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AROMATHERAPY IN THE TREATMENT OF SEASONAL RESPIRATORY VIRAL INFECTIONS

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Abstract. To determine the quality of the oil, it is necessary to conduct a number of complex laboratory studies, including a gas chromatographic analysis of the composition. This test is costly and will often not be carried out by users of aroma oils (private patients, doctors, rehabilitators, etc.). Although there is such equipment for diagnosing the characteristics of the oil, there is no standard database against which to compare the composition of the oil.

The aim of this trial is to inform practitioners and consumers about the rules to be observed when working with EO and possible side effects with the help of modern gadgets.

Methods. To achieve the set goals and solve certain problems, the following research methods were used, in particular: problem-chronological - to establish the chronology of the scientific study of the use of aromatherapy; socio-logical - a study of the medical and social qualities of the spread of pathological changes in the autonomic nervous system; analytical - to determine scientific guidelines, the use of evidence-based medicine in aromatherapy procedures; the method of terminological analysis, which made it possible to ensure the disclosure of the essence of the phenomena under study; the method of scientific extrapolation, which made it possible to determine the possibilities of creating and applying aromatherapy as an optimal synthesis of theoretical and practical knowledge; methods of multivariate statistical analysis and forecasting for data processing.

Project objectives:

1. Develop a classification of EM, taking into account the standardization of requirements for them.
2. To study data on the effect of aerosol therapy with natural essential oils on the microbial and viral background of the body.
3. Analyze changes in cellular and humoral immunity before and after aerosol therapy with natural essential oils.
4. Develop a methodology and algorithm for conducting aerosol therapy with natural essential oils, and create a database for EO.
5. To study the clinical effectiveness of aerosol therapy with natural essential oils in complex rehabilitation.

Results. The developed database will make it easy to navigate a huge variety of proposed types of essential oils and will allow you to establish its correspondence with the producing plant, which, unfortunately, cannot always be observed in essential oils offered for sale. Moreover, the aromatic oils included in the base must be checked for toxicity and correct use. Misuse may result in side effects, including allergic reactions, narcotic, carcinogenic or neurotoxic effects. This database is created with the possibility of constant updating and adding new information in all its forms, is the initial stage of creating a more complete version and can be claimed by interested organizations, and individuals via the Internet.

Conclusions. It is advisable to use phytoaeroprophyllaxis in medical institutions (hospitals, medical units, health centers, sanatoriums, maternity hospitals, nursing homes, etc.). Of course, a return to natural remedies, in particular to aerophytotherapy, and phytoaeroprophyllaxis, should be combined with the study of their action at the modern methodological level, thorough clinical development of indications and contraindications for their use.

Keywords: diseases of the upper respiratory tract, etiological factors, aromatherapy, inhalations, essential oils.

Introduction. Today, most consumers have learned to actively influence their health. It has become prestigious and financially advantageous to be in good shape. Compared to the middle of the 20th century, when patients passively awaited the advice and prescriptions of a doctor, the end of the 20th - beginning of the 21st centuries is characterized by the fact that people began not only to actively monitor their health but also learned how to influence it. This has generated a lot of interest in self-

administered prophylactic as well as self-treatment products. Modern aromatherapy is a preventive, health-improving, completely natural way to maintain a good psycho-emotional and physical form, a therapy that allows you to remove and resolve daily stresses [1]. Aromatherapy is both an auxiliary and independent medical discipline, occupying a position on par with herbal medicine, homeopathy, acupuncture, and other methods. Essential oils pose a minimal risk of possible complications in their use.

Aromatherapy is based on the principle of the impact on the human body of natural essential oils, which have been used for the treatment and prevention of diseases since ancient times. Essential oils are used to remove carcinogens from the body. The radioprotective effect of lavender, eucalyptus, and other oils has been revealed. Almost all essential oils are natural antioxidants, actively affect the vital activity of the cell, and slow down the aging process of the human body. They are a good tool for the prevention of atherosclerosis. Essential oils can be effectively used to treat neuroses, insomnia, etc. As practice shows, essential oils, for example, oils of sage, pine, fir, lavender, and others, having analgesic, anti-inflammatory, sedative, and antiseptic properties, are effectively used in the complex treatment of bronchopulmonary diseases (chronic bronchitis, pneumonia, etc.). The use of composite mixtures of essential oils of mint, lemon wormwood, sage, and lavender helps to increase the functional activity of the respiratory system of the lungs. Essential oils are used to prevent and treat blood diseases associated with a low resistance of red blood cells and normalize energy processes in blood cells. Inhalation of essential oils has a significant physiological effect on the human body: it changes muscle strength, breathing rhythm and pulse, blood and intracranial pressure, and affects vision, and the psycho-emotional state of a person [2, 3].

The goal of the project is to inform practitioners and consumers about the rules to be observed when working with EO and possible side effects with the help of modern gadgets.

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Subjects and methods. To achieve the set goals and solve certain problems, the following research methods were used, in particular: problem-chronological - to establish the chronology of the scientific study of the use of aromatherapy; sociological - a study of the medical and social qualities of the spread of pathological changes in the autonomic nervous system; analytical - to determine scientific guidelines, the use of evidence-based medicine in aromatherapy procedures; the method of terminological analysis, which made it possible to ensure the disclosure of the essence of the phenomena under study; the method of scientific extrapolation, which made it possible to determine the possibilities of creating and applying aromatherapy as an optimal synthesis of theoretical and practical knowledge; methods of multivariate statistical analysis and forecasting for data processing. When performing the work, methods of applied system analysis, elements of probability theory, and methodology for designing failure software were used. In the process of research, the development of methods for simplifying the structural and functional complexity of the model was

used. The study includes a comprehensive examination of patients. The study was conducted in compliance with the principles of evidence-based medicine (selection of patients and statistical processing). Study Design: The review was conducted using modern software based on a diagnosis previously made by a family doctor and aromatherapy procedures. Data on essential oils, producing plants, and substances contained in them is stored and can be used as a local application on a mobile phone that does not have access to the Internet. The form contains a text block to display a detailed description of the chemical composition of the active substance in the essential oil, possible areas of application, and types of possible side effects, as well as the minimum and maximum course of procedures.

The most common reason for patients to visit otorhinolaryngologists, pediatricians, and local therapists is inflammatory diseases of the upper respiratory tract, which make up about 90% of all infectious diseases. At different times, respiratory diseases were called differently: catarrh of the upper respiratory tract, acute respiratory disease, and acute respiratory viral infection (ARVI). According to the World Health Organization (WHO), an adult suffers from ARVI twice a year. The high incidence of respiratory tract diseases is explained by a variety of etiological factors (rhinoviruses, respiratory syncytial infection viruses, influenza and parainfluenza, adeno-, coronaviruses, as well as ECHO and Coxsackie viruses types A and B), high variability of the pathogen and ease of transmission (airborne droplets) [4].

Even though the inhalation of vapors of medicinal plants has been used for a long time, it has been used in medical practice only since 1858, when M. Sales-Giron created an apparatus for inhalation. The term "aromatherapy" (the use of smell as a medicine) was first coined by the French chemist R. M. Gattefosse in 1928. The popularity of aromatherapy was lost over time for various reasons, but in recent years, interest in it has begun to revive. Currently, essential oils are used for the prevention and treatment of acute respiratory infections (ARIs) [5, 6].

Currently, 2 types of drugs are used to treat colds and symptoms of numerous viral infections: 1) symptomatic and antipyretic; 2) isotropic. Among the symptomatic drugs, preparations based on interferon, sympathy - and adrenomimetics predominate. First of all, these are expensive drugs that are actively advertised by all the media. They are inaccessible to the bulk of the population and therefore do not solve the problem of combating massive viral infections.

Among the drugs of the 2nd group, rimantadine, and arbidol, antiviral agents for the treatment of concomitant herpes should be noted. Resistance to most modern antiviral inotropic drugs develops quite quickly, and some of them have various undesirable effects. Given their high cost, the costs of prescribing repeated courses of treatment become unbearable for practical healthcare and most patients.

Due to the high prevalence of influenza and SARS, in which rhinitis is one of the pronounced clinical symptoms, it is very important to include phytotherapy in the treatment of such patients - medicinal plants containing biologically active substances (polyphenols, ecdysones, lectins, essential oils, etc.). The latter, along with antiviral

activity, have anti-inflammatory, antimicrobial, fungicidal, immunomodulatory, hypersensitizing, and reparative properties.

At the same time, there is a growing flow of information containing unprofessional and often dangerous recommendations for the treatment of influenza and SARS, as well as dysentery, hepatitis, and typhoid with plants. This inevitably discredits phytotherapy, turns the practitioner away from it, and harms the patient.

In ancient times, aromatherapy was a popular form of treatment. Hippocrates, Avicenna widely used essential oils to treat many pathological conditions, as well as mental illness, to increase intellectual abilities and emotional and volitional qualities. Later, aromatherapy lost its significance, and only in the second half of the 20th century did it again attract attention [7]. This interest is explained by the sharp deterioration of the environmental situation, urbanization, large psycho-emotional stress, and changes in social status that hurt people's health.

Interest in aromaphylaxis and aromatherapy is also determined by the side effects of drugs of synthetic origin, varying in frequency and strength, leading to various allergic reactions (up to anaphylactic shock). As a result of the impact on the body of several chemicals, medicinal, and other substances, the so-called secondary immunodeficiency develops.

Results. Currently, about 3000 essential oils are known. About 300 EOs are widely used in medical and veterinary practice, food and cosmetic industries, and as part of household chemicals. Essential oils - oily liquids from light yellow to brown, almost insoluble in water (0.05%), but evaporating well even at room temperature, as a rule, have a pleasant smell.

EOs are active against bacteria, mycoplasmas, fungi, viruses, protozoa, and parasites, they have anti-inflammatory, antioxidant, and antimutagenic properties. It is shown that they slow down the aging process, activate regeneration processes in organs and tissues, activate the immune system, prevent the formation and growth of malignant neoplasms, reduce the toxic effects of xenobiotics, ionizing radiation, optimize the functioning of body systems and tissues, showing the properties of adaptogens and improving the quality of life. However, when using EM, it should be remembered that these are the most complex chemical mixtures, the composition of which is very dependent on the climatic zone in which the raw material is grown, the season of the year, weather conditions, and other reasons. And the composition and dose of the oil determine the severity and direction of the pharmacological effects of EO. It should also be taken into account that the effect when using any EO in a person will largely depend on gender, age, type of human nervous system, and its state (excitation, overwork, state of rest) at the time of aromatherapy.

Standardization of essential oils. For aromatherapy, it is recommended to use only natural essential oils that meet international standards for the content of the main components. In the composition of essential oils, 50-500 or more components are determined, which depends only on the sensitivity of the equipment. Natural EOs are widely used as independent and auxiliary medicines in the treatment and prevention of various diseases and syndromes. Aromatherapy requires special training of workers: knowledge of chemistry, toxicology, and safety

precautions when using EO is required. Before the appointment for aromatherapy, it is necessary to conduct a test for individual tolerance: complaints of cough, shortness of breath, skin redness, itching, rash, etc. are a contraindication for taking EO by this patient. In high concentrations, EOs are toxic to humans and animals. EM should be stored only in glass containers without access to light and air. If stored improperly, essential oils lose their medicinal properties and acquire the properties of allergens. Mixtures of 2-3 oils are not recommended to be stored and used for more than a year. The use of multicomponent mixtures is not recommended due to the unpredictability of changes in the chemical composition and pharmacological properties.

All this has led to the fact that both doctors and patients have become more cautious about the use of synthetic and semi-synthetic antibiotics and other drugs. With long-term and sluggish processes (especially in the autumn-winter period), regular use of plant substances, including those containing essential oils, is necessary for prevention and treatment; they can be combined with modern and traditional therapies. Essential oils are, in fact, an environmentally friendly medicine that nature itself gives us. Natural essential oils will help solve many health problems, including the fight against rhinitis, which is accompanied by swelling of the mucous membranes, attachment of cracks in the nasal passages, sinusitis, and other symptoms of a chronic process [7].

The effectiveness of the use of plant aromas is ensured by the fact that these are natural multicomponent compounds with a wide range of positive effects on many body systems. In terms of chemical structure, and biological and pharmacological action, fragrance components are similar to endogenous compounds involved in the bioregulation of the body's physiological systems. This is important since the pathogenesis of various forms of rhinitis as a symptom of numerous diseases caused by environmental and somatic factors is characterized not only by complexity and versatility but also by the "breakdown" of regulatory systems. The multicomponent nature of plant aromas ensures their multipurpose, versatile action on various links of the pathological process [8, 9].

Aromatherapy should begin at the first manifestations of the disease, which can interrupt the further development of the disease process or contribute to its easier course. The effect of the procedure as a naturopathic remedy does not appear immediately, but gradually, but with the perseverance and patience of the patient, it allows you to get a good result. The simplest method of using essential oils is applying them to the nasal passages and inhaling them with the help of various aroma lamps, aroma incense burners, etc. However, one must be aware of possible allergic reactions to essential oils, especially those of synthetic origin [5, 10].

Before using essential oils, it is necessary to obtain full information about their action, composition, and possible undesirable effects. In the pure, undiluted form, essential oils are not used, as they are concentrates; they are diluted with vegetable (sunflower or olive) oil in a ratio of 1:5 or 1:10. The intake of essential oils inside is not recommended, since toxic effects from the kidneys and skin may develop [6, 11].

The most effective are essential oils in the form of inhalations, which are carried out in a polyclinic, a day or

regular hospital, a sanatorium, and rarely at home (the latter option requires the patient to know aromatherapy, at least in general terms). With the help of inhalations, it is possible to prevent its violent manifestations in the early stages of rhinitis, to increase the effectiveness of complex treatment. The indisputable advantage of the inhalation method of therapy is the possibility of its use for children of any age, including newborns, since it is safe and convenient. The introduction of the medicinal substance occurs as physiologically as possible - together with the inhaled air. The active components of the preparations have a topical effect directly on the mucous membrane of the respiratory organs, and the relief of congestive and inflammatory reactions is quickly achieved. When inhaled, maceration of the skin and irritation of the mucous membrane does not occur, which develop with prolonged use of drugs in the form of drops or sprays. However, artificial inhalation has its limitations in use, since it requires a special apparatus - an inhaler. When using a face mask in young children, skin maceration may occur at the point of contact of the mask with the skin. In addition, oily solutions cannot be used in modern inhalers - nebulizers. However, it is preparations based on essential oils that have an advantage that aqueous solutions of drugs do not have, namely, the softening effect of oil microparticles on mucous membranes [9].

After studying certain properties of essential oils, it can be argued that an effective combination is a set of the following oils:

1. mint oil (without menthol) (Oleum methane)
2. eucalyptus oil (Oleum eucalypti);
3. cajeput oil (Oleum cajeputi);
4. levomenthol (Levomenthol);
5. wintergreen oil (gaultheria lying down) (Oleum wintergreen);
6. juniper oil (Oleum juniperi);
7. clove oil (Oleum caryophyllene).

Juniper essential oil prevents the spread of colds and increases the body's resistance. Peppermint essential oil has an invigorating and analgesic effect. The essential oil of clove is used as an antiseptic and pain reliever. It has a strong anti-inflammatory effect. Vapors of essential oil of clove disinfect the air. Eucalyptus increases resistance to infectious diseases.

Eucalyptus essential oil is used for colds and flu and inhibits the vital activity of pathogenic bacteria. Cajeput essential oil is derived from the evergreen cajeput tree (also known as the "white tea tree"), popular as a remedy for colds. It has an anti-inflammatory and tonic effect. Used as an antiseptic. Wintergreen oil, obtained from wintergreen leaves, reduces inflammation in the respiratory system. Levomenthol is a naturally occurring menthol. It has a moderate antispasmodic effect and reduces the severity of symptoms of acute rhinitis, pharyngitis, laryngitis, and bronchitis [10, 12].

Aromatherapy rules:

1. Use only natural oils. Synthesis products can cause an allergic reaction, restless behavior, sleep disturbance, and irritation of the nasal mucosa and eyes. Specialists of professional aromatherapy (doctors, cosmetologists, psychologists) use products only with a guarantee of high quality, bought in the pharmacies of the city.
2. Use aromatic oils only in microdoses.

3. Remember, one of the features of herbal aromas is that their action at high and low concentrations is opposite in nature: a positive effect is observed at low concentrations and not observed at high ones. In addition, with an overdose, nausea, emotional arousal, and anxiety may occur.

4. Aromatherapy gives effect only in the case of prolonged and gradual use. The maximum shelf life of aromatic oils is two years. The most perishable oils are citrus fruits (tangerine, orange, grapefruit, lemon). They can be stored for no more than a year.

Discussion. Proper use of essential oils at home in the form of baths, massages, aerosols, or special lamps is a very effective form of preventing colds and other infectious diseases. However, when coming into contact with other children, especially in kindergarten, due to the insufficient development of their immune system, children inevitably pick up colds and other infections. When this happens, essential oil comes to the rescue. It can significantly reduce the discomfort experienced by a sick child, shorten the time of illness and prevent a recurrence [7, 13].

On mobile devices, all programs work with data that can have two sources: local and remote. A remote data source is a stand-alone server or other information storage that provides access upon request from a mobile application (client). For convenient interaction with this kind of repository, programming interfaces called APIs are most often used. At the moment, the most popular solution for building API is the architectural solution Rest, which allows you to create distributed systems in Kotlin, Python, and Java programming languages. The server hosts a database that contains tables with information. A properly configured database allows the API to access it and retrieve information. The main language for communicating with the database can be called SQL.

Another type of information storage is local. Mobile applications quite often use the built-in memory of the device to store files necessary for work. It can be pictures, text files, and also databases. With the help of an application written in Java / Kotlin, you can communicate with the database, and save, delete and edit the information stored in the database. An important difference between this solution and remote storage of information is the inability to restore local data after deleting the program that used them.

Conclusions. It is advisable to use aromatherapy and aroma prophylaxis in preschool and school institutions to increase the effectiveness of preventive vaccinations (which is dictated by the increasing tension of the sanitary-hygienic and epidemiological situation), as well as to improve sanitary and hygienic conditions during the epidemic of SARS and influenza (they use essential oils obtained from monarda, basil, eucalyptus, pine, fir, sage, etc.). It is advisable to use phytoaeroprophyllaxis in medical institutions (hospitals, medical units, health centers, sanatoriums, maternity hospitals, nursing homes, etc.). Of course, a return to natural remedies, in particular to aerophytotherapy, and phytoaeroprophyllaxis, should be combined with the study of their action at the modern methodological level, thorough clinical development of indications and contraindications for their use. At the same time, we emphasize that the use of various combinations of essential oils for the treatment and prevention of acute and

chronic diseases should not be absolutized - they are not omnipotent in severe and acute diseases. Only a rational and qualified combination of methods of scientific and traditional medicine in the prevention and treatment of patients can give the desired results.

The developed database will make it easy to navigate a huge variety of proposed types of essential oils and will allow you to establish its correspondence with the producing plant, which, unfortunately, can not always be observed in essential oils offered for sale. This database is created with the possibility of constant updating and adding new information in all its forms, is the initial stage of creating a more complete version and can be claimed by interested organizations, and individuals via the Internet. The proposed database will facilitate access to information of interest on essential oils for specialists of any level of computer training.

Practical significance. The use of the developed system of aerosol therapy with natural essential oils will improve the clinical and laboratory efficiency of the complex treatment of patients. In addition, the use of natural essential oils in the treatment of patients will make it possible to cancel or reduce the dose of medications. Due to the simplicity and accessibility of the method, it can be used not only in hospitals but also in outpatient settings.

References:

1. Yuan R, Zhang D, Yang J, Wu Z, Luo C, Han L, et al. Review of aromatherapy essential oils and their mechanism of action against migraines. *J Ethnopharmacol.* 2021 Jan 30; 265:113326. PMID: 32877718. DOI: 10.1016/j.jep.2020.113326
2. Candy B, Armstrong M, Flemming K, Kupeli N, Stone P, Vickerstaff V, et al. The effectiveness of aromatherapy, massage and reflexology in people with palliative care needs: a systematic review. *Palliat Med.* 2020 Feb; 34(2):179-194. PMID: 31659939. PMID: PMC7000853. DOI: 10.1177/0269216319884198
3. Li H, Zhao M, Shi Y, Xing Z, Li Y, Wang S, et al. The effectiveness of aromatherapy and massage on stress management in nurses: a systematic review. *J Clin Nurs.* 2019 Feb; 28(3-4):372-385. PMID: 29964364. DOI: 10.1111/jocn.14596
4. Al-Harrasi A, Bhatia S, Kabir T, Behl T, Kaushik D, Ahmed MM, et al. Olfactory Aromatherapy vs COVID-19: A Systematic Review. In: Al-Harrasi A (ed.), *Role of Essential Oils in the Management of COVID-19.* CRC Press; 2022. p. 3-6. DOI: 10.1201/9781003175933-2
5. Buckle J. The role of aromatherapy in nursing care. *Nurs Clin North Am.* 2001 Mar; 36(1):57-72. DOI: 10.1016/S0029-6465(22)02529-4
6. Leigh de Rapper S, van Vuuren SF. Odoriferous therapy: A review identifying essential oils against pathogens of the respiratory tract. *Chem Biodivers.* 2020 Jun; 17(6):e2000062. PMID: 32207224. DOI: 10.1002/cbdv.202000062
7. Buckle, J. Literature review: should nursing take aromatherapy more seriously? *Br J Nurs.* 2007 Jan 25-Feb 7; 16(2):116-20. PMID: 17353823. DOI: 10.12968/bjon.2007.16.2.22772
8. Al-Harrasi A, Bhatia S, Kabir T, Behl T, Kaushik D, Ahmed MM, et al. Essential Oil Chemistry vs. Aromatherapy. *Role of Essential Oils in the Management of COVID-19.* CRC Press; 2022. p. 135-143. DOI: 10.1201/9781003175933-10
9. Brunvoll SH, Nygaard AB, Ellingjord-Dale M, Holland P, Istre MS, Kalleberg KT, et al. Prevention of covid-19 and other acute respiratory infections with cod liver oil supplementation, a low dose vitamin D supplement: quadruple blinded, randomized placebo-controlled trial. *BMJ.* 2022 Sep 7; 378:e071245. PMID: 36215222. PMID: PMC9449357. DOI: 10.1136/bmj-2022-071245
10. Goepfert M, Liebl P, Herth N, Ciarlo G, Buentzel J, Huebner J. Aroma oil therapy in palliative care: a pilot study with physiological parameters in conscious as well as unconscious patients. *J Cancer Res Clin Oncol.* 2017 Oct; 143(10):2123-2129. PMID: 28634728. DOI: 10.1007/s00432-017-2460-0
11. Willcox M, Donovan E, Hu XY, Elboray S, Jerrard N, Roberts N, et al. Views regarding use of complementary therapies for acute respiratory infections: a systematic review of qualitative studies. *Complement Ther Med.* 2020 May; 50:102382. PMID: 32444047. DOI: 10.1016/j.ctim.2020.102382
12. Sysoev NP, Feshchenko IF, Tarasenko EA, Babushkina NS, Podkladnev EA, Nikolenko VV. The possibility of optimizing the application of aroma-ozone therapy in the prevention and treatment of inflammatory diseases of the oral cavity. In: *The priorities of the world science: experiments and scientific debate. Proceedings of the XIV International scientific conference.* 2017. p. 46-54.
13. Al-Lehebi R, AlSardi M, Alshaya S. Aromatherapy may not be so relaxing after all: a case of acute eosinophilic pneumonia. *Chest.* 2021; 160(4):A1198. DOI: 10.1016/j.chest.2021.07.1100

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АРОМАТЕРАПІЯ В ЛІКУВАННІ СЕЗОННИХ РЕСПІРАТОРНИХ ВІРУСНИХ ІНФЕКЦІЙ

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Резюме. Сучасна ароматерапія – профілактичний, оздоровчий, повністю природний спосіб, який ефективно застосовується в практиці фізичної реабілітації.

Мета. Поінформувати практиків і споживачів про правила роботи з ефірними оліями та можливі побічні ефекти за допомогою сучасних гаджетів.

Матеріали і методи. У роботі використані методи дослідження: проблемно-хронологічний – встановити хронологію наукового вивчення використання ароматерапії; соціологічний – дослідження медико-соціальних якостей поширення патологічних змін у вегетативній нервовій системі; аналітичний – для визначення наукових орієнтирів, застосування доказової медицини в процедурах ароматерапії; метод термінологічного аналізу – для розкриття сутності досліджуваних явищ; метод наукової екстраполяції, що дав змогу визначити можливості створення та застосування ароматерапії як оптимального синтезу теоретичних і практичних знань; методи багатofакторного статистичного аналізу.

Результати. Розроблена база даних дозволить легко зорієнтуватися у величезній різноманітності

запропонованих видів ефірних олій і дозволить встановити їх відповідність заводу-виробнику. Ароматичні масла, що входять до складу бази, повинні бути перевірені на токсичність і правильність використання. Ця база даних створена з можливістю постійного оновлення та додавання нової інформації у всіх її формах, є початковим етапом створення більш повної версії та може бути затребувана зацікавленими організаціями та окремими особами через Інтернет.

Висновки. Запропонована база даних дозволить легко орієнтуватися у величезній різноманітності запропонованих типів ефірних масел і дасть можливість користувачам встановлювати його відповідність із заводом-виробником.

Ключові слова: захворювання верхніх дихальних шляхів, етіологічні фактори, ароматерапія, інгаляції, ефірні олії.

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