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AWARENESS ABOUT NATURAL THERAPEUTIC COSMETIC PRODUCTS, THEIR PREVALENCE OF USE AMONG RESIDENTS AGED 25–65 IN YEREVAN AND THE REGIONS, AND THE NECESSITY OF CREATING A NEW BRAND

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The use of natural, therapeutic cosmetic products (NTCPs) is gaining increasing popularity over time. The climate crisis and growing consumer demand continue to drive the importance of creating new NTCPs brands, as evidenced by the steadily rising turnover of natural cosmetic products (NCPs) in the global market. The cosmetics industry has become one of the fastest-growing sectors of the past decade. In the global market, the turnover of NCPs was estimated at USD 31.84 billion in 2023. It is projected to reach USD 45.6 billion by 2030, with an average growth rate of approximately 5.3% [4]. According to statistical forecasts, the Chinese cosmetics market amounted to USD 60 billion in 2021. It is expected that by 2050 it will become the world's largest consumer cosmetics market, reaching approximately USD 450 billion [13].

A wide variety of chemical compounds are used in the production of cosmetic products (CPs), and in some cases their harmful effects may outweigh the expected beneficial effects. Thus, sodium lauryl sulfate, commonly found in skin-cleansing and washing products, can irritate, ulcerate, and inflame the skin [12]. Likewise, the widespread use of parabens as preservatives in CPs manufacturing has today become a public health concern, as there is evidence suggesting that they contribute to the development of breast cancer [1]. Currently, public awareness has significantly increased regarding the harmful effects of many chemical substances used in the production of cosmetic products,

as well as the beneficial effects of natural, therapeutic cosmetic products (NTCPs) derived from natural raw materials [14]. The accessibility of social media and informational campaigns has played an important role in this process [9, 5]. As a result, the cosmetics industry is now placing greater emphasis on promoting products derived from natural raw materials, taking into account their numerous advantages, including safety, high efficacy, skin compatibility, and others [2, 16]. Particular high attention is being paid to the targeted mechanisms of active ingredients used in the production of NTCPs, which are aimed at correcting age-related skin changes, including pigmentation, the synthesis of endogenous compounds responsible for skin elasticity, antioxidant protection, and more [13, 17].

Natural essential oils, which are widely used in the production of NTCPs, exhibit multifaceted effects. On the one hand, due to their very small molecular size and high lipophilicity, they perform a carrier function, transporting active ingredients into the deeper layers of the skin. On the other hand, they nourish, protect, moisturize, and enhance the skin's local immunity [6]. The favorable climatic conditions and rich flora of the Armenian Highlands can contribute to further enrichment of NTCPs compositions and to increased efficacy [18].

Materials and methods

The study was conducted among residents aged 25–65 in the city of Yerevan and the regions. In order to determine the prevalence of NTCP use, the factors contributing to their use, and the importance of creating a new brand, a quantitative, selective cross-sectional study was carried out using a questionnaire. The sample was formed from the specified age group and consisted of randomly selected participants.

The sample size was calculated using the formula $n = z^2 \cdot p \cdot q / d^2$, where “p” and “q” represent the proportions of NTCPs users and non-users, each assumed to be 50%,

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and “d” is the margin of error, set at 7%. With “p” and “q” = 0.5, “z” = 1.96, and “d” = 0.07, the calculated sample size was $n = 196$. Taking into account an estimated 10% non-response rate, the final sample size was increased to 216 participants. The research instrument was an anonymous, self-administered electronic questionnaire, consisting of 19 pre-designed questions, including items on sociodemographic and socioeconomic characteristics, as well as data on the features, advantages, and disadvantages of NTCPs use. Participation in the study was voluntary, and an oral informed consent form was provided to all respondents.

After providing oral consent, participants took part in the survey, having been informed in advance that they could withdraw from the study at any time, and that their participation was voluntary and without any financial or personal benefit. The study did not offer any direct personal benefit to the participants. However, the responses provided contributed to obtaining more accurate data and a clearer understanding of the issue. No personal identifying information was recorded on the questionnaire. All information provided by the participants was kept confidential and was available only for the researcher.

Since no Armenian-language version of the questionnaire was available in Armenia, it was developed, based on validated questionnaires used in other countries [10, 15]. Prior to conducting the main study, a pilot study was carried out, using the developed questionnaire. The questionnaire was tested among 20 participants from the target group, after which several questions were reviewed, modified, or removed.

