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THE ROLE OF PHYTOTHERAPY IN MODERN MEDICINE

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Annotation: This article highlights the role of phototherapy in modern medicine, the effects of medicinal plants on human health, and their healing properties. In recent years, the demand for natural medicines has increased, making phototherapy-the use of plants for treatment -an important branch of medical science. The biologically active compounds found in medicinal plants have a mild yet effective impact on the human body. The article provides information about the advantages and practical applications of phototherapy, as well as scientific research conducted in Uzbekistan on medicinal plants.

Keywords: phototherapy, medicinal plants, natural medicines, traditional medicine, pharmaceuticals.

Annotatsiya. Ushbu maqolada fitoterapiyaning zamonaviy tibbiyotdagi o‘rni, dorivor o‘simliklarning inson salomatligiga ta’siri va ularning shifobaxsh xususiyatlari yoritilgan. So‘nggi yillarda tabiiy dori vositalariga bo‘lgan talab ortib borayotgani tufayli fitoterapiya-o‘simliklar asosida davolash usuli-tibbiyotda tobora muhim ahamiyat kasb etmoqda. Dorivor o‘simliklar tarkibidagi biologik faol moddalar inson organizmiga yumshoq, ammo samarali ta’sir ko‘rsatadi. Maqolada fitoterapiyaning afzalliklari, amaliy qo‘llanilishi hamda O‘zbekistonda dorivor o‘simliklar asosida olib borilayotgan ilmiy tadqiqotlar haqida ma’lumotlar keltirilgan.

Kalit So‘Zlar: fitoterapiya, dorivor o‘simliklar, tabiiy dori vositalari, xalq tabobati, farmatsevtika.

Аннотация: В статье рассматривается роль фитотерапии в современной медицине, влияние лекарственных растений на здоровье человека и их целебные свойства. В последние годы спрос на натуральные лекарственные средства значительно возрос, что делает фитотерапию одним из важных направлений современной медицины. Биологически активные вещества, содержащиеся в лекарственных растениях, оказывают мягкое, но эффективное воздействие на организм человека. В работе приведены данные об особенностях фитотерапии, её преимуществах, практическом применении, а также об исследованиях, проводимых в Узбекистане на основе лекарственных растений.

Ключевые Слова: фитотерапия, лекарственные растения, натуральные препараты, народная медицина, фармацевтика.

Today, issues related to preserving human health, preventing diseases, and forming a healthy lifestyle are gaining crucial importance on a global scale. In this process, interest in natural resources, particularly medicinal plants, is growing. Although chemical drugs hold a leading

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position in the pharmaceutical market, due to their side effects, many patients prefer natural and safe remedies. One such natural treatment direction is phototherapy, i.e., treatment with plants.

Phototherapy is a field of medicine aimed at treating and preventing diseases based on plants and their extracts. Medicinal plants contain hundreds of biologically active substances beneficial to the human body—flavonoids, alkaloids, sapiens, essential oils, tannins, vitamins, and other natural components. These substances have a gentle yet effective impact on the nervous, cardiovascular, liver, gastrointestinal, immune, and respiratory systems. Phototherapy is distinguished by its naturalness, ecological purity, low side effects, possibility for long-term treatment, and economic affordability. The main forms of using medicinal plants are infusions, extracts, tinctures, tablets, capsules, syrups, and ointments. Teas and infusions prepared at home are the simplest forms, while extracts and tinctures produced on an industrial scale have a stronger effect. For example, the preparation "Glyciram" is obtained from licorice root and is known as an effective remedy against cough; "Valemidin," based on valerian root, is used as a sedative.

Today, phototherapy has become one of the important directions in modern medicine. It is widely used as a complementary or supplementary treatment method alongside chemical drugs. This field is also actively developing in Uzbekistan. Scientists from the Tashkent Pharmaceutical Technical School, the Tashkent Pharmaceutical Institute, and the Institute of Plant Chemistry are creating new preparations based on medicinal plants. Annually, thousands of tons of medicinal plant raw materials are processed and exported in our country.

Approximately 10-12 thousand species of medicinal plants have been identified worldwide, of which the chemical and pharmacological properties of over 1000 have been studied. In Uzbekistan, there are more than 700 species of medicinal plants, nearly 120 of which are used in folk and scientific medicine. According to statistical data, 40-47% of the drugs used in modern medicine are derived from plant raw materials. This indicates the significant place phototherapy holds in the pharmaceutical field. Phototherapy is most commonly used in the following areas: treatment of nervous system, cardiovascular, digestive, respiratory, skin, and immune system diseases. For instance, valerian, basil, lavender, and lemon balm calm the nerves and improve sleep; hawthorn, barberry, lemon, and garlic strengthen heart activity and normalize blood pressure; rosehip, mint, cumin, and ginger improve digestion; aloe, chamomile, and marigold reduce skin inflammation; echinacea, lemon balm, and garlic boost immunity.

Among the most famous medicinal plants are aloe, ginger, garlic, rosehip, echinacea, licorice, valerian, barberry, basil, and fennel. Aloe vera leaf juice heals burns and wounds quickly; ginger is beneficial for colds, joint pain, and low immunity. Garlic, as a natural antibiotic, strengthens the cardiovascular system; licorice root is widely used as a cough remedy; and valerian has a calming effect on the nervous system. The antibacterial property of berberine in the barberry plant has been scientifically confirmed. Substances obtained from medicinal plants are also present in many well-known drugs. For example, "Aspirin" comes from salicylic acid in willow bark, "Morphine" from the opium poppy, "Atropine" from belladonna, and "Digoxin" from the foxglove plant. Furthermore, one of the most commonly used preparations in folk medicine is Asotin (acetylsalicylic acid), derived from willow bark and known as a pain reliever and fever reducer; valerian infusion is prepared from valerian root and calms the nerves.

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Phototherapy, as a natural and ecologically safe treatment direction, has many advantages: it has a complex effect on the body, has few side effects, and is suitable for long-term use. However, it also requires a responsible approach. Incorrect dosage, allergic reactions, or incompatible plant mixtures can lead to negative consequences. Therefore, herbal remedies should be used based on the recommendation of a specialist.

Phototherapy is increasingly strengthening its place in modern medicine. Plant-based medicines are distinguished by their high efficacy, ecological safety, and naturalness. Uzbekistan's rich flora resources, scientific potential, and the ancient experience of folk medicine create broad opportunities for the further development of this direction. Phototherapy is not only a heritage of the past but also one of the important future directions of medicine.

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