Global utilization on some herbal drugs

Rajesh Kumar Yadav, Shweta Singh, Neda Fatima, Sadhana, Kavita and Priya Chaurasiya

Abstract

Human beings are depend on nature for their simple requirement as being the source for medicine, shelter, food stuff, fragrance, clothes, flavor, fertilizer, and means of transportation throughout the ages. Herbal medicine origin in ancient culture. It helps to treat disease and help to improve the general health and well beings. Turmeric has the most powerful medicine sometime it cause a little adverse effect such as allergic reaction, asthma, headache, vomiting and diarrhea but it is very useful in the treatment. It may also help to improve the depression. Teas are also play a vital role in human health and fitness. Teas are help to prevent from some chronic disease such as cancer and diabetes etc. Plant are extremely rich in wide varities of metabolities such as tannis, terpenoid, alkaloid and flavonoid which have been found in vitro to have antimicrobial property. Therefore plants have provide good antimicrobial agent and also antiviral they have been partly or completely characteristics. There will be a great future of medicinal drugs as there are about half millions plants around the world. The most of them are not investigated yet for their medicinal activities could be used in the treatment. In the world there are many foods crops have medicinal effect such as garlic help to understand plant toxicity and protect human and animal from natural poisons. There are approximately 30,000 plants are used across the world. The Royal botanical gardens conservatively estimated in 2016 that 17,810 plant species have a medicinal use, out of some 30,000 plants which use for another kind of documented.

Keywords: Introduction, morphology of medicinal plant, turmeric, aloevera, herbal teas

Introduction

A herb is a plant or parts of plant. It is used in scent, flavor or therapeutics properties of dietary supplements and also it is also help to improve the health. It is still the mainstay of about 75 - 80% of the world population. The W.H.O has traditionally defined traditional medicine include (Herbal drugs) as compared to therapeutics practice that have been in existence. Traditional medicine is synthesis of therapeutics experience of generation of practicing. The main use of herbal medicine and phytoneutrients and nutraceutical continue to expand rapidly across the world wide. The use of herbal remedies has also been widely embarrased in many developed countries with complementary and alternative medicine yet becoming main stream in the U.K and the rest of Europe as well as in the North America and Australia. Now days the use of herbal medicine enhancing across the world wide it is continue to grow and number of product introduce in the market. Even though there are many plant have been used by traditional healer of Ethiopian society. There are many species are found which do not have any scientific evidence of their anti-cancer. There are following research against cancer disease. National cancer Institute (NCI) organize a examplary programs they are collaborating with tropical countries to inventory plant species and assess their potential in the anticancer and anti aids treatment. The ministry of environment and forest, Government of India has identified and documented over 9,5000 species of medicinal plant that are beneficial for pharmaceutical industry of these 2,000 to 2,300 are used in traditional medicine while at least 150 species are used commercially on a large scale.

Morphology of medicinal plant: Morphology is a study of external structure of plant and it is comparative meaning that the morphologist examines the structure in many different plants of some or different species.

- Firstly, The morphology of plant are discover that the spines of cactus also share the few basic structure and development as leaves in other plant, the aspect of plant morphology overlaps with the study of plant evaluation and paleobotany.
- Secondly, the morphology of medicinal plant were observed in both vegetable structure of plant as well as reproductive structure.
- Thirdly, plant morphology studies plant structure at a ultrastructure. The structural feature of cells visible only by the use of electron microscope and optical microscope.
Fourthly, plant morphology examine the pattern of development, the process by which structure original and mature as a plant grows [6].

**Turmeric:** The name turmeric derived from the latin word terra merita (meritorious earth) which referring to the color of ground. In North India turmeric is also called “haldi” a word derived from the Sanskrit word haridra, and in the South it is called Manjal. It is mostly cultivated in the tropic region and goes by different names in different culture [7]. It is component of traditional medicine and also Indian and Ayurvedic medicine. Research told to us turmeric have following property such as antibacterial, antiviral, antifungal, anticancer and most important antioxidant property. Herbal and other dietary supplement that have antioxidant property [8].

