

Effective herbal remedies on diabetes and liver disorders

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Abstract

According to the WHO every plants of the world have medicinal importance. As everyone knows several scientists working to search remedies over fatal diseases since last century. And ayurvedic, Unani and traditional use of plants prove to treat different sort of diseases, including diabetes and liver related problems are widespread throughout the world. Various researchers have been working on the Debates and liver protective activity of medicinal plants and many plant substances are known for their interferences with the human digestive system. This research paper designed with the Diabetes and Liver Disorder and its protective measures and phytochemical uses of plant and their parts, particularly against the diabetes and liver protective plants used by tribe of Manora Taluka from Washim district. The Manora Taluka was selected for investigation, as tribal of this area are mainly dependent upon the forest flora for their live hood and use herbal medicines for curing the ailments and diseases and few plants were recorded and documented which are used by tribal people against Diabetes and liver disorder protective.

Keyword: Natural remedies against Diabetes and Liver Disorder

1. Introduction

WHO reported that every 5th person of the population is infected and has Diabetes? Due to bursting of the pancreatic cells alpha and beta cells of Pancreas which secretes insulin in human body and naturally which controlled the blood sugar. Most of the scientist have viewed about diabetes that it is due to stress and change in our living style. Medical sciences discovered remedies on Diabetes but it is effective in some extent. Mostly tribal peoples who live near to the forest and their life totally depend on plant product they never take any medicine, against diseases they used plants parts to cure the various diseases. As *Gymnema sylvestris* is one of the plants which is used against to cure Diabetes. Liver disorder is one of the major causes of mortality and disease in peoples, and that influence the peoples of all ages. The liver is a vital organ of paramount importance involved in them an intendance of metabolic functions and detoxification of the exogenous and endogenous challenges like antibiotics, drugs, viral infections and chronic alcoholism ^[1]. Defective homeostatic mechanisms are affected if liver function is impaired, with potentially serious consequences.

Hence, considerable progress has been made in the development of highly effective, acceptable methods to cure the hepatitis among the tribal peoples; the development of new liver protective drugs from medicinal plants is an attractive preposition. Today's drugs have somewhat, to offer for alleviation of hepatic ailments, whereas most important representatives of phytoconstituents used for liver diseases chiefly on regional basis. In this way ayurvedic or ethnological drugs can be found useful. The indigenous information and the ancient literature about the plants and herbs can be effective to solve the liver problems.

Tribal like *Banjara* of the Manora area have been using various plants and their parts as medicine to check the Diabetes and liver function. Unfortunately, the ethnobotanical estimation of Liver protective activity of medicinal plants was not recorded for this region. Hence, the present study is effort to gain insight in the knowledge of traditional medicine of this region.

2. Material and Methods

Survey method was followed for this investigation, during the present work the ethnomedicinal field work was carried out in tribal hamlets, forest and different villages in Manora taluka of Washim district. Ethnomedicinal information was collected from *Gond, Kolam, Andh, Pradhan, Bhil, Lohar* and *Banjar* tribal villagers and many ayurvedic or ethnomedicinal drugs practitioners, (vidoos) were interacted for the study and information of their traditional knowledge about plants used for ailment of liver problem was studied. Extensive field survey of different parts of the Manora taluka was made along with the local tribal villagers and ethnomedicinal / ayurvedic drug practitioners perusal of published literature and herbarium specimen of different herbaria of the district was done to document information following the various methodologies ^[2-3]. Specimens were identified with the help of standard floras by taxonomy experts in Department of Botany, M.S.P. Arts, Commerce and Science College, Manora and deposited in the herbarium of the same college.

2.1. Observation

Systematic estimation of liver protective ethnomedicinal plants by tribal's of Manora Taluka of Washim district

Table 1: Systematic estimation of liver protective ethnomedicinal plants by tribal's of Manora Taluka of Washim district

Sr. No	Common name/ Local name	Botanical Name	Family	Plant Parts used
01	Gudmar (गुडमार)	<i>Gymnema sylvestre</i>	Apocynaceae	Leaves and stem
02	Tarota	<i>Cassia tora L.</i>	Caesalpinioideae	Leaves
03	Bel	<i>Aegel marmelos (L.) Correa.</i>	Rutaceae	Fresh leaves
04	Shevga, Mungana	<i>Moringa oleifera L.</i>	Moringaceae	Roots
05	Aola, Amla	<i>Emblica officinalis Gaertn.</i>	Euphorbiaceae	Fruit
06	Anjir	<i>Ficus carica L.</i>	Moraceae	Leaves, Fruit



