

Ethnomedicinal Plants Use for the Disease of Cancer

Abstract

The paper represents the ethnomedicinal plants used by the peoples of different areas on disease cancer.

Keywords: Ethnomedicine, Cancer, Herbal, preparation.

Introduction

Medicinal plants continue to play a central role in the health care system of large proportions of the world's population. This is particularly true in developing countries, where herbal medicine has a long and uninterrupted history of use reorganization and development of the medicinal and economic benefits of these plants are on the increase in both developing and industrialized nations (WHO, 1988) continues usage of herbal medicine by a large proportion of the population in the developing countries is largely due to the high cost of western pharmaceuticals and health care (Koduru et al., 2007). In addition, herbal medicines are more acceptable in these countries from their cultural and spiritual point of view. Use of plants for medicinal remedies is an integral part of the Indian cultural life, and this is unlikely to change in the years to come several studies implying methodologies of modern medicine have been conducted on a multitude of herbs of ethno – botanical importance (Dahanukar et al., 2000). Ayurveda, the traditional Indian system of medicine, has been successful from Ancient times in using natural drugs, mostly herbal preparations, in preventing or suppressing various diseases using several lines of treatment.

Among the human diseases treated with medicinal plants is cancer, which is probably the most important genetic disease. Cancer has been defined as a disease in which there is uncontrolled multiplication and spread within the body of abnormal forms of the body's own cells (Rang et al., 2001). All cancer types arise through a series of steps characterized by progressive loss of normal growth control. There are proteins in the cells that ensure this continuity (Brooks and La Thanque, 1999). Death from cancer often comes not from the primary site but from metastases. Cancer may affect people at all ages even foetus but the risk for most varieties increases with age. Thousands of herbal and traditional compounds are being screened worldwide to validate their use as anticancerous drugs (Diwanay et al., 2004; Liu et al., 1998.)

The disease causes about 13% of all death. Reports have shown that during 2007, about 7.6 million people died from cancer in the world. All cancers are caused by abnormalities in the genetic material of the transformed cells and these abnormalities may be due to the effect of carcinogens such as tobacco, smoke, radiation, chemicals or infectious agents.

Every year, millions of people are diagnosed with cancer, leading to death in a majority of the case, according to the American Cancer Society, deaths arising from cancer constitute 2 – 3 % of the annual deaths recorded worldwide. In India, cancer rates are increasing every year, breast cancer being the most common form of cancer amongst Indian women. Current statistics indicates that across all ethnic groups, one in every 31 women in this country is likely to develop breast cancer. Many traditional healers and herbalists have been treating cancer patients for many years using various medicinal herbal remedies in the study area; the knowledge and experience of these herbalists have not been scientifically documented. Information on traditional herbal practice is passed from one generation to another through oral tradition. Considering the rapid rate of deforestation and loss of biodiversity, there is a need for accurate scientific documentation of the knowledge and experience of these herbalists. In this article, we report the information gathered from traditional and elder rural dwellers, on plants used in the block for the treatment of cancer.



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Aim of the study

People should know the value of plants for the treatment of cancer.

Result and Discussion

Results from this work revealed that quite a number of plant parts from the species specially the leaves, roots, barks and seeds have been found efficient in the management of cancer. However, the prominent plant species in the recipes are *Solanum nigrum*, *Catharanthus roseus*, *Butea monosperma*, *Triticum aestivum*, *Garcinia kola*, *Kigelia Africana* and *Alliums* genera which are indicative of their importance in the management of the disease. Similarly, Leguminosae and Liliaceae families occurred more frequently in the list of plants identified but the occurrence of other families also suggest the importance of all those families are repository of useful chemical compounds which may be explored for drugs in the management of cancer.

In orthodox medicine, cancer can be treated with drugs and radiotherapy if detected early. Otherwise surgical operation is used at some stages after which it can become very difficult and hopeless. However, nature has some remedy for cancer patients. Some substances have been found to be anti – carcinogenic, i.e. they fight cancer with cancer forming cells and help to eliminate them for the body, for example cumaric acid and lycopene which are found naturally in tomatoes fruits (*Lycopersicon esculentum* L.) and the leaves of bitter leaf (*Vernonia amygdalina* del.). Also, a lot of research has been and is still being done on the effectiveness of *Aloe vera* (L). *Burm.f.*, *Azadirachta indica*, *Catharanthus roseus*, *Butea monosperma* for managing cancer. Literature has revealed that most of the synthetic drugs that have been used in the past have negative effects that were of grave consequence in some cases, especially when taken by the patients on self prescription after initial visit to the physician. For this reason, it is imperative for ethno – botanists and pharmacognosists to do more analysis on the 20 wonderful plants mentioned in this work. Our medical health practitioners should also focus attention on more intense research on medicinal plants which can save the life of our people without side effects.

