Original Article

Examining the Use of Cosmetic Products and the Awareness of Healthy Life among University Students

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Abstract

Aim: Cosmetics may be harmful to human health due to the substances they contain. University students commonly use these products. Health promotion and maintenance are closely associated with gaining healthy lifestyle behaviors, too. People need to be aware of the benefits of changing their lifestyles if they want to maintain their health and ward off illnesses. The health awareness of individuals can play a significant role in giving up their unhealthy behaviors and developing conscious behaviors. The aim of this study was to examine the use of cosmetic products and the awareness of healthy life among university students who commonly use cosmetics. **Materials and Methods:** This was a descriptive and cross-sectional study conducted with university students between May 2021 and February 2022. The population consisted of 2757 students, and the sample of the study consisted of 422 students who attended a foundation university and met the inclusion criteria. The data were collected from the students using an Information Form and the Healthy Life Awareness Scale over Google Forms. The data were analyzed in the Statistical Package for the Social Sciences (SPSS) software program using descriptive statistics and Mann–Whitney *U* test, a nonparametric test. **Results:** The students had a mean age of 20.24 ± 2.09 years; approximately 78.1% of them were females and they were commonly using cosmetics every day (62.3%), the most frequently used oral and dental care products (20.7%), and hair care products (20.2%). Half or fewer of the participants were aware of the symbols specific to cosmetic products, such as consumed within *x* days of opening, shelf life, protection against ultraviolet rays, and compliance with the standards. The awareness of healthy life was above the moderate level (59.0 ± 9.6) and was higher in those who were females and paid attention to the products' protection band, color/odor changes, and expiration date. It was observed that one-third of the participants shared their items with others, and one-quarter of them used items of others. Those who did not share their own cosmetics with others and did not use those of others had a higher awareness about healthy life. **Conclusion:** It was concluded that students who had high awareness of healthy life used cosmetic products more consciously. In order for young people to gain healthy life behaviors and to prevent the unnecessary use of cosmetic products, it is recommended to establish information platforms, particularly on the internet and social media, and to organize training programs that include their families and individuals in their immediate circle and also peer learning.

Keywords: Cosmetics, healthy life, awareness, university students

Introduction

Cosmetics are the products one can apply on the body (e.g., skin, nails, body hair, hair, lips, genitalia, teeth, and mouth) to clean the given area, improve one's smell and appearance, and keep oneself in good condition.[1,2] They include personal care, hair care, oral care, makeup, and nail care products as well as moisturizers, fragrances, depilatories, and sunscreens.[1-3]

Today, there are a great number of cosmetic products of different qualities manufactured by various companies.[3] These products contain more than 10,000 ingredients that may cause many diseases.[3-5] These products may cause both acute and long-term side effects.[6]

Submission: 01-12-2022 **Revision:** 22-01-2023
Acceptance: 03-02-2023 **Web Publication:** 25-09-2023

Access this article online

Quick Response Code:

Website: www.tjdonline.org

DOI: 10.4103/tjd.tjd_136_22

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How to cite this article: Olcer Z, Cal A, Unal N, Oztas B, Oge G. Examining the use of cosmetic products and the awareness of healthy life among university students. Turk J Dermatol 2023;17:79-87.

Most of the cosmetics are applied directly to the skin; therefore, dermal exposure is the most critical pathway for the emergence of their potential harmful effects. Also, the use of cosmetics around the mouth or hand-to-mouth contact may lead to oral exposure.[3] Product exposure can cause mild or severe allergic reactions, some skin problems (e.g., acne, contact dermatitis, and urticarial), hormone disorders, eye, skin, and respiratory irritation, neurotoxicity, cancer, congenital abnormalities, developmental and reproductive disorders, and infertility.[1-8] Due to the potential adverse effects of cosmetics on human health, it can be asserted that their use is one of the healthy lifestyle behaviors.

