Aim of the study: search for promising medicinal raw materials for extracting biologically active substances.

Materials and methods. **S**earch and analysis of thematic literature.

Results and discussion. Based on the results of the analysis of literature sources conducted we chosed sage (*Salvia sclarea L.*) and mint (*Menthe piperita L.)* leaves as the medicinal plant raw material for further development of a pharmaceutical product application.

Those types of medicinal plant raw material can be used in several forms such as mouthwashes, toothpastes, topical agents or local drug delivery devices. However, more research is needed to prepare another medicinal forms, wich will be more comfortable for patients. In this connection, the creation of natural medicines, in particular of plant origin, with the antimicrobial and bactericidal properties is a topical problem of pharmaceutical technology.

Among a variety of solid dosage forms, tablets that are easy to use, and the most convenient in transportation and storage are considered to be the most common for the treatment diseases. Another advantage of tablets is efficiency of their production, the possibility of accurate dosing and combination of several medicinal substances in one dosage form.

When developing the composition and technology of tablets, it is necessary to standardize the biologically active substance obtained from medicinal plant raw materials and select the component composition of auxiliary substances. Since, auxiliary substances in the production of tablets are intended to give the tablet mass the necessary technological properties that ensure dosage accuracy, mechanical strength, disintegration and stability of tablets during storage.

Conclusions. Thus, according to the results of the literature analysis, medicinal plant raw materials - sage leaves and mint - were chosen and it was established that tablets are the promising most convenient medicinal form. Therefore, the goal of further research will be the development of the component composition and technology of sublingual tablets based on sage leaves and mint for the prevention and treatment of infectious diseases of the oral cavity.

OPTIMIZING THE USE OF TOPICAL RETINOIDS IN MOROCCAN PATIENTS WITH ACNE

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Introduction. Acne has been known to exist since ancient times, although it was not identified as a distinct medical condition until the 19th century. It is one of the most common skin disorders, peaks in adolescence and early adulthood, affecting around 85% of people between the ages of 12 and 24. Though it is often thought of as a teenage problem, acne can occur in people of any age, though it grows less common as time goes on.

Acne pathology and the mechanisms of action of retinoids are complex and multifactorial. Major factors in acne pathogenesis include epithelial hyperproliferation, increased sebum production with concurrent alterations in its composition, increased *Cutibacterium acnes* population, and follicular and perifollicular inflammation. These can impair normal functioning of the pilosebaceous unit, leading to the formation of microcomedones, comedones, inflammatory lesions, or nodules.

Aim of the study: optimizing the use of topical retinoids in Moroccan patients with acne.

Materials and methods. For the purposes of the study was developed a questionnaire for surveying of pharmacy visitors with acne. The questionnaire consists from 2 chapters. Chapter I included information concerning the demographic data, data about longitude of disease. Patients were also asked if they follow the dietary recommendations. The chapter II included questions concerning the criteria of efficiency and safety of the acne treatment as well as about the factors, that from the point of patient are the most important for the effectiveness of the treatment. The greatest attention was paid to the use of topical retinoids.

Results and discussion. Treatments for acne are available, including lifestyle changes, medications, and medical procedures. Eating fewer simple carbohydrates such as sugar may minimize the condition. Treatments applied directly to the affected skin, such as azelaic acid, benzoyl peroxide, and salicylic acid, are commonly used. Antibiotics and retinoids are available in formulations that are applied to the skin and taken by mouth for the treatment of acne. However, resistance to antibiotics may develop as a result of antibiotic therapy. Several types of birth control pills help prevent acne in women. Medical professionals typically reserve isotretinoin pills for severe acne, due to greater potential side effects. Early and aggressive treatment of acne is advocated by some in the medical community to decrease the overall long-term impact on individuals.

Topical retinoids represent a mainstay of acne treatment because they expel mature comedones, reduce microcomedone formation, and exert anti-inflammatory effects. The first-generation retinoid tretinoin (all-trans retinoic acid) and the synthetic third-generation polyaromatics adapalene and tazarotene are approved for acne treatment by the US FDA, whereas topical tretinoin, isotretinoin (13-cis retinoic acid), and adapalene are accredited in Canada and Europe. Topical retinoids have a favorable safety profile distinct from the toxicity of their systemic counterparts. Local adverse effects, including erythema, dryness, itching, and stinging, occur frequently during the early treatment phase. Their impact varies with the vehicle formation, skin type, frequency and mode of application, use of moisturizers, and environmental factors such as sun exposure or temperature. The broad anti-acne activity and safety profile of topical retinoids justifies their use as first-line treatment in most types of non-inflammatory and inflammatory acne. They are also suitable as long-term medications, with no risk of inducing bacterial resistance, for maintenance of remission after cessation of initial combination therapy.

Retinoids, analogs of vitamin A, have pleiotropic effects including comedolysis and reduction of microcomedonal formation. They have been shown to benefit both comedonal and inflammatory acne. The mechanisms through which these effects occur

are believed to involve binding to retinoic acid receptors (RARs). Three subtypes, RAR-α, RAR-β, and RAR-γ, are known, of which RAR-γ expression is highest in human skin. Different retinoids vary in their receptor subtype affinity and may be more selective for one receptor versus another. Topical retinoids have evolved over the decades from first-generation tretinoin, which is still a commonly used treatment approach for many dermatologists. The continued investigation of these agents led to the discovery of third and fourth generation retinoids, which have advantages in potency, tolerability, photostability, and other indications. Research into receptor binding sites of retinoids has also led to discovering a fourth-generation retinoid, trifarotene, which has selectivity towards RAR. Ongoing research will undoubtedly lead to further developments and understanding of topical retinoids and their uses.

Topical retinoids are the drugs of choice for the treatment and maintenance therapy of patients with mild-to-moderate acne vulgaris. Depending on the severity of the acne, topical retinoids may be used alone or in combination with benzoyl peroxide and topical or oral antibiotics. Oral antibiotics are an important therapy for inflammatory acne unresponsive to topical therapy. Neither topical nor oral antibiotics should be used as monotherapy. Oral contraceptives and/or spironolactone are useful for many women with acne. Oral isotretinoin is the drug of choice for severe, extensive, nodular acne vulgaris but is also often used in moderate cases where scarring is evident, acne-related psychosocial distress is significant or other treatment modalities have failed.

Topical retinoids are currently approved by the US Food and Drug Administration for the treatment of acne vulgaris in nonpregnant, nonlactating patients 12 years of age and older. Their efficacy, safety, and tolerability are well documented for inflammatory and noninflammatory acne with studies repeatedly demonstrating a decrease in the number of lesions, significant improvement in acne severity, improvement in the cosmetic appearance of acne, and the prevention of acne lesions through microcomedone formation. There is some variability between prescription retinoid products regarding efficacy, safety, and tolerability; with erythema, peeling, and dryness being common, potential side effects. Due to their efficacious and safe profile, topical retinoids remain the first-line treatment for acne vulgaris.

Conclusions. This study highlights the high prevalence of scars on acne patient and its significant impact on quality of life that increases with scars severity. Therefore, quality of life impact of acne scars must be considered for therapeutic decision-making.

OVERVIEW OF UKRAINIAN PRICING REIMBURSEMENT MODEL

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Introduction. The Ukrainian government established the Affordable Medicines Program (AMP) in 2017 to provide reimbursement for outpatient prescription medicines. While the program has clear advantages, it is crucial to evaluate the AMP