![Turmeric](image1)

**Fig 1:** Turmric is more effective at healing injuries

**Application of turmeric**
- Turmeric has been used for centuries in Chinese and Ayurvedic medicine for the treatment of dyspepsia and epigastric pain.
- It is used in the treatment of cancer.
- It help to control diabetes
- It is commonly used in the detoxification of liver
- It is most commonly used in the treatment of inflammation.
- It help to prevent from artherities.
- It help in wound healing.

**Note:** Clinical trial, in which 600 mg turmeric root was administered five time daily to patient with POD, reported ulcer resolution at 4 to 12 weeks in 48 to 76% reduced [9].

**Side effect**
- Many time turmeric cause hair loss in rats as may also have observed this effect in human.
- After oral and topical administration turmeric have been tolerated in clinical trial.
- This is also responsible for bowel movement and mild gastric movement discomfort.

**Note:** Recent, clinical trial were observed by eleven healthy volunteers ingested cinnamon bark followed by turmeric rhizome, each for 4 week and providing 55mg/day oxalate compared with the cinnamon and control group, They show the consumption of turmeric enhancing the level of urinary oxalate which may cause the kidney stone [10].

**Turmeric is Indian gold for gastroprotection:** Turmeric is very spice, food preservative and very good coloring agent in India. It immense value and is an important constituents in various religious function and tradition in India. Now days, it is also cultivate in Srilanka, Indonesia, Bangladesh, Burma and Pakistan but India is only one country that are cultivated 90% of turmeric all over the world. The organolaptic features also determine about the various varities of turmeric the most import varities are- Krishna, Suvarna, Rajendra, Sonia, Suguna and Sudarshana [11].

**Aloevera:** Aloevera is a plant that belong from the family of liliaceae that grows easily in hot region. It is yellow in colour and it is herbaceous and perennial plant with thick succulent. It is mainly useful on the wound as well as clinically experimentally more result are still needed to outcomes [12].

![Aloevera](image2)

**Fig 2:** Natural remedies mainly used for skin care

**Pharmacological activity of aloevera**
- Anticancer activity
- Antiseptics property
- Anti ulcer activity
- Antinflammatory property
- Anti bacterial activity
- Anti viral activity
- Wound healing propert
- Teeth and gums
- Anti diabetic property
- Anti-ulcer property
- Teeth and gums

**Teeth and gums:** Aloevera is a good and effective gels as toothpaste is fighting to the cavities. Toothpaste at controlling oral bacteria [13].

**Antidiabetic property:** Diabites is a chronic disease which are caused by cessation of insulin secretion. Aloe have antidiabetic or antioxidant property finally which help to induced the diabetes. Recent research describe that treatment of diabetes should not focus on insulin secretion and also protection of beta cell. The correlation of antidiabetic and oxidant help to induced diabeties [14].

**Anti inflammatory property:** Aloevera have an ability to inhibit the cyclooxygenase enzyme and reduce prostaglandin in E2 producing from arachidonic acid so, it is easily reduce the inflammation.

**Active components of aloevera**
- Vitamin
- Enzyme
- Mineral
- Sugar
- Anthraquinones
- Fatty acids
- Hormones [15].

---

" 2473 "
**Herbal Teas:** The herbal tea is made from the leaves, seeds and or roots of various plants and these are mixture of “tisanes”. It does not contain caffeine. However, these are some general benefit that can be obtained from the herbal teas:

- Stimulating of internal organ
- Promoting a good night sleep.
- Reliving stress
- Supporting heart health
- Nourishing the nervous system
- Helping to avoid cold
- Relive from stomach cramp \[16\].

**Different types of teas**

1. **Green tea**
2. **Oolong tea**
3. **White tea**
4. **Black tea**

**1. Green tea:** Tea is very commonly used across the world wide. It is obtained from the plant camellia sinesis. The first green tea was exposed from India to Japan during 17th century. It is mainly composed of protein, theanine, 5-N ethylglutamate, glutamic acid, tryptophan, glycine serine, aspartic acid, tyrosine, glucose, fructose, minerals. Green tea also contain polyphenol which induced flavanols, flavanoids and phenolic acid.

**Medicinal value**

- It shows the cardiovascular effect
- It have anticancer property
- It is used as anti infective
- It is used in the treatment of weight loss
- It is used to treat diabetes \[17\].