University students commonly use these products.[9-11] A study conducted with students attending the faculty of health sciences reported that they used cosmetic products at a rate of 91%.[12] Another study conducted with female students reported this rate as 97.8%.[13] Young people use these products mainly to feel beautiful and boost their self-confidence.[11]

Health promotion and maintenance are closely associated with not only preventing diseases but also gaining healthy lifestyle behaviors. Healthy lifestyles are defined as managing the behaviors that affect a person's health and choosing behaviors that are appropriate for their own health status while organizing daily activities. People need to be aware of the benefits of changing their lifestyles if they want to maintain their health and ward off illnesses. The health awareness of individuals can play a significant role in giving up their unhealthy behaviors and developing conscious behaviors.[14] The aim of this study was to examine the use of cosmetic products and the awareness of healthy life among university students. The number of similar studies on cosmetic products and awareness of healthy life is limited; therefore, this study is original as it would both contribute to the literature and be guiding for future studies.

Research questions

1. What are the characteristics of students using cosmetic products?
2. What is the awareness level of students about healthy life?
3. Do students' awareness levels of healthy life vary based on gender and how they use cosmetic products?

Materials and Methods

The study was conducted based on descriptive and cross-sectional design.

Place and time of the study

The study was conducted with the students attending a foundation university located in the Central Anatolia Region, Turkey, between May 2021 and February 2022.

Population and sample

The population consisted of 2757 students attending the Faculties of Medicine, Dentistry, Pharmacy, and Health Sciences and Vocational School of Health Services in the field of health as well as the Faculties of Law, Political Sciences, Economics and Social Sciences, Fine Arts and Architecture, and Communication, Vocational School of Justice and Vocational School in other fields within the body of a foundation university. The sample size was determined according to the formula for the sample with a finite population:[15]

$$n = \frac{N \cdot t^2 \cdot p \cdot q}{d^2 \cdot (N-1) + t^2 \cdot p \cdot q},$$

where n is the number of individuals to be included in the sample, p is the frequency of occurrence of the case analyzed = 50% (calculated by assuming that the occurrence rate of the case examined in accordance with the related literature would be 50% as it could not be reached), q is the frequency of nonoccurrence of the case analyzed = 50%, t is the theoretical value found from the t table at certain degrees of freedom and the identified error level = 1.96 (the theoretical t value at $\alpha = 0.05$ for ∞ degrees of freedom), d is standard error of the rate to be determined in the study = 0.05:

$$n \cong \frac{2757 \times 1.96^2 \times 0.5 \times 0.5}{0.05^2 \times (2757-1) + 1.96^2 \times 0.5 \times 0.5}.$$

The minimum sample size to be reached in the study was determined as 338 students. A total of 422 students were reached in the study.

Inclusion criteria for the students were determined as follows; being 18 years of age or older, having no visual impairment making reading difficult, being able to understand the statements on the scale and questionnaire, and being voluntary to participate in the study.

Data collection tools

The data were collected using an information form prepared by the researchers and the "Healthy Life Awareness Scale."

- *Information form:* This form, prepared by the researchers based on the literature,[9,16,17] consists of six questions on the sociodemographic characteristics of the participants and 15 questions on their characteristics related to the use of cosmetic products.
- *Healthy Life Awareness Scale (HLAS):* The scale, which was developed by Ozer and Yilmaz in 2020, consists of 15 items and 4 subscales (change, socialization, responsibility, and nutrition). Each item is anchored with a 5-point Likert-type scale as (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, and (5) strongly agree. The score of the change subscale is obtained by

summing the scores of items 1–5 as in the socialization subscale with items 6–9, in the responsibility subscale with items 10–12, and in the nutrition subscale with items 13–15. The lowest and highest scores of the scale are 15 and 75, respectively. A high score signifies a high level of healthy life awareness. Ozer and Yilmaz[14] conducted its Turkish validity and reliability study in 2020 and determined that the scale is a valid and reliable tool for determining the healthy life awareness levels of individuals. The Cronbach's alpha reliability values for the subscales of the scale are 0.70 for the change subscale, 0.71 for the socialization subscale, 0.74 for the responsibility subscale, and 0.61 for the nutrition subscale.[14] In this study, Cronbach α values were 0.79 for the change subscale, 0.79 for the socialization subscale, 0.77 for the responsibility subscale, 0.78 for the nutrition subscale, and 0.87 for the overall scale.

