

Conference Paper

Knowledge of Doctors and Nurses on the Selection of Cosmetic Facial Wash

Mutiara Titani*, Savira Fauzia Fiddini, Dyah Rahmasari

Pharmacy Department, Health Science Faculty, University of Muhammadiyah Malang, Indonesia

ORCID

Mutiara Titani: <https://orcid.org/0000-0003-1269-3601>

Abstract.

Cosmetics are used by women and men to maintain good skin condition and protect the skin from factors that can damage it. Facial wash has a smooth texture, removes dirt and dust, and reduces oil. This study aimed to determine the level of knowledge of non-pharmaceutical health workers (general practitioners and nurses) on the selection of facial wash cosmetics and to determine the relationship between the level of knowledge and their selection of products. This was a descriptive analytical study with a cross-sectional design. A pretest posttest questionnaire that has been validated was employed. 50 respondents were recruited through purposive sampling. In terms of brand selection, 24% used a beauty doctor's prescription. 72% based their decision according to the needs of the facial skin. 52% bought the product in supermarkets. A total of 82% saw the information on the packaging. In 42% of cases, the function of the facial wash was to brighten the facial skin. The dosage of liquid soap was 90%. The use of domestic facial wash products was 100%. The pretest knowledge level in the 'poor' category was 52% and the posttest knowledge level in the 'good' category was 88%. There was a significant difference found between before and after being given treatment ($p < 0.01$).

Keywords: knowledge, facial wash, selection, doctors, nurse

Corresponding Author: Mutiara Titani; email: author:mutiara@umm.ac.id

Published 15 September 2022

Publishing services provided by Knowledge E

© Mutiara Titani et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICMEDH Conference Committee.

1. INTRODUCTION

Cosmetics comes from the word kosmein (Greek) which means "to decorate". Today most cosmetics can be made by human hands that come from natural or artificial ingredients that are useful for enhancing beauty. Cosmetics are used on the outside of the body and are not intended to cure a disease [1].

Facial cleansers are facial soaps with a smooth texture, which function to remove dirt such as dust and cosmetic residue. Other functions depend on the variant and brand (anti acne, brighten, reduce oil, etc).

The use of cosmetics must be adjusted to the rules of use and form, for example skin type, skin color, climate and weather, time of use, age, and contain ingredients that meet the requirements so as to minimize unwanted side effects [2].

OPEN ACCESS

The negative impact of cosmetics often occurs when the wrong product is used. As a result, it can arise from the use of cosmetic products that do not meet the requirements, such as products that contain hazardous chemicals, have no legality from BPOM, and have expired [3].

In several similar studies regarding knowledge of cosmetics that are guaranteed quality and free from harmful chemicals, it is stated that the level of knowledge of respondents is still very low. Respondents also did not understand about labels, expiration dates, and side effects of use. And the only known dangerous chemical is mercury [4].

Based on the background described above, the researcher considers it important to examine the level of knowledge of non-pharmaceutical health workers (general practitioners and nurses) on the selection of facial wash and to determine whether or not there is a relationship between the level of knowledge of respondents and the selection of facial wash.

2. RESEARCH METHODS

This research is a descriptive analytical research. This research is a cross sectional study and was conducted with a pretest posttest only design using a questionnaire distributed offline and given counseling related to the media booklet. This research was conducted in all Public Health Centers of Probolinggo City on June 14 to 18 2021. The population used were non-pharmaceutical health workers (general practitioners and nurses). And the sample calculation uses the slovin formula.

The sampling technique used was purposive sampling technique which had pre-determined exclusion criteria. There are validity and reliability tests, followed by data processing and data analysis. Data analysis consisted of univariate analysis, normality test, and bivariate analysis

3. RESULTS

Based on the results of research conducted from 14 to 18 June 2021 in 6 (six) Probolinggo City Health Centers. The data obtained are based on the answers of 50 respondents to the questionnaire

3.1. Validity and Reliability Test

The validity and reliability tests were carried out on 30 respondents who had the same criteria as the research respondents and were conducted in different places. The results of the validity test of 29 question items were declared valid so that no question items were deleted. The results of the reliability test of 29 question items obtained a reliability value of 0.845.