**Fig 3:** Green tea act as a remote control to switch on cell therapy

**3. White tea:** The white tea are found very rarely that is also obtained from the (*Camellia sinensis*). It have a high antioxidant property. It is mainly produced in China. It is unfermented tea made from young shoots. There are four main varities of white teas which include silver, needle, White peony, Long life eyebrow, and tribute eyebrow. The main constituents of tea include proteins, polysaccharides, polyphenols, minerals and trace elements amino and organic acid, lignins and methylxanthines (Caffeine, theophylline, and theobromine), flavanols and glycosides also contain.

**Steps of processing of white tea**

```
Fresh tea leaf
              ↓
            Withering
              ↓
        Drying (air/ solar/ mechanical drying)
              ↓
              White tea
```

**Pharmacological value**

- It has higher antielastase
- Anti-cholinergic
- White tea lower the level of diabetes
- It is used in stroke
- It easily reduced the cholesterol production \[19\].

**Fig 4:** Black tea have a antioxidant property

**2. Black tea:** Black tea is one of the popular tea which are commonly used in India and other western countries. It is dark brown in color and it create sweet aroma. It has very good flavor as compared to green and oolong tea. It consist of calories, protein, sodium and fat but in a very little amount.

**Medicinal value**

- It is mainly used in the treatment of diabetes
- It is commonly used in cardiovascular disease
- It easily reduce obesity
- It help to improve the oral health
- It is used in the treatment of cancer \[18\].

**Fig 5:** White tea popular option to treat diseases

**4. Oolong tea:** Oolong is commonly used in China and Taiwan. Teas are comes from the same plant but little difference in the harvesting and processing. Oolong tea is partially fermented while black tea is completely fermented. It have lesser antioxidant property as compared to other teas such as green tea, black tea and white tea. It contain similar amount of caffeine, approximately 10 to 60 mg per 8-ounce cup. It does not contain no fat, carbohydrate and protein.
Pharmacological value
- Lower risk of Alzheimer’s disease
- It help to reduced the parkinson’s disease
- It help to make bones strong
- It prevent from diabetes type-2
- It is protect from the ovarian cancer [20]

Fig 6: Oolong tea a great metabolic tea

Conclusion
Herbal medicine and tea can be a very excellent for the treatment and condition. They have a very little side effect. The medicine can be easily purchase without any prescription of doctors. Both are play a vital role in the pharmacological activity. The major active ingredient of tea is catechines both are help to prevent from chronic disease such as cardiovascular, diabetes etc. They have an fast reliving properties. Diabetes is not curable but it maintain the level of diabetes and human well-being.

Acknowledgement
I would like to express my special thanks to my teachers and also collage faculty who always encourage me and also who gave me golden opportunity to do this review and helped me in completing my project. I came to know about so many new things within limited time duration I am thankful to them.

References
3. Martins Ekor. The growing use of herbal medicine: issue relating to adverse reaction and challenges in monitoring safety.
4. Tamrat testaye ayele, a review on traditional used medicinal plant, Herbs for the cancer Therapy: in Ethiopia; Current status challenges and future perspective, Department of Chemistry, Collage of Natural Computation Science, Wolleges university, Nekmte, Ethiopia, organic chemistry: current research.
5. Niteesh Kumar, Nautigal S. Plant Physiology Disciplin, Forest Research Institute, Dehradun, India International journal of Herbal medicinal wealth of Jhil Mil Jnee conservation reserve.
7. Prasad S, Aggarwal BB. From Traditional medicine to modern, Turmeric, the golden spice.
10. Andrographic Paniculata (Burm F Nees), (Withania somniferia (L.) Dunal, in Principles and practice of phytotherapy.
13. Divya pathak, Rajesh Sharma. Assistant Professor, Dept. of pharmacology, Teerthanker Mahaveer Collage of Pharmacy, TMU, Moradabad, U.P India review on’aloevera medicinal plant’.
17. Sabu Chacko M, Priyat Thambi, […], and LKUO Nishigaki, beneficial effect of green tea.
19. Harshal Pawar A. Assistant Professor and HOD, Dr. L.H. Hiranandani, collage of pharmacy, India, White Tea a Day Keeps Disease Away, Current trend in Biomedical Engineering and Bioscience ISSN: 2572-1151.