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REVIEW ARTICLE – NARRATIVE REVIEW

Role of Medicinal Plants in Traditional Healthcare Practices of the Saharanpur Region

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Abstract

Medicinal plants have been an important part of traditional healthcare systems in India for many centuries. People have used plants to treat diseases, improve health, and prevent illness using simple and natural methods. This narrative review focuses on the role of medicinal plants in traditional healthcare practices of the Saharanpur region, located in western Uttar Pradesh, India.

The aim of this review is to present a clear and simple overview of commonly used medicinal plants, their plant parts, and their role in treating basic health problems. The paper discusses plants such as tulsi, neem, aloe vera, giloy, turmeric, ginger, and amla, which are widely used in households and traditional healing practices. This review is based on published books, research articles, and review papers related to medicinal plants and traditional healthcare systems.

The study highlights the importance of medicinal plants in primary healthcare, especially in rural areas. It also emphasizes the need to document and preserve traditional plant-based knowledge, which is slowly declining due to modernization. This review is useful for students, teachers, and early researchers in the field of Botany and Life Sciences.

Keywords: Medicinal Plants, Traditional Healthcare, Home Remedies, Saharanpur, Rural Healthcare

Introduction

General Overview of the Topic

Plants play a very important role in human life. Apart from providing food and oxygen, plants are also used for medicinal purposes. Medicinal plants are those plants that have healing properties and are used to prevent or cure diseases. The use of medicinal plants is one of the oldest forms of healthcare known to humans.

In India, traditional healthcare systems such as Ayurveda, Unani, and folk medicine are largely based on plant resources. People have used leaves, roots, bark, flowers, fruits, and seeds of plants to prepare medicines at home or through traditional healers. This knowledge has been passed from one generation to another through oral tradition.

Study Context

Saharanpur district is located in the western part of Uttar Pradesh and shares boundaries with Uttarakhand and Haryana. The region has a warm climate, good rainfall, and fertile soil, which support rich plant diversity. Agricultural activities dominate the area, and many rural households maintain kitchen gardens where medicinal plants are grown. In addition to cultivated species, several medicinal plants grow naturally in this region. Even today, people in Saharanpur widely depend on medicinal plants to treat common illnesses such as fever, cough, stomach problems, skin diseases, and wounds.

Traditional healthcare practices are still common in Saharanpur, especially in villages. People often use medicinal plants as the first line of treatment before visiting hospitals. Elders, farmers, and traditional healers have good knowledge of medicinal plants and their uses.

Medicinal plants are preferred because they are easily available, affordable, and considered safe when used properly. These plants play an important role in maintaining community health, particularly where modern medical facilities are limited or expensive. This makes Saharanpur an important area for studying medicinal plants from a botanical perspective.

Purpose of the Review

This narrative review aims to explain the role of medicinal plants in traditional healthcare practices. The review presents existing literature in a clear and structured form to support learning and academic understanding among students and early-career researchers in Life Sciences.

Review Methodology (Narrative Approach)

Review Design

This study follows a narrative review approach. The review is based entirely on secondary sources, and no laboratory experiments or field surveys were conducted. This section explains the approach adopted to identify, select, and review relevant literature for the present narrative review.

Sources of Literature

Relevant literature was collected from peer-reviewed national and international journals, academic books, government publications, and institutional reports. Searches were conducted using academic databases such as Google Scholar, Scopus, and Web of Science.

Search Strategy and Keywords

A structured search strategy was used to identify relevant studies. Keywords such as medicinal plants, traditional healthcare, and ethnobotany were used, along with region-specific terms including Saharanpur, home remedies, and rural healthcare.

Inclusion and Exclusion Criteria

The review included studies focusing on plant-based traditional medicine, ethnobotanical knowledge, and the use of medicinal plants in primary healthcare, with particular emphasis on household practices. Studies primarily focused on processed or laboratory-produced medicines were excluded. As a general guideline, studies published from 2000 onwards were considered, with earlier landmark studies included where necessary to provide historical context.

Literature Review (Thematic)

Evolution of Research on the Topic

The existing literature on ethnobotany shows that traditional plant knowledge is an important part of rural life in many parts of India. Studies from different regions highlight how people depend on plants for medicine, food, agriculture, and cultural practices.

In Saharanpur and nearby regions, traditional healthcare practices are strongly connected with local plant resources. Many plant species are known for their medicinal value and are regularly used in households.

Themes in Literature

Role of Medicinal Plants in Rural Healthcare

Several studies report that medicinal plants form the foundation of traditional healthcare systems in rural regions. Plant-based remedies are commonly used to treat everyday health problems such as fever, cough, cold, digestive issues, skin infections, and minor injuries. Literature also shows that people value medicinal plants because they are locally available, low-cost, and generally perceived as safe when used with traditional knowledge.