All analyses were conducted using the SPSS version 23 statistical package. Microsoft Office Excel 2016 (Microsoft Corp. package) was used for data plotting and graphical presentation.

Results and discussion

Behavioral Analysis of Society

The use of various cosmetic products has been known to humankind since ancient times. Ancient Egyptians used beeswax mixed with animal fat as lipstick, which was tinted with red pigment or clay. In addition to lipstick, Egyptians also used eyeshadows, eyeliners, nail care products, and others [7, 8]. The establishment of the production of NTCPs aims to identify the needs of beneficiaries, which are as diverse as the segments of NTCPs users themselves. These include adolescents with and without various skin problems; middle-aged individuals (25–45 years old) who use cosmetics to maintain youthful

skin; people aged 46–65 who exhibit emerging and progressing age-related skin changes; individuals over 65 with the characteristics of aged skin; as well as people of all ages who have various skin conditions. To assess the necessity of creating a new NTCPs brand, an evaluation of the needs of beneficiaries across all the above-mentioned segments was conducted. In order to increase consumer trust, the principle of proper market positioning will be adopted; highly qualified specialists will work in the production facility, and the products will be high-quality and affordable, so as to meet the changing needs of consumers [11, 3].

Results of the Statistical Analysis

A total of 216 individuals aged 25–65 participated in the survey, of whom 196 (90.7%) were female and 20 (9.3%) were male. Among the participants, 158 individuals (73.1%) reside in Yerevan, while one quarter of them live in the regions. Analysis of the survey results showed that the creation of a new locally produced NTCPs brand is promising and is expected to have high demand, since 95.4% of respondents prefer to use cosmetic products derived from natural ingredients (Fig. 1).

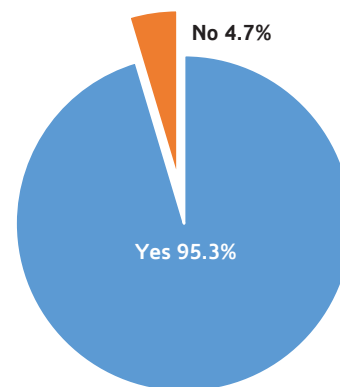


Fig. 1. Distribution of participants' opinions on the use of cosmetic products, according to the type of base ($n = 216$)

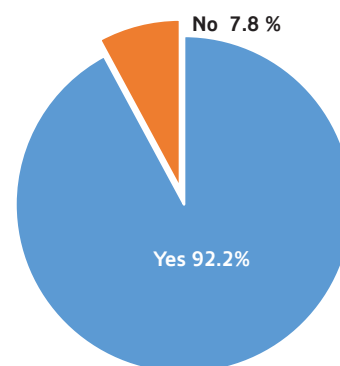


Fig. 2. Distribution of participants' opinions regarding the safety of NTCPs products ($n = 216$)

Table 1.

Respondents' Attitudes Toward Certain Characteristics of NCPs Products

When choosing <i>NCPs</i> products, which factors are prioritized?	Quality indicators – 74.1% (160)
	Safety – 54.6% (118)
	Composition – 50% (108)
	Price – 28.7% (62)
Advantages of locally produced <i>NCPs</i> products	High quality – 47.7% (103)
	Safety – 32.4% (70)
	Affordable pricing – 25.9% (56)
When selecting a <i>NCPs</i> brand, which characteristic is given priority?	Quality indicators – 74.1% (160)
	Safety – 54.6% (118)
	Composition – 50% (108)
	Price – 28.7% (62)
	Product appearance – 9.3% (20)
Where can <i>NCPs</i> products be purchased?	Pharmacies – 71.3% (154)
	Online ordering from the manufacturer's website – 53.7% (116)
	Specialized cosmetic stores – 50.5% (109)
	Ordering via social networks – 33.3% (72)
What would be valued in a new locally produced brand?	High quality – 80.2% (130)
	High effectiveness – 63.6% (103)
	Affordable pricing – 55.6% (90)
	Composition – 48.8% (79)
	Ease of use – 34.6% (56)
	Product appearance – 11.7% (19)
How much are you willing to pay for locally produced new-brand cosmetic products?	Up to 15,000 AMD – 38.4% (83)
	15,100–30,000 AMD – 32.4% (70)
	30,100–50,000 AMD – 7.9% (17)
Your attitude toward a new locally produced brand	Excellent – 44% (95)
	Good – 47.7% (103)
Reasons for not using <i>NCPs</i> products	High price – 38.9% (21)
	Lack of effectiveness – 16.7% (9)
	Lack of fragrance – 13% (7)
	High tendency toward allergies – 22.2% (12)

According to 92.2% of respondents, cosmetic products produced on a natural basis are safe, in contrast to non-natural ones, in which the chemical components present may exert harmful effects on the skin (Fig. 2).