Data collection

Data collection tools were delivered to the students online through Google Forms. First, they were informed about the research team and the purpose of the study, and that no personal information would be required in the study, their responses would only be used for scientific purposes, they could withdraw from the study at any time, their participation in the study would have no effect on the educational process, and their information would be kept confidential. As a prerequisite of the process, they were asked to check "I agree" in response to the statement "If you have read the above information and are voluntarily participating in this study." In this way, the students acknowledged that they gave informed written consent. Then they filled out data collection tools online.

Data analysis

The data were analyzed using Statistical Package for the Social Sciences (SPSS) for Windows, version 22.0 (IBM Corporation, Armonk, New York). Data were represented in number, percentage, mean, standard deviation, and minimum and maximum values as descriptive statistics. Kolmogorov–Smirnov test was used to test whether or not the data were normally distributed. The statistical significance level was accepted as 0.05. The difference between dependent and independent variables was analyzed using the Mann–Whitney *U* test, a nonparametric test. The data were assessed at a confidence interval of 95% and a significance level of $P < 0.05$. Cronbach α coefficient was used to analyze the reliability. The results of the study were reported according to the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) checklist.

Ethical considerations

The approval (IRB no. 74791132-604.01.01-1187) from the Non-Invasive Clinical Trials Ethics Committee of Ankara Medipol University as well as institutional permission was obtained. The participants' informed consents were obtained. The authors who conducted the Turkish validity and reliability study of the scale granted their permission for its use in the study. All steps of the study were conducted in accordance with the principles of the Declaration of Helsinki.

Results

The mean age of the students was 20.24 ± 2.09. Overall, 78.1% of them were females, 69.4% were studying in health-related departments, and 75.8% graduated from high schools other than health vocational high schools

Table 1: Distribution of descriptive characteristics of the students (n = 422)

Characteristics	Mean ± SD	Median	Min–Max
Age (year)	20.24 ± 2.09	20	18–30
		n	**%**
Gender	Female	331	78.1
	Male	91	22.6
Faculty/college	Field of health	293	69.4
	Other fields	129	30.6
Graduated high school	Health vocational high school	102	24.2
	Other	320	75.8
Financial status	Income less than expense	71	16.8
	Income equal to expense	287	68.0
	Income more than expense	64	15.2
Place of residence	In dormitory	49	11.6
	With family	335	79.4
	Home alone/with friends	38	9.0
Employment status	Employed	31	7.3
	Unemployed	391	92.7
Total		**422**	**100**

[Table 1]. It was determined that 62.3% of the students used cosmetics every day, and they most frequently used oral and dental care products (20.7%), followed by hair care products (20.2%). They obtained information on cosmetics from user comments (23.7%), immediate circle (22.6%), and social media (19.0%), respectively. They mostly purchased these products from cosmetic chain stores (31.0%) and pharmacies (22.0%). Even though the participants' knowledge of the symbols on the products varied, they were aware mostly of the symbol of recycling (87.7%), followed by flammable-explosive (82.9%). The data on the cosmetic product usage habits of the students participating in the research are given in Table 2. The side effects experienced were reported only local symptoms such as acne on the skin, spotting, redness, dryness, itching, burning sensation, allergy, and dandruff on the scalp. None of the participants reported any systemic side effects.

The participants had a mean score of 59.0 ± 9.6 in the Healthy Life Awareness Scale, which was above the moderate level. Their subscale mean scores were 18.5 ± 4.1 for the change subscale, 16.6 ± 3.1 for the socialization subscale, 13.1 ± 2.2 for the responsibility subscale, and 10.78 ± 3.1 for the nutrition subscale. Cronbach α reliability coefficient of the scale was 0.87 for the overall score and between 0.77 and 0.79 for the subscales [Table 3].