Across the globe, specifically in rural areas, traditional healthcare practices are strongly connected with local plant resources, where many plant species are known for their medicinal value and are regularly used in households.

Frequently Reported Medicinal Plants

Existing studies consistently report on the use of several medicinal plants that play a central role in traditional healthcare practices. These plants are commonly used at the household level to treat everyday health problems and are valued for their accessibility, affordability, and perceived safety.

The literature highlights that certain medicinal plants are repeatedly mentioned across regions due to their wide range of therapeutic applications.

Tulsi (Ocimum sanctum):

Tulsi is one of the most commonly used medicinal plants. Its leaves are used to treat cough, cold, fever, and respiratory problems. Tulsi is also known for its immunity-boosting properties.

Neem (Azadirachta indica):

Neem is widely used for its antibacterial and antifungal properties. Leaves and bark of neem are used to treat skin diseases, wounds, and infections.

Aloe vera (Aloe barbadensis):

Aloe vera is commonly used for skin care, burns, and digestive problems. The gel extracted from its leaves has cooling and healing effects.

Turmeric (Curcuma longa):

Turmeric is used as an antiseptic and anti-inflammatory agent. It is commonly applied to wounds and is consumed with milk to treat internal inflammation.

Ginger (Zingiber officinale):

Ginger is used to treat cold, cough, nausea, and digestive issues. It is commonly consumed as tea or mixed with honey.

Giloy (Tinospora cordifolia):

Giloy is known for boosting immunity and treating fever. It is commonly used in the form of juice or decoction.

Amla (Phyllanthus emblica):

Amla is rich in vitamin C and is used to improve digestion, immunity, and overall health**.**

These plants are repeatedly mentioned across different studies and regions, indicating their central place in traditional plant-based healthcare.

Patterns Observed Across Studies

Across different studies, consistent patterns are observed in the selection and use of plant parts for medicinal purposes. Leaves are the most used plant part due to their easy availability and simple preparation methods. Other plant parts such as roots, bark, fruits, seeds, and flowers are also used depending on the medicinal requirement and plant species.

The choice of plant part is closely linked to the intended therapeutic effect. For example, neem leaves are commonly used for treating skin-related problems, while turmeric rhizomes are widely used for wound healing and inflammation management. These recurring patterns across studies reflect shared traditional knowledge and similar healthcare practices across regions.

Recent Development and Current Trends

Recent literature on ethnobotany and medicinal plants has increasingly focused on documenting traditional knowledge systematically, validating medicinal uses through pharmacological studies, and exploring conservation issues related to over-harvesting of useful species. There is also growing attention on integrating traditional plant-based practices with primary healthcare and public health programs, while ensuring that local knowledge holders are acknowledged and their knowledge is preserved.

Discussion

The reviewed literature shows that medicinal plants play a vital role in traditional healthcare practices of the Saharanpur region. Similar patterns of plant use are observed in other parts of India, indicating shared traditional knowledge.

Medicinal plants are mainly used for primary healthcare and minor illnesses. Although modern medicine is available, traditional plant-based practices remain popular due to cultural beliefs and accessibility.

However, the documentation of traditional knowledge is limited. Much of this knowledge is still transferred orally, which increases the risk of its loss. Changes in lifestyle and reduced interest among younger generations may further reduce the use of medicinal plants.

Implications and Future Scope

The findings suggest that there is an urgent need to document traditional medicinal plant knowledge in regions like Saharanpur so that it is not lost for future generations. Proper documentation can support community health programs and help bridge traditional practices with modern healthcare.

Future research can include field surveys and interviews with local communities to document plant species and preparation methods. Scientific studies can also be conducted to validate the medicinal properties of commonly used plants.

Conservation of medicinal plants is important to ensure their availability for future generations. Awareness programs can help promote sustainable use of plant resources.

Conclusion

This narrative review focused on the role of medicinal plants in traditional healthcare practices of the Saharanpur region. The review shows that medicinal plants are widely used for treating common health problems and maintaining overall well-being.

Plants such as tulsi, neem, aloe vera, turmeric, ginger, giloy, and amla play an important role in traditional medicine. These practices reflect a strong relationship between people and plants.

Preserving traditional medicinal plant knowledge is important for cultural heritage, botanical education, and sustainable healthcare practices.

Data Availability

This study is a narrative review based exclusively on previously published and publicly available literature. No primary data was generated or collected as part of this study. The review relies on scholarly articles, reports, and academic sources, all of which are publicly available and have been appropriately cited in the manuscript.

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Disclosure of Interest

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