Dosage Pattern of Ethnomedicinal Plants

Formulation of the dosage of extracts from the recipes must be strictly adhered to for maximum efficacy and also the avoidance of over dosage which may lead to other complications in patients. One major advantage of Traditional medicine is that, it is cheaper than orthodox medicine. While drugs alone are not the only means of providing health care, they do play an important role in protecting, maintaining and restoring the health of people. Information gathered from the herbalist's shows that increasing number of people is turning to the use of anti – cancer which shows that they are effective and efficient in the management of cancer. According to traditional medicine has higher benefits than any other health care system as it is cheaper, readily available and could cure permanently. Apart from this, it has no side effect and is capable of saving for the nation, huge foreign exchange which can be used for other development programme. The vulnerability of medicinal plants to over exploitation and extinction

needs to be dealt with seriously. Issues relating to the conservation of these medicinal plants should be addressed by the government and nongovernmental organizations. Conservation methods such as In – Situ and Ex – Situ should be adopted to protect our natural biodiversity.

Enumeration of recipes**Recipe 1**

Botanical Name	Vernacular Name	Plant part used
<i>Calotropis procera</i> (Aiton) Dryander	Aak	Leaves
<i>Kigelia Africana</i> (Lam.) Benth.	Kanguli	Leaves and bark
<i>Diospyros malabarica</i> (desrousseaux) Kosteletsky	Gab	Bark and fruit.

Preparation

Leaves bark and fruit should be rinsed and boiled in 4 liters of fermented corn water for 6 hours.

Application

It is taken as a tea thrice a day with a cup.

Recipe 2

Botanical Name	Vernacular Name	Plant part used
<i>Mangifera india</i> L.	Aam	Bark
<i>Citrus medica</i> L.	Nimbu	Fruit juice
<i>Allium cepa</i> L.	Pyas	Leaves
<i>Bryophyllum pinnatum</i> (Lam) Oken	Bish-Kapru	Root

Preparation

The Roots bark and leaves are indicated above should be rinsed and boiled in the water for 40 minutes. *Citrus medica* fruit juice is added when cooled.

Application

Cup full 3 times daily upto 2 months.

Recipe 3

Botanical Name	Vernacular Name	Plant part used
<i>Citrus medica</i> L.	Nimbu	Fresh juice
<i>Citrus aurantifolia</i> (Christmann) Swingle	Kagjinimbu	Fresh juice
<i>Plumbago zeylanica</i> L.	Chitrak	Root

Preparation

It should be ground together smoothly and mixed with black soap and gum powder.

Application

Use the preparation to wash all the part of the body, once in a week.

Recipe 4

Botanical Name	Vernacular Name	Plant part used
<i>Zingiber officinale</i> Roscoe	Adrak	Rhizome, Seed/ fruit
<i>Curcuma domestica</i> valetton	Haldi	Whole plant
<i>Allium sativum</i> L.	Lahsun	Bulbs
<i>Allium cepa</i> L.	Pyas	Leaves

Preparation

All the plants should be ground together when dried and taken with honey.

Application

Take one full cup as tea 3 times daily after meal.

Recipe 5

Botanical Name	Vernacular Name	Plant part used
<i>Chenopodium ambrosioides</i> L.	<i>Bethuali</i>	Twigs and roots
<i>Allium stivum</i> L.	<i>Laksun</i>	Leaves
<i>Oroxylum indicum</i> (L.) Ventenat	<i>Tantia</i>	Fruit, bark and leaves
<i>Potash</i>		

Preparation

Soak all the above with lime and dry gin with gun powder for 30 days.

Application

Two teaspoonful morning and evening after meal.

References

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3. (Dahanukar et al., 2000). Ayurveda, the traditional Indian system of medicine, has been successful from Ancient times in using natural drugs, mostly herbal preparations, in preventing or suppressing various diseases using several lines of treatment.
4. (Rang et al., 2001). All cancer types arise through a series of steps characterized by progressive loss of normal growth control.