Table 4 compares the healthy life awareness levels of the students based on gender and how they used cosmetic products. The mean scores of the change and responsibility subscales and the total mean score of the scale were significantly higher in female students than in their male counterparts ($p < 0.05$). The students who paid attention to the protection band obtained a higher total score and higher mean scores from all the subscales than the students who did not ($p < 0.05$). The difference between the students who used the products even if their color/odor changed and the scale total score was statistically significant ($p < 0.05$). Those, who did not use the expired products, had higher scores in the change subscale of Healthy Life Awareness Scale and higher total score compared to those who used ($p < 0.05$). Total scores of those who did not share their personal items with others and used the items of others, as well as their mean scores of the socialization, responsibility, and nutrition subscales, were statistically significantly higher ($p < 0.05$) [Table 4].

Discussion

A limited number of studies in the literature indicated that university students widely used cosmetic products in Turkey, Saudi Arabia, and India.[9-11] Although a study conducted with students of health sciences in Tanzania reported the rate of using cosmetics as 91%,[12] another study conducted with female students in Ethiopia found this rate as 97.8%.[13] The results of the study revealed that university students used commonly cosmetic products (62.3% every day). Even though the majority of the participants in this study were females, males today are also interested in personal care, and thus, they commonly use cosmetic products.[18] Young people use these products mainly to feel beautiful and boost their self-confidence.[11] It is an expected result that the students would use cosmetics often to make themselves feel beautiful/good and boost their self-confidence. This would especially hold true during university, as people at that age value what others think about them.

This study reported that the students most frequently used oral and dental care products, followed by hair care products. These products are essential components of daily personal care for people of all ages and both genders. The related studies have also revealed similar results.[9,16] The high rate and frequency of using cosmetic products are considered to be significant in informing individuals about the effects of oral and dental care products and hair care products on health and ensuring that they make informed choices.

As information technologies have advanced in recent years, university students have started to prefer information technologies as information sources to learn more about cosmetics.[12,19] In this study, it was determined that the majority of the participants obtained information about cosmetics from user comments, their immediate circle, and social media. In the study by Al-Hindi *et al.*,[19] a great majority of the participants reported that they learned about cosmetic procedures mostly from social media, TV, and friends. In their study, Kureh *et al.*[12] reported that students mostly referred to their family members, friends, media, and the internet as sources of information about the negative effects of cosmetics. These results reveal not only the sources of information used by university students but also the sources that should be taken into consideration in planning trainings on cosmetics. In this sense, it is important to employ innovative methods in interventions for this group, which heavily uses mobile technologies and social media.

Demirci and Demirci-Aksoy[16] stated in their study that the majority of consumers were not aware of the symbols on the labels of cosmetic products. Even though the participants' knowledge of the symbols on the products varied, they were aware mostly of general symbols such as recycling (87.7%) and flammable-explosive (82.9%) used on packages along with cosmetics. The fact that half or fewer of the participants were aware of the symbols specific to cosmetic products, such as consumed within *x* days of opening, shelf life, protection against ultraviolet rays, and compliance with the standards, indicated that they needed more information on this subject. Possible side effects are more likely to be seen in products that have

Table 2: Distribution of the students' characteristics of using cosmetic products (n = 422)

Characteristics		*n*	%
Frequency of using cosmetic products	Everyday	263	62.3
	Once every 2 days	113	26.8
	Once a week	37	8.8
	Once a month or less	9	2.1
Most frequently used cosmetic product[a]	Oral and dental care products	405	20.7
	Hair care products	394	20.2
	Hand body care products	385	19.7
	Face care products	327	16.7
	Makeup products	281	14.4
	Products used in the genital area	90	4.6
	Foot care products	71	3.6
Source of information on cosmetic products[a]	User comments	316	23.7
	Immediate circle (family, relatives, and friends)	302	22.6
	Social media	254	19.0
	Dermatologist	211	15.8
	Media	151	11.3
	Cosmetologist	101	7.6
Purchase point of cosmetic products[a]	Chain stores on cosmetics	355	31.0
	Pharmacies	252	22.0
	Supermarket	181	15.8
	E-commerce websites	153	13.4
	Natural-organic product markets	109	9.5
	Catalog sales	75	8.4
Being aware of symbols on these products[b]	Quantity	167	39.6
	Consume within *x* days of opening	244	57.8
	Flammable, explosive product	350	82.9
	Shelf life	192	45.5
	Protection against UVA rays	185	43.8
	Recycling	370	87.7
	Organic certified product	288	68.2
	No animal testing	249	59.0
	Standardized product	129	30.6
	See additional information	226	53.6
	Copyright	67	15.9
Factors that affect the purchase of cosmetics*[a]	Dermatological testing	354	19.6
	Free of chemical substances	304	16.9
	No harm to animals	270	15.0
	Reputable brand	262	14.5
	Herbal-natural content	252	14.0
	Organic-halal certificate	215	11.9
	More grams	45	2.5
Purchase of unnecessary cosmetics	Yes	90	21.3
	No	332	78.7
Use of tester	Yes	141	33.4
	No	281	66.6
Paying attention to the product protection band	Yes	399	94.5
	No	23	5.5
Using a product even if its color/odor changes	Yes	25	5.9
	No	397	94.1
Using an expired product	Yes	35	8.3
	No	387	91.7
Sharing personal products with others	Yes	137	32.5
	No	285	67.5

Table 2: Continued

Characteristics		*n*	%
Using products of others	Yes	109	25.8
	No	313	74.2
Believing that it negatively affects body	Yes	225	53.3
	No	197	46.7
Having side effects	Yes	161	38.2
	No	261	61.8

[a]More than one option are marked

[b]Correct responses to the symbols are presented

Table 3: Students' mean scores for Healthy Life Awareness Scale and its subscales and reliability coefficients

The scale and its subscales	Mean ± SD	Median	Min–Max	Cronbach α
Healthy Life Awareness Scale	59.0 ± 9.6	60	15–75	0.874
Change	18.5 ± 4.1	19	5–25	0.794
Socialization	16.6 ± 3.1	17	4–20	0.793
Responsibility	13.1 ± 2.2	14	3–15	0.765
Nutrition	10.78 ± 3.1	11	3–15	0.782

not been kept under appropriate conditions. Therefore, it is important to know the meanings of the symbols on cosmetic labels and to obey them for the health and safety of users.

A great majority of students in this study claimed that when purchasing these products, they looked for whether or not dermatological tests are conducted, they are free of chemicals, any animal gets harmed during testing, they are of respected brands, and they contain herbal components. The study by Kureh *et al.*[12] with students who attended health sciences reported that the participants used trendy and fashionable cosmetics, giving attractiveness and beauty and boosting their self-confidence, and primarily skincare ones. Shah *et al.*[20] also determined in their study that 60% of female students checked the quality of cosmetics before purchasing them. Although these results reflect the main factors that should be considered when purchasing cosmetics, they also draw attention to the fact that students use fashionable products that they believe make them more attractive and beautiful.

Cosmetic products, even if they contain natural ingredients, can cause not only acute but also long-term side effects.[1,6] In this study, 46.7% of the participants did not believe that cosmetic products had adverse effects on the body. The fact that almost half of the participants believe that cosmetic products have no negative effects on their bodies poses an important threat to health protection and promotion.

It is necessary for individuals to be aware of changing their lifestyles in order to maintain their health and ward off illnesses. This may allow them to give up unhealthy behaviors and develop positive health behaviors.[14] In their study, Gokbulut and Bal[21] found that the HLAS mean score of individuals aged between 18 and 25 was 59.08 ± 9.59. This study similarly revealed that the HLAS mean score of the students was 59.0 ± 9.6, which was above the average. Among the subscales of the HLAS, the change subscale had the highest mean score; whereas, the nutrition subscale had the lowest mean. The study by Mansur and Ertaş[22] indicated that while the highest mean score was observed in the change subscale, the socialization subscale had the lowest mean score, followed by the nutrition subscale with the second lowest mean score. The results are compatible with the literature, and healthy life awareness of university students should be raised. Also, the students' low mean scores in the socialization and nutrition subscales suggested that they had low life awareness in these subscales.

