SCIENTIFIC Research and Community

Acne Treatment Preferences and Pharmaceutical Care Patterns in Georgian Pharmacies

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ABSTRACT

Acne vulgaris is a global problem that requires a challenging and prolonged treatment course for patients (1,2). It significantly impacts a patient's quality of life, affecting self-esteem and other psychosocial factors. Patients encounter many over-the-counter and prescription acne treatments, including topical creams, gels, cleansers, antibiotics, retinoids, and hormonal therapies. The variety of options can be overwhelming, and the lack of clear, personalized guidance on choosing between these therapies adds to the confusion. Exploring patients' behaviors, preferences, and reliance on healthcare professionals is essential for improving acne management strategies and ensuring the effectiveness of the treatment.

Aim: The study aimed to explore the treatment behaviors, preferences, and decision-making processes of acne vulgaris patients in Georgia, focusing on their use of dermatological and cosmeceutical products, medications such as antibiotics, retinoids, and hormone therapies, and their reliance on healthcare professionals.

Method: A structured online questionnaire was distributed to a targeted group on social networks ("Acne," "Skin Health"). Survey respondents had to have been affected by acne at least once in their lifetime.

Key Findings and Conclusions: 200 respondents participated in the survey, with more than half experiencing acne from adolescence to adulthood. Among them, around 70% had moderate to severe acne, yet only half consulted a specialist. When selecting treatment, respondents equally valued advice from pharmacists and doctors, followed by recommendations from acquaintances and online information. of those treated by doctors, 26.1% received antibiotics, 11.6% used oral retinoids, and nearly 19.5% underwent hormone therapy. Retinoids were prescribed by pharmacists in 6% of cases, and 18.6% self-medicated. Popular acne treatment brands in Georgia included SVR, La-Roche-Posay, and Bioderma, with most consumers keeping track of new product releases.

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Introduction

Acne affects 9.5% of the world's population, ranking second among dermatological diseases. Its prevalence is 85% during puberty, while in adults (aged 30-39), it occurs in 40% and in 5.7% of adults over 60 years old [1,2]. The disease is more common in women—80%, while in men, it is seen in 20%, though with more severe forms. The incidence of adult acne has increased, especially after the COVID-19 pandemic [3].

Various factors influence acne prevalence: gender, age, environmental, and genetic factors. Although acne is not considered a life-threatening condition, it significantly impacts patients' quality of life and has serious psychosocial consequences [4,5]. Acne is classified into mild, moderate, and severe forms, characterized by phases of exacerbation and remission. For patients, treatment is a long process, requiring at least six to eight weeks to achieve noticeable results [3,6].

Despite various approaches to acne treatment, the number of patients is increasing yearly due to the disease's complexity and its dependence on many factors, such as hormonal imbalances, metabolic disorders, diet, hygiene, stress, sleep deprivation, unhealthy lifestyle, and improper use of hygiene and cosmetic products. In recent years, cases of self-treatment and visits to pharmacies and other retail points have increased among acne patients [3,7,8]. Due to the complex nature of acne management

and the increasing number of treatment options, patients have to navigate a wide range of therapeutic choices, often without clear guidance. This complexity is further compounded by self-medication and the influence of non-medical sources such as friends, family, and online information. Understanding patients' behaviors, preferences, and reliance on healthcare professionals is crucial to improving acne management strategies and ensuring effective treatment outcomes [8,9].

Research Objective
The study aims to explore the treatment behaviors, preferences, and decision-making processes of acne vulgaris patients in Georgia, with a focus on their use of dermatological and cosmeceutical products, medications such as antibiotics, retinoids, and hormone therapies, and their reliance on healthcare professionals.

Research Subject and Methods
The study was conducted in Georgia through an electronic survey, ensuring personal data protection and voluntary participation. The 20-question survey, containing both closed and open-ended questions, was shared in closed social media groups ("Acne," "Skin Health"), where individuals shared their experiences related to the problem. The survey included questions such as "How severe is your acne?" "Did you consult a dermatologist or pharmacist for your treatment?" and "What factors do you consider when choosing an acne treatment product?"
Research Limitation – the essential condition for participation was that the respondent must have experienced acne at least once in their lifetime.

Results
In May 2024, a study was conducted with 200 respondents who had experienced acne, 85% of whom were female and 15% male.

The age distribution was as follows: 32.7% were aged 12-18, 29.1% were 19-25, 21.6% were up to 35, and 16.6% were over 36.

According to the data, more than half of the respondents (53%) reported experiencing acne only during adolescence, while 29.5% have had acne from adolescence to the present. Additionally, 16.5% had no acne during adolescence but developed it in recent years.
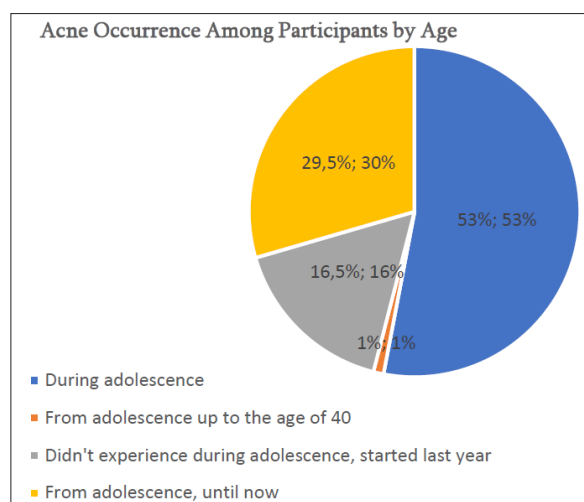

Diagram N1: Acne Occurrence Among Participants by Age

To assess the severity of the disease, the survey included descriptions of mild, moderate, and severe acne symptoms. Among

participants, 46.5% reported experiencing moderate acne, 23.2% had severe cases, and 30.3% had mild acne. 52.5% of respondents treated themselves, while 47.5% consulted a doctor. When selecting dermatological-cosmetic products for acne treatment, 41.3% of participants trusted pharmacy staff, while 40.4% relied on a specialist doctor's recommendation.

