epherdraceae)

Vernacular Name:- Tutfoor, Rachi,

trudak Officially part Used:-Twigs

Mode of Use:- Asthma, cardiac stimulant hay fever, rashes of allergic origin,respiratory disorder rand sunburn

08) Saussurea obvallata Wall.ExCB Clark(Family:-Asteraceae)

Vernacular name:- Jogi gag, Pangehi Officially part used:-Bracts

Mode of Use:-Cough and respiratory problems.

09) Viola serpens Blume(Family:-Violaceae)

Vernacularname:- Banfsha Officially part used: Whole plant

Mode of use:- Cough and cold

10) Acorus calamus L.(Family:-Araceae)

Vernacular name: Nag Russ

Mode ofuses: Rhizomes are emetic in large doses; stomachic and carminative in smaller doses; useful in bronechitis and remittent fever. Fresh rhizome is inhaled in common cold as anti-allergic.

11) Cannabis sativa L.(Family:-Cannabinaceae

Vernacular name: Bhang

Mode of uses: This plant yield ‘charas’ and ‘ganza’ which in action are sedative, appetizer, narcotic and toxic. Leaf juice removes lice and dandruff.

12) Phlomis bracteosa Royle ex Benth.(Family:-

Vernacular name: Neel Trath

Mode of uses: Powdered leaves are mixed in tea and used against cough and cold. Flowers are crushed and used against toothache. Flowers are used as laxative.

13) Adhatoda vasica Brenkar (Family:Acanthaceae)

Officially part used:-Flower and leaves

Mode of Use:- Ash of flower and honey is used to cure whooping cough and the burning leaves for asthma an cold

14) Calotropis procera Family:-Asclepiadaceae)

Vernacular name:-Desi Ak

Officially part used:- Root, leaves

Mode of Use:-The leaves are used to cure asthma and cough.

15) Ocimum teluislorum(Family:-Lamiaceae)

Vernacular Name:- Tulsi

Officially part used:-leaves

Mode of Use:-Used for the treatment of cure cold and cough.

16) Ficus religiosaLinn(Family:-Moraceae)

Vernacular Name:- Peepal

Officially part Used:- Leaves Roots and fruits

Mode of Use:-Leaves are used to treat constipation.Roots are chewed to prevent gum diseases.Powder of fruits is used for asthma.

17) Taxus baccata L. (Family:- Taxaceae)

Vernacular Name:-Barmi

Officially part used:-Leaves

Mode of Use:-Decoction of leaves is used to cure asthma,bronchitis and cough.

18) Saxifraga hirculus(Family:-Saxifragaceae)

Vernacular name:-

Officially plant part used:- Herb (Whole plant)

Mode of use :- Decoction Cough, chest complaints, pulmonary.

19) Hyoscyamus niger L(Family:-Solanaceae)

Vernacular name:-Ajwain

Plant part used:-Herb Leaf Stem, Flower

Mode of use:- Decoction, powder,extract Asthma,cough

20) Fagaceae Quercus dilatata Royle.(Family:-Fagaceae

Vernacular Name:-

Plant part used:- Tree Stem, Flower

Mode of use:-Powder for Asthma.

21) Coriandrum sativum L.Family:-Apiaceae

Vernacular name:- Dhania

Plant part used:- Whole plant , Leaf, Flower, Seed. Mode of Use:-Powder is used for pastedecoction Asthma, cough, bronchitis.

22) Fragaria indica Andrews.(Family:-Rosaceae)

Vernacular Name:-Kulmanchh

Plant part used:-Shrub Flower, Leaf, Whole plant , Mode of Use:-Extract, paste, powder decoction Sore throats, tuberculosis.

Conclusions and Recommendations:- From time to time traditional medicinal plants were being used to treat various ailments including respiratory illnesses. In Himalayas , A brief Study of 22 medicinal plants are being used to cure respiratory problems. It is necessary that attention should be given to the sustainable use of these plant species and further pharmacological studies should be conducted to extract and use the active medicinal ingredients. This study I believe is a doorway for many researchers to give more emphasis on how to phytochemical extraction and development of new drugs to treat respiratory Disorders .

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Conflicts of Interest

The author declares no conflict of interest.

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