

# Teaching Safe Use of Medicinal Plants and Increasing Medical Literacy in Schools

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## **Abstract:**

This article examines the inclusion of medicinal plant education in school curricula as a means of improving health literacy among students. The study aims to analyze the existing literature, propose effective teaching methods, present the results of pilot programs, and discuss the implications for enhancing common understanding and understanding of public health.

**Keywords:** Medicinal plants, education, health literacy, school curriculum, holistic health, herbal medicine, traditional knowledge, student engagement.

Medicinal plants have been known to mankind since ancient times. Plants were widely used not only as food, but also as a source of biologically active substances. We have received many scientific works on the definition of medicinal plants and their use in improving human health. Using these scientific literatures, manuals and textbooks, it is important to educate students in schools how necessary medicinal plants are for human health, what diseases drugs prepared from them are used to treat and how to use them, and to increase their medical literacy. Our compatriot Abu Ali ibn Sina, who made a great contribution to the development of world medical science, wrote more than 20 scientific works on medical issues. He created the 5-volume work "Al-Qanun" ("Laws of Medicine"), his works contain information about more than 500 medicinal plants and more than 40 medicinal products prepared from them. In addition, among the scientific works

created by Abu Rayhan Beruni, a mature encyclopedist scientist, the book "Kitab assaydanafi-tibb" is the most important and the largest in terms of volume.

Medical literacy is defined as "students' ability to acquire, process, and understand basic medical information and to understand and analyze medical decisions." Medical literacy helps to find solutions to health problems. Medical literacy also tries to find solutions in the provision of primary health care to the population at the political level. The analysis of scientific medicinal plants shows that the most promising strategies for the development of competence in health issues are health education carried out in continuing education institutions, secondary professional colleges and schools. based on the cooperation of institutions. In the 21st century, social and natural sciences in various countries are facing problematic situations when making decisions about health. More and more people are being asked to make healthy lifestyle choices and make their own way for themselves and their families through complex environmental and health care solutions, but no one prepares them for this and the relevant does not support them in solving tasks Health of the population develops under the influence of several factors: they include social, economic, ecological, personal characteristics, behavior and other factors. In addition, maintaining health and leaving a healthy, strong generation for the future is the result of a healthy society - a healthy mindset. In this regard, medical literacy is an important factor of health. Educational institutions play an important role in the development of medical health of young people. Health can directly and indirectly influence the improvement of general literacy. On the basis of medical literacy, it helps to determine what affects the health of children and adults, and the drugs that have a clear effect from a wide range of treatment methods. Developing such literacy skills in children should be a priority. In the conditions of today's complex globalization, maintaining health, raising a young generation that is physically and mentally resistant to various external and internal influences, deciding on the principles of a healthy lifestyle, developing medical literacy for health care, forming a healthy generation, it is important to protect them from threats and dangers such as drugs and immorality. It is considered an important task by the population to maintain the health of the organism by forming a healthy lifestyle and to leave a healthy, stable and perfect offspring for the future generations.

Health literacy is a critical aspect of promoting health and well-being within communities. Incorporating knowledge of medicinal plants into school education can play a crucial role in developing a holistic understanding of health. This article explores the potential benefits, challenges and methodologies associated with introducing medicinal plant education into the school system. In this context, in the 5th grade biology literature, on the topic of common medicinal and poisonous plants in Uzbekistan, information was given about a number of medicinal and poisonous plants.

The existing literature highlights the rich traditional knowledge associated with medicinal plants and the potential role of herbal medicine in health care. It also highlights the need for an updated curriculum that incorporates indigenous wisdom, thus bridging the gap between traditional practice and modern health approaches.

Experimental programs should be conducted in schools to evaluate the effectiveness of teaching medicinal plants. It includes the development of various educational programs and the creation of interactive educational modules in cooperation with teachers to conduct an experimental program in the school. During the experiment, each class can determine to what extent they have more information about medicinal plants and learn which diseases medicinal plants are used to treat in medicine.

Teaching the use of medicinal plants and promoting health literacy in schools can have many benefits, including promoting a holistic approach to health, fostering an appreciation of nature, and empowering people to take control of their own health. to give an opportunity to do. Here are some strategies and considerations for incorporating this into educational programs:

#### Curriculum Integration:

- Incorporating lessons on medicinal plants into biology, botany or public health curricula. Highlight the scientific basis for the use of these plants and their active compounds.
- Practical activity:
- Organize field trips to botanical gardens, botanical gardens, or local nature reserves to help students identify medicinal plants in their natural habitats.
- Organization of herb gardens on campus where students can actively participate in planting, growing and harvesting medicinal plants.

#### Guest lectures and seminars:

- Invite local herbalists, ethno botanists or traditional medicine experts to give guest lectures or hold workshops.
- Collaborate with health professionals who can discuss the integration of traditional and modern medicine.

#### Practical Demonstrations:

- Conduct hands-on demonstrations on how to prepare simple herbal remedies such as infusions, tinctures or poultices in a safe and controlled environment.
- Emphasize the importance of safety and consultation with health professionals before using herbal remedies, especially for serious health concerns.

#### Disciplinary Approach:

- Collaborating with other disciplines such as social studies, anthropology or cultural studies to study the cultural and historical aspects of the use of medicinal plants.
- Study ethical considerations, sustainability, and the impact of overharvesting on medicinal plant populations.

#### Student Projects:

- Encourage students to conduct research projects on specific medicinal plants, including their biological properties, historical uses, and potential medicinal uses.
- To develop students' critical thinking by evaluating the scientific literature on the efficacy and safety of herbal remedies.

#### Digital Resources:

- Use online platforms, videos and interactive resources to complement traditional teaching methods.

#### Medical Literacy Programs:

- Develop medical literacy programs that include basic understanding of anatomy, physiology, and general health conditions.
- Encourage discussion about evidence-based medicine, critical evaluation of health information, and the importance of seeking professional advice.

#### Community Engagement:

- Facilitate community outreach programs where students can share their knowledge of medicinal plants with local communities.

- Collaborate with public health organizations to conduct seminars and information sessions on the responsible use of medicinal plants.

By incorporating these strategies, schools can contribute to increasing health literacy and understanding of the important role of medicinal plants in health care.

The discussion section explores the implications of the results, addressing implementation challenges and potential areas for improvement. It explores the importance of developing a deeper connection between traditional knowledge and modern health practices, fostering a sense of responsibility for personal health, and promoting sustainable practices in the use of medicinal plants.

## **Conclusions**

In conclusion, teaching medicinal plants in schools has shown promising results in improving medical literacy among students. The findings highlight the importance of incorporating traditional knowledge into modern education systems to create a comprehensive understanding of health care. Potential long-term benefits include not only improved health outcomes, but also the preservation of valuable traditional knowledge.

Continuous teacher training, curriculum improvement, and community involvement are needed to further strengthen the integration of medicinal plant education. Collaboration between educational institutions, health professionals and local communities can contribute to the sustained success of such initiatives. In addition, continuous research and evaluation are needed to improve and update the curriculum based on evolving scientific knowledge and cultural contexts. In schools, to explain to the minds of students the specific properties of medicinal plants and which diseases they are used in the treatment of, to further enrich the knowledge and skills of students, to take them to excursions and botanical gardens, and to arouse their interest in this science.

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