91.2% of respondents are willing to pay more for NTCPs products than for cosmetic products produced on a non-natural basis (Fig. 3).

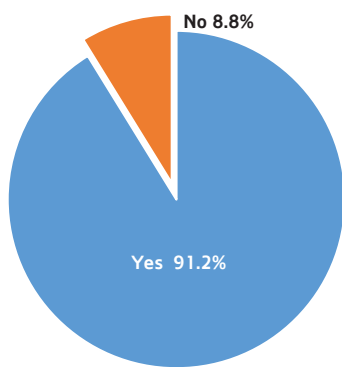


Fig. 3. Distribution of participants, according to their willingness to pay for NTCPs products ($n = 216$)

70.8% of participants are willing to pay up to 30,000 AMD for NTCPs products. Currently, 75% of them use some form of NTCPs; for 82.1%, the use of NTCPs products has fully met their expectations, and 92% would recommend the use of NTCPs to acquaintances, friends, and relatives. For various skin problems, 88% of respondents prefer to use NTCPs products, and among participants who have used NTCPs, allergic reactions were observed in only 13.6% (Fig. 4).

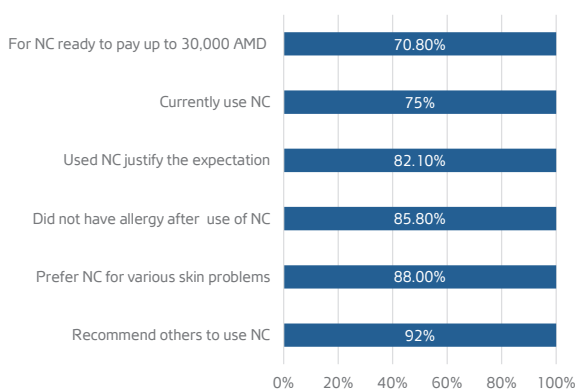


Fig. 4. Distribution of participants according to willingness to pay for NTCPs products, expectations from use, current use, allergic reactions, and willingness to recommend them to others.

The assessment of the prevalence of NTCPs use and the necessity of creating a new brand, the elicitation and

analysis of responses to a number of related questions further confirmed the importance of creating a new natural cosmetic products brand (Tab. 1).

Conclusions

All the necessary prerequisites for the implementation of this project are in place, and consumers place great importance on the creation of a new local brand of high-quality, effective, and affordable natural therapeutic cosmetic products, as evidenced by the responses of approximately 72.2% of respondents. Considering the fact that 64.8% of respondents prefer locally produced natural therapeutic cosmetic products, we conclude that the new brand will find its rightful place in the Armenian cosmetics market and will become one of the leading brands within a short period of time. Based on the fact that 95.4% of respondents prefer cosmetic products produced on a natural basis, the planned production will also focus exclusively on cosmetics manufactured using natural ingredients. Taking into account that 74.5% of respondents are willing to pay more for natural cosmetic products as compared to non-natural ones, it is concluded that the most effective way to meet customer needs and build long-term customer loyalty is the production of cosmetic products, using natural and high-quality raw materials, in full alignment with our adopted mission.

Considering that 70% of respondents are willing to pay no more than 30,000 AMD for NTCPs products (including the ranges up to 15,000 AMD and 15,000–30,000 AMD), the pricing policy for the new brand's cosmetic products will take this into account, with planned price fluctuations expected to be within the 8,000–10,000 AMD range. Considering the fact that 71.3% of respondents believe NTCPs products can be purchased from pharmacies, and 53.7% prefer ordering online from the manufacturer's website, the majority of sales are planned to be carried out through these two channels. Targeting will focus on both pharmacy and online sales. Considering that 88% of respondents prefer to use NTCPs products for various skin problems, collaboration is also planned with cosmetology clinics and dermatologists. Furthermore, as 85% of respondents have used or are currently using some form of NTCPs, it can be concluded that the demand for NTCPs products is currently at a high level. The above conclusions serve as a basis to assert that the prerequisites for creating a new NTCPs brand are well-founded.