According to Chart N2, 26.1% of respondents were treated with antibiotics, 11.6% with oral retinoids, and 19.5% underwent hormone therapy as prescribed by a doctor. There were isolated cases where patients used antibiotics and hormone therapy based on a pharmacist's advice or their own. Notably, 6% of participants used oral retinoids based on a pharmacist's recommendation, and 18.6% self-medicated (see Chart N2).
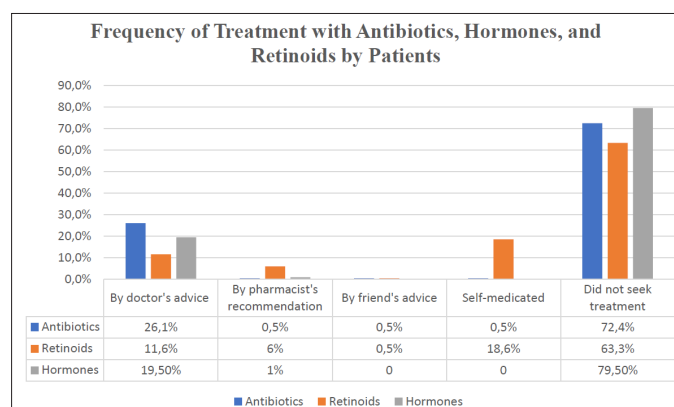
Chart N2: Frequency of Treatment with Antibiotics, Hormones, and Retinoids by Patients

Most respondents, when choosing an acne treatment product, equally valued consulting with a pharmacist and a doctor, followed by the experience of a close acquaintance, and lastly, information found online.

42.4% of participants used three external-use products for acne treatment, one-third used two products, and 12.6% used more than four products. For the majority (67%), the treatment duration was six months or more, while 21% had a treatment duration of one month or less.

In response to the open-ended question, "Which is your irreplaceable brand?" Georgian consumers' top brands were SVR and La-Roche-Posay, followed by Bioderma, Cerave, and Cetaphil.

When asked, "Which is your preferred external-use treatment form?" the majority of respondents (44.7%) favored gel, followed by cream (37.2%), 8% chose spot acne stickers, and 6.5% preferred serum. Notably, 77.8% of respondents expressed interest in and kept track of new acne treatments and cosmetic products entering the market.

In the open-ended question, "Name your irreplaceable brand for acne treatment," the majority named SVR (45 respondents) and La-Roche-Posay (39 respondents) as their top choices. It is noteworthy that the majority of respondents (88.8%) use at least two products daily and have been undergoing treatment for more than three months.

Discussion and Conclusions
According to the study, acne manifests not only during adolescence

but also in adulthood. While half of the respondents reported experiencing acne during their teenage years, 29.5% have experienced acne from adolescence until now. This indicates the persistent nature of acne and how it manifests in different life stages.

The study found that around 70% of respondents had moderate to severe forms of acne. However, only half of these individuals pursued a diagnosis and treatment plan from a dermatologist. This indicates a potential gap in the usage of specialized care, which could be attributed to factors such as a lack of resources or awareness or a preference for self-treatment. Interestingly, trust in acne treatment is equally divided between pharmacists and dermatologists. Hence, it is essential for pharmacists to be well-versed in the complexities of acne management. To address this, pharmacists should engage in continuous professional development to stay updated on the latest treatment options and best practices. The ongoing education will enable pharmacists to offer informed advice and recognize when to refer patients to other healthcare professionals. By enhancing their expertise, pharmacists can better support patients in navigating their treatment options, ultimately leading to improved outcomes.

In terms of treatment practices, patients typically use oral hormone therapy, antibiotics, and retinoids as prescribed by their doctors. It is noteworthy that 18.6% of patients self-medicate with retinoids, highlighting a need for better patient education and guidance. Self-medication, especially with treatments like retinoids, can lead to adverse effects.

The majority of respondents (88.8%) use at least two products daily and have been undergoing treatment for more than three months. This not only reflects a strong commitment to managing acne but also underscores the complexity and burden associated with prolonged treatment regimens. Moreover, most respondents (77.8%) are actively seeking new, effective acne treatments and closely monitor the market for new product releases. This reflects a high level of engagement and desire for effective solutions among patients. Georgian patients have identified SVR and La-Roche-Posay as their preferred brands for acne treatment, followed by Bioderma, Cerave, and Cetaphil.

Limitations and Future Directions
The study's limitations include the lack of clinical assessments for acne severity and treatment outcomes, which hinders the ability to link self-reported treatment behaviors with actual clinical results. Additionally, the study did not explore the reasons behind patients' brand preferences, self-medication practices, or the equal trust patients place in both pharmacists and doctors.

Future research should focus on these areas to gain deeper insights into patient decision-making processes. Such understanding could lead to improved treatment strategies and identify key areas where patient education and healthcare practices may be enhanced.

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