3.2. Respondent Demographic Data

TABLE 1: Gender of Respondents.

Type Sex	Amount Respondent	Percentage (%)
Man	11	22
Woman	39	78
Total	50	100

Table 1 shows that of the 50 respondents there were 22% men and 78% women. according to [5] mentions that women are never free to look beautiful and attractive so that cosmetics are needed to make it happen. Over time, not only women need cosmetics but men too.

TABLE 2: Age of Respondents.

Age Category	Age	Number Samples	of	Percentage (%)
Late adolescence	17-25 years old	4		8
Early adulthood	26-35 years old	22		44
Late adulthood	36-45 years old	17		34
Early old age	46-55 years old	7		14
Total		50		100

Table 2 shows that of the 50 respondents the most in the category of early adulthood as much as 44%. At this time is a period of searching, stabilization so that during this time a person needs to show appearance in the sense that growth in himself is in a peak position [6].

Table 3 shows that the most professions are nurses as much as 72%.

On Table 4 shows that the most widely used facial wash brands are products from beauty doctor clinics as much as 24%. according to [7] each product must carry out promotions until there is an attraction for consumers and provide consistent satisfaction and beauty clinic products are also believed to provide a good image.

TABLE 3: Respondent's Profession.

Profession	Amount Respondent	Percentage (%)
General practitioners	14	28
Nurse	36	72
Total	50	100

TABLE 4: Facial Wash Brands.

Brand	Production Formulation		Number of Respondents	Percentage (%)
	K. Beauty	Non K. Beauty		
Baby Soap		✓	4	8
Biore		✓	4	8
Garnier		✓	3	6
Multi Beauty		✓	2	4
Ponds		✓	2	4
Beautiful saree		✓	3	6
Scarlett		✓	2	4
Wardah		✓	7	14
Pixy		✓	2	4
S. Vavl		✓	1	2
Pawpaw		✓	1	2
Image		✓	1	2
Berl		✓	1	2
Hadalabo		✓	1	2
Nivea		✓	1	2
Erha		✓	1	2
Chitoderm		✓	1	2
MSI Bamboo		✓	1	2
Natasha Skincare	✓		1	2
Daviena Skincare	✓		1	2
MS. Glow	✓		6	12
Naava Green	✓		4	8
Total			50	100

TABLE 5: Reasons for Use.

Code	Answer	Number Respondents	of	Percentage (%)
1	Friend's Suggestion	6		12
2	Interested In Product Ads	8		16
3	According to Facial Skin Needs	36		72
	Total	50		100

Table 5 shows that of 50 respondents using facial wash because it suits the needs of facial skin. according to [8] There are several factors that need to be considered in making cosmetics, one of which is how the skin type and how the skin needs.

TABLE 6: Where to Get.

Code	Answer	Number Respondents	of Percentage (%)
1	Online store	10	20
2	Beauty clinic	9	18
3	Supermarket	26	52
4	Buy at friends	2	4
5	MLM Distributors	1	2
6	MSI Distributors	1	2
7	Cosmetic Retail Store	1	2
	Total	50	100

Table 6 shows that 26% of the 50 respondents bought at the supermarket.

TABLE 7: Viewing Infromation.

Code	Answer	Amount Respondent	Percentage (%)
1	YES	41	82
2	NO	9	18
	Total	50	100

Table 7 shows that out of 50 respondents, 82% saw the information listed on the packaging. according to Arnold et al., (2015) [9] said that by looking at the information on the packaging can increase knowledge and broad insight and be able to collect various information.

TABLE 8: Function of Facial Wash.