It is important for individuals to notice the changes in their bodies and the effects of negative health behaviors on their health in order to display preventive health behaviors and health-promoting behaviors.[14] The female students obtained significantly higher mean scores in change and responsibility subscales and higher total mean scores than those of their male counterparts. Accordingly, female students were more sensitive to changes in their bodies and aware of the effects of negative health behaviors on their health than their male counterparts. At this point, it is observed that it is necessary to support men more than women to notice the possible effects of health behaviors on their bodies.

People need to be careful about the use of cosmetics in order to improve their production, sale, and use.[2] In a study with female university students, it was observed that 48.6% of the participants shared their items with others.[13] In this study, it was observed that one-third of the participants shared their items with others, and one-quarter of them used items of others. When the

Table 4: Comparison of Healthy Life Awareness Scale total and subscale mean scores of the students in terms of gender and some characteristics of using cosmetic products

Characteristics	Healthy Life Awareness Scale														
	Change			Socialization			Responsibility			Nutrition			Total		
	Mean ± SD	Median	Statistics	Mean ± SD	Median	Statistics	Mean ± SD	Median	Statistics	Mean ± SD	Median	Statistics	Mean ± SD	Median	Statistics
Gender															
Female	18.9±3.9	19.0	*U* = 11609.5	16.9±2.8	17.0	*U* = 13230.5	13.2±2.1	14.0	*U* = 12842.0	10.9±3.1	11.0	*U* = 13094.0	59.9±8.8	61.0	*U* = 12084.0
Male	17.0±4.6	18.0	*P*=0.001	15.9±3.8	17.0	*P* = 0.072	12.6±2.6	13.0	*P* = 0.026	10.3±3.1	11.0	*P* = 0.055	55.7±11.5	58.0	*P* = 0.004
Paying attention to the product protection tape															
Yes	18.7±3.9	19.0	*U* = 3284.5	16.8±2.8	17.0	*U* = 2931.5	13.2±2.1	14.0	*U* = 3151.0	10.9±3.0	11.0	*U* = 2945.0	59.6±8.8	60.0	*U* = 2652.5
No	15.7±5.9	16.0	*P* = 0.021	13.6±5.2	14.0	*P* = 0.003	11.2±3.7	11.0	*P* = 0.009	8.7±3.7	9.0	*P* = 0.004	49.2±15.2	52.0	*P* = 0.001
Using a product even if its color/odor changes															
Yes	16.8±5.2	18.0	*U* = 3930.5	15.2±3.9	16.0	*U* = 3855.5	12.0±3.1	13.0	*U* = 4183.5	10.5±3.1	10.0	*U* = 4712.5	54.6±11.3	56.0	*U* = 3675.0
No	18.6±4.0	19.0	*P* = 0.080	16.8±3.0	17.0	*P* = 0.058	13.1±2.1	14.0	*P* = 0.175	10.8±3.1	11.0	*P* = 0.671	59.3±9.4	60.0	*P* = 0.029
Using an expired product															
Yes	16.6±4.5	18.0	*U* = 5005.5	16.1±3.4	16.0	*U* = 6035.5	12.4±2.7	13.0	*U* = 5843.5	10.0±3.4	10.0	*U* = 5644.5	55.1±10.1	56.0	*U* = 5026.5
No	18.7±4.0	19.0	*P* = 0.010	16.7±3.0	17.0	*P* = 0.280	13.1±2.2	14.0	*P* = 0.164	10.9±3.0	11.0	*P* = 0.100	59.4±9.5	60.0	*P* = 0.011
Sharing personal products with others															
Yes	18.1±4.0	18.0	*U* = 17807.5	16.0±3.0	16.0	*U* = 15277.5	12.7±2.3	13.0	*U* = 16478.0	10.2±3.0	11.0	*U* = 16259.5	57.0±9.1	58.0	*U* = 15571.0
No	18.7±4.2	19.0	*P* = 0.143	17.0±3.0	17.0	*P* = 0.001	13.2±2.2	14.0	*P* = 0.007	11.0±3.1	11.0	*P* = 0.005	60.0±9.7	61.0	*P* = 0.001
Using products of others															
Yes	18.3±4.0	19.0	*U* = 16396.5	15.9±3.2	16.0	*U* = 13450.0	12.5±2.4	13.0	*U* = 13669.5	10.3±3.0	11.0	*U* = 14545.5	57.0±9.6	58.0	*U* = 14031.0
No	18.6±4.2	19.0	*P* = 0.545	16.9±3.0	17.0	*P* = 0.001	13.3±2.1	14.0	*P* = 0.001	11.0±3.1	11.0	*P* = 0.021	59.8±9.5	61.0	*P* = 0.006

