STUDY OF THE FUNDAMENTALS OF RESOURCE SCIENCE OF MEDICINAL PLANTS IN THE FORMATION OF A PHARMACEUTICAL SPECIALIST

RESERCH GROUP:

Zakharchuk Oleksandr Ivanovych
Doctor of Medical Sciences; Professor Head of the Department of pharmaceutical botany and pharmacognosy
Bukovinian State Medical University, Ukraine

Horoshko Oleksandra Marianivna
Candidate of Pharmaceutical Sciences, Associate Professor of the Department of pharmaceutical botany and pharmacognosy
Bukovinian State Medical University, Ukraine

Ezhned Maria Akhmedivna
Assistant Professor of the Department of pharmaceutical botany and pharmacognosy
Bukovinian State Medical University, Ukraine

Sakhatska Inna Mykhailivna
Candidate of Pharmaceutical Sciences, Senior Lecturer of the Department of pharmaceutical botany and pharmacognosy
Bukovinian State Medical University, Ukraine

Summary. The article reveals the main tasks of resource science of medicinal plants, the expediency of studying the discipline in the process of receiving undergraduate education, and the prospects of their use in the practical field. The significance of the learning outcomes in the pharmacist training system caused by the need for practical implementation of the preparation of medicinal plant raw materials is highlighted, since medicinal plants are one of the sources of obtaining medicinal products in modern medicine. Directions for improving the training of a highly qualified specialist are summarized.

Keywords: resource science of medicinal plants, pharmacy, institution of higher education, medicinal plant raw materials, medicinal plants.

Introduction.

The pharmaceutical industry is one of the progressive industries and is represented by a wide range of ready-made medicines, which is facilitated by the...
rapid development of the pharmaceutical industry in Ukraine.

Despite the fact that the high level of development of modern chemistry makes it possible to manufacture a variety of highly effective synthetic medicinal products, modern medicine quite often uses plant-based products. The interest of medical and pharmaceutical specialists in obtaining information on phytoremedial issues necessitates the training of specialists in this field, their thematic improvement. Therefore, the training of specialists in the field of medicinal plants and phytotherapy in medical (pharmaceutical) educational institutions is particularly relevant today.

Purpose: to substantiate the expediency of studying the discipline "Resource science of medicinal plants" in the process of receiving undergraduate education, and the prospects of their use in the practical field.

Material and methods. The objects of the study are literary and electronic sources of information on the resource science of medicinal plants and methodological materials of the educational process in a higher education institution.

Research results and their discussion.

In modern medicine, the importance of the production of new drugs based on plant raw materials is constantly increasing, which is due to the low toxicity and biological safety for the body of most herbal remedies, as well as the specific features of their activity: a significant breadth of the therapeutic spectrum, the gradual increase of the clinical-pharmacological effect, the complexity of the influence on various mechanisms pathological process, relatively infrequent manifestations of allergic and other negative reactions even in the conditions of their long-term use. These features determine the role of drugs based on plant raw materials in the long-term outpatient treatment of patients with chronic diseases, at the stage of post-hospital restorative treatment, as well as in sanatorium-resort conditions. Phytopreparations are widely used in medical practice and play an important role in medical therapy. Currently, the issue of optimization of use and restoration of the existing plant raw material base is particularly acute. The development of this direction is of state importance, namely, control over the organization of rational use and timely reproduction of phytoresources [4].

Resource science of medicinal plants, as a discipline, is included in the initial plans for study by students of the 5th year as an elective course for specialization. Students study this subject after completing a full course of pharmacognosy, assimilation of pharmacy and industrial production of medicines. 135 hours are allocated to the study of the discipline, of which 76 classroom hours and 59 hours for independent study.

The discipline "Resource science of medicinal plants" is a science whose object of research is the natural resources of medicinal plants, in particular their diversity, conditions of growth, distribution, reproduction, protection, condition and dynamics of the raw material base of medicinal plants, as a source of raw materials for the production of medicinal phytoremedies and their use in medicine.

The purpose of studying the discipline is to form students a holistic idea of the current state of plant resources in individual regions and the state as a whole, promising types of medicinal plants, to provide a future specialist in the field of pharmacy with comprehensive knowledge of medicinal plants, the rational use and
The main tasks of this course are to study the state of use of medicinal plant resources and natural vegetation as a source of raw material resources; study of the species composition of medicinal plants, their range and ecological and phytocenotic growth conditions; determining the productivity of medicinal plant raw materials; determination of the volume and placement of operational stocks of medicinal plant raw materials; calculation of the volume of possible annual harvests of medicinal plants; mapping of thickets and reserves of medicinal plants; study of the phenorhythms and terms of reproduction of the original stock of medicinal plant raw materials depending on the biological and ecological and phytocenotic conditions of the growth of medicinal plants; development of the rational mode of procurement of medicinal plant raw materials depending on the biological features and ecological and phytocenotic conditions of growth natural plants; development of a unified system of protection and reproduction of medicinal plant resources.

According to the results of the study, students will be able to improve their knowledge of ways to solve the problem of rational use of medicinal plant resources, the structure of various phytocenoses, mastering methods of determining stocks in specific thickets of key areas, and being able to identify medicinal plant thickets. One of the practical skills that students improve is accounting for stocks of medicinal plants, developing a plan for resource studies based on the needs of the pharmacy chain and industry.

The study of this course in the pharmacist's training system is caused by the necessity of practical implementation of the preparation of medicinal plant raw materials, since medicinal plants are one of the sources of obtaining medicinal products in modern medicine [3]. Phytopreparations are widely used in medical practice and play an important role in medical therapy. Currently, the issue of optimization of use and restoration of the existing plant raw material base is particularly acute. The development of this direction is of state importance, namely, control over the organization of rational use and timely reproduction of phytoresources [4].

This discipline makes it possible to prepare the future specialist for scientific approaches in the development of not only the optimal composition, but also the technology of both new drugs, as well as the possibility of improving the bioavailability, bioequivalence and reducing the side effects of existing dosage forms, since it is important that doctors and other personnel, providing medical services were sure that any drug is not only effective and safe, but also meets the needs of patients. Since the discipline is the scientific and practical base of the pharmaceutical industry, mastering it will allow you to create a specialist highly qualified and prepared both for scientific developments and for the practical production of drugs. This task, in particular, is carried out by the Bukovinian State Medical University, where the Faculty of Pharmacy was established in August 2004 at the request of the times. Today, it is a full-fledged component of a higher school of the European model, in which the scientific-educational, methodical and material-technical base is updated and improved annually, and the basic standards of the pharmaceutical field are used. The fundamental training of a pharmacist enables a wide choice of workplaces in all institutions and institutions of the pharmaceutical profile, as well as
research institutes and clinical diagnostic laboratories.

Conclusion. In the conditions of globalization and reform of domestic pharmacy, the teaching of resource science of medicinal plants affects the professional competence and general erudition of the pharmacist, starting with familiarization with the main aspects of growing medicinal plant raw materials and the creation of phytoremedies and their use in medical practice, as well as preparing a master's graduate for independent work.

References: