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DESCRIPTION OF KNOWLEDGE LEVEL, ATTITUDES, AND BEHAVIOR IN THE USE OF FACIAL WHITENING COSMETICS AMONG FEMALE STUDENTS OF THE FACULTY OF MEDICINE, HKBP NOMMENSEN UNIVERSITY MEDAN, 2024

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INTRODUCTION

ABSTRAK

Untuk mengetahui gambaran tingkat pengetahuan, sikap dan perilaku penggunaan kosmetika pemutih wajah pada mahasiswi Fakultas Kedokteran Universitas HKBP Nommensen Medan tahun 2024. Penelitian ini adalah penelitian deskriptif dengan pendekatan cross-sectional. Dengan teknik total sampling, diperoleh 71 responden mahasiswi pengguna kosmetik pemutih. Dari hasil penelitian menunjukkan angkatan 2021 rata-rata usia yaitu 21,2 tahun, angkatan 2024 rata-rata usia yaitu 20,2 tahun dan angkatan 2023 rata-rata usia yaitu 18,8 tahun. Gambaran tingkat pengetahuan cukup (52,1%). Tingkat pengetahuan yang cukup mayoritas terdapat pada angkatan 2023 (59,1%). Gambaran tingkat sikap mampu (81,7%). Tingkat sikap yang mampu mayoritas pada angkatan 2022 (89,5%). Gambaran tingkat perilaku cukup mampu (54,9%). Tingkat perilaku yang cukup mayoritas pada angkatan 2022 (79%).

ABSTRACT

To determine the level of knowledge, attitudes and behaviors of using facial whitening cosmetics in female students of the Faculty of Medicine, HKBP Nommensen University Medan in 2024. This is a descriptive study with a crossectional design. With the total sampling technique is obtained 71 female respondents who used whitening cosmetics. The results showed that the average age of the class of 2021 is 21.2 years, the average age of the class of 2024 is 20.2 years and the average age of the class of 2023 is 18.8 years. The description of the level of knowledge is sufficient (52.1%). The majority of the level of knowledge is found in the class of 2023 (59.1%). Description of the level of capable attitude (81.7%). The level of attitude that is able to be the majority in the class of 2022 (89.5%). The description of the level of behavior is quite capable (54.9%). The level of behavior is quite majority in the class of 2022 (79%).

A beautiful face, for most Indonesian women, is one that is clean, smooth, light-colored, and free from dark spots or blemishes.¹ Fair skin is considered an ideal beauty standard among women from all backgrounds. This concept of beauty has rapidly developed along with new lifestyle trends and



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advancements in cosmetology. The use of cosmetics contributes to holistic self-care and creates a space for emotional well-being.²

Cosmetics are substances or preparations intended to be applied to the external parts of the human body such as the epidermis, hair, nails, lips, and external genital organs, or to the teeth and oral mucosa, mainly to cleanse, perfume, change appearance, and/or eliminate body odor, or to protect and maintain the body in good condition.³ Skin whitening products, commonly known as bleaching agents, are one of the most sought-after cosmetic products among women, particularly among teenagers.⁴ Due to the allure of cosmetics that enhance beauty and attractiveness, they have become an essential need for adolescents. However, many are still unaware of the ingredients and potential effects of using these cosmetics.⁵

Many women are obsessed with having fair skin and engage in various treatments, including using skin-lightening products that promise instant brightening results. Marketers take advantage of this demand by selling various beauty products with added whitening features. However, this high demand creates opportunities for marketers to produce illegal whitening cosmetics containing harmful ingredients such as mercury, hydroquinone, retinoic acid, and even steroids, often sold at lower prices than legally approved cosmetics. The use of non-standardized cosmetic products can trigger various adverse reactions, including irritation, allergies, photosensitization, acne, intoxication, and physical blockages. According to the Indonesian Food and Drug Authority (BPOM), as stated in Press Release No. HM.01.1.2.12.23.50 dated December 8, 2023, regarding cosmetics containing prohibited/harmful ingredients, 181 types of cosmetics with prohibited ingredients were still found. The most commonly detected hazardous substances in these cosmetics include mercury, retinoic acid, and hydroquinone in facial creams, as well as red K3 and red K10 dyes in facial makeup products.

Based on a study of 487 vocational high school students at SMKN 1 Janapria conducted by Susilawati M, Bayani F, Apriani L, and Wahyuni I in 2022 on the relationship between students' knowledge levels and their attitudes toward choosing and using skin whitening cosmetics, it was concluded that the majority of respondents had low knowledge levels (60.2%), and most were fairly capable (67.4%) in selecting whitening cosmetics. There was no significant relationship between knowledge level and attitudes toward selecting and using skin whitening cosmetics. Similarly, a study of 130 women aged 15-35 years by Fadhila KR et al. in 2019 on knowledge and use of whitening and brightening products in Sukolilo District, Surabaya, found that 87 respondents (67%) had low knowledge levels about the use of whitening and brightening products. Additionally, a survey of 527 female students at SMAN 1 Sidrap conducted by Ryanda A, Ibrahim I, and Adhayanti I in 2022 on the level of knowledge and attitudes of SMAN 1 Sidrap teenagers in South Sulawesi revealed that most respondents (35.68%) had low knowledge levels regarding the selection and use of facial whitening cosmetics. Therefore, this study aims to describe the knowledge level, attitudes, and behavior related to the use of facial whitening cosmetics among female students of the Faculty of Medicine at HKBP Nommensen University Medan.

METHOD

This is a descriptive study with a cross-sectional approach, approved by the Ethics Committee of the Faculty of Medicine, HKBP Nommensen University under No. 735/KEPK/FK/IX/2024. A total sampling technique was used to include all relevant female students without random selection, aiming to explore patterns and perceptions of whitening cosmetic use within a group with higher awareness and understanding of health. The study subjects were all female students using whitening cosmetics at the Faculty of Medicine, HKBP Nommensen University Medan in 2024. The inclusion criteria included female students from the 2021, 2022, and 2023 classes who had used or were currently using facial whitening cosmetics and were willing to participate as respondents. The exclusion criterion was respondents who did not fully complete the questionnaire. Data collection was conducted using Google Forms from October 22 to October 24, 2024, at the Faculty of Medicine, HKBP Nommensen University Medan. The data collection technique used a closed-

question format questionnaire, and data analysis was performed using SPSS with descriptive statistical analysis.

RESULTS

The study was conducted on 71 female student respondents who met the inclusion criteria.

Table 1. Characteristics of Respondents Based on Age and Class Year

Class Year	Average Age (years)	
	Frequency (n)	
2021	21,2	
2022	20,2	
2023	18,8	

Based on Table 1, it can be seen that the average age of the 2021 class year is 21.2 years, the 2022 class year is 20.2 years, and the 2023 class year is 18.8 years.

Table 2. Level of Knowledge

Category	Frequency	Percentage
	(n)	(%)
Level of knowledge		
Good	15	21,1
Sufficient	37	52,1
Insufficient	19	26,8
Total	71	100

Based on Table 2, it can be seen that the knowledge level of female students in the use of whitening cosmetics falls into the sufficient category, with a total of 37 female students (52.1%).

Table 3. Level of Attitude

Category	Frequency (n)	Percentage (%)
Capable	58	81,7
Fairly capable	13	18,3
Less capable	0	0
Total	71	100

Based on Table 3, it can be seen that the majority of female students have a capable level of attitude in the use of whitening cosmetics, with a total of 58 students (81.7%).

Table 4. Level of Behavior

Category	Frequency	Percentage
	(n)	(%)

Level of behavior		
Capable	31	43,7
Fairly capable	39	54,9
Less capable	1	1,41
Total	71	100

Based on Table 4, it can be seen that the majority of female students have a fairly capable level of behavior in selecting whitening cosmetics, with a total of 39 students (54.9%).

DISCUSSION

From the data presented in Table 1, it can be seen that out of 71 respondents, the majority of respondents from the 2021 class had an average age of 21.2 years, followed by the majority of the 2022 class with an average age of 20.2 years, and the majority of the 2023 class with an average age of 18.8 years.

Based on data from 71 respondents, differences in class year are one of the characteristics observed. Female students with a good level of knowledge were more commonly found in the 2022 class (42.1%), those with a sufficient level of knowledge were mostly in the 2023 class (59.1%), and those with a poor level of knowledge were predominantly in the 2021 class (36.75%). According to Notoatmodjo, knowledge is influenced by several factors, one of which is experience—the more experience a person has, the greater their knowledge.²⁵ Another previous study by Herlina stated that the higher the knowledge level of a teenager, the more careful and meticulous they are in selecting and using whitening cosmetics.⁵

Female students with a capable level of attitude were more prevalent in the 2022 class (89.5%) compared to the 2021 class (80%), while those with a fairly capable level of attitude were mostly found in the 2023 class (22.7%), and no respondents were found to have a less capable level of attitude. The results of this study align with a previous study by Aulia et al., which stated that the formation of a person's attitude can be influenced by various factors, such as personal experience, the influence of others, emotional factors, and culture.¹⁰

Female students with a good level of behavior were most commonly found in the 2021 class (60%), those with a sufficient level of behavior were predominantly in the 2022 class (79%), and those with a poor level of behavior were only found in the 2021 class (3.3%). According to Mahendra, behavior is a form of response to stimuli from others, but in providing responses, it greatly depends on other influencing factors, one of which is the environment.²⁶

CONCLUSIONS

The majority of female students at the Faculty of Medicine, HKBP Nommensen University, have a sufficient level of knowledge, a capable level of attitude, and a fairly capable level of behavior regarding the use of facial whitening cosmetics.

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