* $p < 0.05$, Mann–Whitney *U* test

participants' characteristics of sharing personal care products and using products of others were compared with the healthy life awareness levels, it was observed that the participants who did not share their products with others had higher mean scores in the change, socialization, responsibility, and nutrition subscales, and higher total mean score than those who did. Besides, it was observed that there was a significant difference in the scale total score and in all subscales of the scale, except for change. It is an expected situation that individuals with high healthy life awareness would not share cosmetic products with others. In one study, it was found that infectious agents in make-up products can survive from a few hours to a few days and infections can be transmitted from person to person through makeup products.[23] These reasons point out that it is important to raise awareness that cosmetic products, particularly makeup supplies, are personalized and individuals should not share these supplies with others.

Cosmetics adversely affect health due to the chemicals they contain, which particularly affects women who heavily use cosmetics.[3-5,10,24] The studies have shown that continuous and long-term use of cosmetics cause some health problems such as fungal infections, contact dermatitis, dry eyes, congenital abnormalities, developmental and reproductive disorders, hair loss, dizziness, and lung injury.[3-5,10,24,25] In the study, it was observed that HLAS total score was high in those who paid attention to color and odor changes in cosmetics. The most important thing to protect yourself from the harmful effects of cosmetic products is to avoid using questionable products. Therefore, it is expected for students who follow this basic principle to have a high awareness of healthy life.

It is an important issue in maintaining health that the products offered for human consumption are not used after their expiration dates. The study by El-Gilany and Taref[26] reported that 88.7% of female students did not use expired cosmetics. In this study, 91.7% of the participants stated that they did not use expired cosmetics. Moreover, HLAS scores of those who did not use the expired ones were higher than the scores of those who did. It was thought that the students had high awareness level on this subject.

When the comparison of paying attention to the protection band with the levels of healthy life awareness was examined, it was observed that the participants who did not share their products with others had higher mean scores in the change, socialization, responsibility, and nutrition subscales, and higher total score than those who did, resulting in showing a significant difference. Raising awareness of individuals about healthy life can reflect on different spheres of their lives. It is an expected situation that as the awareness of the individual raises, he/she avoids behaviors that would negatively affect his/her health.[9] It is believed that if individuals have a high awareness of healthy life, they would make conscious choices about cosmetic products, hence protecting and improving the health of individuals and society.

Limitations

This study is limited to only students who attended a foundation university. Also, male students thought that only women use cosmetic products. This situation may have affected their participation in the study. Another limitation of the study is that female dominance is very high in the study group due to the fact that women are more willing to participate in the study.

Conclusion and Recommendations

The results of the study revealed that the students with high awareness of healthy life displayed more positive behaviors toward the use of cosmetics. In order for young people to gain healthy life behaviors and to prevent the unnecessary use of cosmetic products, it is recommended to establish information platforms, particularly on the internet and social media and to organize training programs that include their families and individuals in their immediate circle and also peer learning. It may be beneficial to carry out works to encourage male students to participate in training programs in order to raise their healthy life awareness. It is believed that introducing symbols on cosmetic products to the public and making them understandable would enable people to make healthier choices about these products.

Acknowledgement

We would like to thank people for their help and suggestion, students for their participation, and the University for giving permission.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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