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ԱՄՓՈՓՈՒՄ

ԲՆԱԿԱՆ ԲՈՒԺԻՉ ԿՈՍՄԵՏԻԿ ՄԻՋՈՑՆԵՐԻ ՄԱՍԻՆ ԻՐԱԶԵԿԿԱԾՈՒԹՅՈՒՆԸ, ԿԻՐԱՌՄԱՆ ՏԱՐԱԳՈՒԹՅՈՒՆԸ ԵՐԵՎԱՆԻ ԶԱՐԱՔԻ ԵՎ ՄԱՐԶԵՐԻ 25-65 ՏԱՐԵԿԱՆ ԲՆԱԿԻՉՆԵՐԻ ՇՐՋԱՆՈՒՄ ԵՎ ՆՈՐ ԲՐԵՆՂԻ ԱՏԵՂԾՄԱՆ ԱՆՐԱԺԵՇՏՈՒԹՅՈՒՆԸ

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Բանալի բառեր՝ բնական կոսմետիկ միջոցներ, բժշկական արտադրություն, նոր բրենդ, բնական եթերային յուղեր:

Ուսումնասիրվել են Երևան քաղաքի և մարզերի 25-65 տարեկան բնակիչների շրջանում բնական կոսմետիկ միջոցների մասին իրազեկվածությունը, կիրառման տարածվածությունը և նոր բրենդի ստեղծման կարևորությունը, որը հիմնավորվում է կոսմետիկայի համաշխարհային շուկայում տարեցտարի աճող ապրանքաշրջանառության տեմպերով և ընտրված թիրախ խմբում իրականացված հարցման տվյալների վերլուծությամբ:

Իրականացվել է բանակական, ընտրովի հատույթային հետազոտություն՝ հարցման եղանակով: Հիմք ընդունելով հասարակության վարքագծային առանձնահատկությունները՝

վեր են հանվել շահառուների փոփոխվող կարիքները և իրականացվել տարբեր սեգմենտների կարիքների գնահատում: Հետազոտության արդյունքում պարզվել է, որ տեղական արտադրության բնական, բուժիչ կոսմետիկ միջոցների նոր բրենդի ստեղծումը հիմնավորված է, իսկ Հայկական լեռնաշխարհի բարենպաստ կլիմայական պայմանները նոր հեռանկարներ են բացում ապրանքանիշի բաղադրության մեջ՝ ներառելու հարուստ վիտամինային և միներալային կազմ ունեցող բնական հումք՝ թույլ տալով ստանալ որակյալ և մեծ արդյունավետություն ցուցաբերող տարատեսակ կոսմետիկ արտադրանք:

РЕЗЮМЕ

ОСВЕДОМЛЕННОСТЬ О НАТУРАЛЬНЫХ ЛЕЧЕБНЫХ КОСМЕТИЧЕСКИХ СРЕДСТВАХ, РАСПРОСТРАНЕННОСТЬ ИХ ПРИМЕНЕНИЯ СРЕДИ ЖИТЕЛЕЙ ГОРОДА ЕРЕВАНА И РЕГИОНОВ В ВОЗРАСТЕ 25–65 ЛЕТ И НЕОБХОДИМОСТЬ СОЗДАНИЯ НОВОГО БРЕНДА

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Ключевые слова: натуральные косметические средства, медицинский, производство, новый бренд, натуральные эфирные масла.

Было проведено исследование относительно осведомленности о натуральных косметических средствах, распространенности их применения и важности создания нового бренда среди жителей Еревана и регионов в возрасте 25–65 лет, что обосновано ежегодно растущими объемами товарооборота на мировом косметическом рынке и анализом данных опроса, проведенного в выбранной целевой группе. Было проведено количественное, выборочное комплексное исследование методом опроса. Учитывая поведенческие

особенности населения, были выявлены изменяющиеся потребности заинтересованных групп, и была проведена оценка потребностей различных сегментов. В результате исследования было установлено, что создание нового местного бренда натуральных лечебных косметических средств обосновано, а благоприятные климатические условия Армянского нагорья открывают новые перспективы для включения в состав бренда богатого витаминно-минерального природного сырья, что позволяет получать качественную и высокоэффективную косметическую продукцию.