Fig 1: *Gymnema sylvestre* (गुडमार) Apocynaceae



Fig 4: *Moringa oleifera* L. Moringaceae



Fig 2: *Cassia tora* L. Caesalpinioideae



Fig 5: *Emblica officinalis* Gaertn. Euphorbiaceae



Fig 3: *Aegel marmelos* (L.) Correa. Rutaceae



Fig 6: *Ficus carica* L. Moraceae

3. Results and Discussion

Manora Taluka of Washim district has been widely acknowledged for its herbal treasure trove. The medicinal plants are used as cheap and safe remedies for various ailments by tribals and aborigines. The present research work revealed that the *Gond*, *Kolam*, *Andh*, *Pradhan*, *Bhil*, *Lohar* and *Banjara* tribal aborigines of Manora taluka range have adequate ethnobotanical knowledge which has been transmitted from one generation to another. This information

of medicinal plants with botanical name, local name, family and parts used is given in Table- 1.

In the present work 06 plants were recorded for Diabetes and liver protective used by the *Gond*, *Kolam*, *Andh*, *Pradhan*, *Bhil*, *Lohar* and *Banjara* tribal of range forest of Washim district. This study may focus researcher's attention for phytochemical and pharmacological investigation of the above reported liver protective plants to know their need on modern scientific lines for the validity of ethnobotanical

claims and thus would be of great scientific contribution to the society.

A lot of medicinal plants, traditionally used for thousands of years are present in group of herbal preparation of the Indian traditional health care system. In India, over 40 poly herbal commercial formulations reputed to have hepatoprotective action are being used. Scrutiny of the literature indicates that 160 phytoconstituents from 101 plant families have antihepatotoxic activity^[3-4]. Silymarin; a phytoconstituent from (*Silybummarianum*) has been widely used from ancient times because of its excellent hepatoprotective action. *Picrorrhizakurroa* Royle contains kutokoside and picrolive which are potential hepatoprotectant^[5-6]. *Phyllanthus amarus* is another most important plant selected for clinical trials. The present paper describes literature survey on liver protective herbal drugs; herbal drugs used as a hepatoprotective in Ayurvedic system of medicine. From hundreds of year, the Ayurvedic formulations are being employed in Indian subcontinent to cure liver disorders, natural chemical constituents and inorganic salts are prescribed to treat the liver complications of minor to sevir type of liver toxicity. Liver protective herbal drugs contains a variety of chemical constituents like phenols, coumarins, lignans, essential oil, monoterpenes, carotinoids, glycosides, flavonoids, lipids, alkaloids and xanthines. Sesquiterpenes have been reported from *Atracyclodes maerocephala*. *Andrographis panicles* and *Gardenialflorida* are theonly source of diterpenes and carotinoids respectively. Extract of about 25 different plants have been reported to cure liver disorders. Some herbal drugs such as like *Adenosmaindiana*, aromatic amides of *Clausenalansium*, *Ginseng saponins* and polysaccharides of *Auricularia auricular* and *Tremella fuciform* also possess hepatoprotective property.

4. References

1. Dienstag JL, Isselbacher KJ. Toxic and drug induced hepatitis, 15th edn. Chapter 296, In: Harrison's Principles of Internal Medicine. Braunwald E, *et al.*, The McGraw Hill Companies. 2001; 2:737-742.
2. Saleem M, Chetty TS, Ramkanth MC, Rajan S, Mahesh VT, Gauthaman K. Hepatoprotective Herbs – A Review. *Int. J. Res. Pharm. Sci.* 2010; 1:1-5.
3. Handa SS, Sharma A. Chakraborti. Natural products and plants as liver protecting drugs. *Fitoterapia.* 1986; 57:307-49.
4. Sharma A, Singh RT, Sehgal V, Handa SS. Antihepatotoxic activity of some plants used in herbal formulations. *Fitoterapia.* 1991; 62:131-136.
5. Dwivedi Y, Rastogi R, Chander R, Sharma SK, Kapoor NK, Dhawan BN. Hepatoprotective activity of picroliv against carbon tetrachloride induced liver damage. *Indian J. Med. Res.* 1990; 92:195-200.
6. Visen PS, Shukla B, Patnaik GK, Kapoor NK, Kaul S, Dhawan BN. Hepatoprotective activity of active principle of *Picrorrhizakurroa* on rat hepatocytes against paracetamol toxicity. *Drug Development Research.* 2004; 22:209-19.