Code	Answer	Amount Respondent	Percentage (%)
1	Prevent acne	11	22
2	Prevents comedones	1	2
3	Reduce oil on the face	17	34
4	Brighten facial skin	21	42
	Total	50	100

Table 8 shows that out of 50 respondents, 42% had a facial wash function as a face lightener. according to Iswandi, 2(019)[10] mentions that consumers who want to buy cosmetics must look at their skin type because everyone has a different skin type so that in this way it can minimize the occurrence of unwanted side effects.

TABLE 9: Forms of Facial Wash.

Code	Answer	Amount Respondent	Percentage (%)
1	SOLID SOAP	5	10
2	LIQUID SOAP	45	90
Total		50	100

Table 9 shows that 90% of the 50 respondents had a facial wash in the form of liquid soap. according to Laksana et al., (2017) [11] stated that liquid soap is practical in use with a form that tends to be better and manufacture on a large scale is relatively cheap.

TABLE 10: Domestic Products.

Code	Answer	Amount Respondent	Percentage (%)
1	YES	50	100
2	NO	0	0
Total		50	100

On **Table 10** shows that all respondents in this study use domestic products (100%). according to A. Putri, 2018 [12] states that someone likes domestic products, there is also someone who likes foreign products but returns to consumers whether or not the product is suitable for their skin type.

TABLE 11: Knowledge Level of Respondents.

Category	Score	Correct Score	Number of Respondents			
			Pretest		Posttest	
				%		%
Well	75-100%	22-29	8	16	44	88
Enough	56-74%	17-21	16	32	6	12
Not enough	0-55%	0-16	26	52	0	0
Total			50	100	50	100

Table 11 shows that in the pretest knowledge, the average respondent has a knowledge level of "Less" as much as 52%, then given treatment. The average posttest knowledge of respondents has a knowledge level of "Good" as much as 88%. according to Cholishiyana, (2011) [13] states that the treatment here with any media can increase a person's knowledge because the treatment can affect the information obtained.

3.3. Normality test

In the knowledge normality test, the sig value was obtained. pretest $0,200 > 0,05$ and posttest $0,071 > 0,05$ and normally distributed so that it is continued with parametric analysis, namely T test.

TABLE 12: Knowledge Normality Test Result.

Questionnaire	Value of Sig.	value	Note.
PRETEST	0.200	>0.05	Normal Distribution
POSTTEST	0.071	>0.05	Normal Distribution

TABLE 13: Selection Normality Test Result.

Questionnaire	Value of Sig.	value	Note.
Reason	0.000	<0.05	Abnormally Distributed
The place	0.000	<0.05	Abnormally Distributed
Information	0.000	<0.05	Abnormally Distributed
Function	0.000	<0.05	Abnormally Distributed
Form	0.000	<0.05	Abnormally Distributed
Local product	0.000	<0.05	Abnormally Distributed

In the selection normality test, all of the values obtained are sig. 0.000 <0.05 and is not normally distributed so that it is continued with non-parametric analysis, namely the chi square test.

3.4. Bivariate Test Result

TABLE 14: Knowledge T Test.

Questionnaire	mean	Sig.(2-tailed)
PRETEST	16.84	0.000
POSTTEST	24.92	0.000

In the results of the knowledge T test, a significance value of 0.000 <0.05 was obtained, meaning that there was a difference before and after being given the booklet media treatment. according to Dahlan, (2020) [14] before being given treatment there must be a significant difference compared to after treatment.

In the Chi-square test, the reason for using points obtained a sig value. of 0.001 <0.05 so that H1 is accepted, which means that there is a relationship between knowledge and reasons for use. For the other points obtained the value of sig. > 0.05 so H1 is rejected.

TABLE 15: Chi-square test of Selection.

Questionnaire	Value of Sig. Pretest	Pretest Decision
Reason	0.001	H1 accepted
The place	0.289	H1 rejected
Information	0.175	H1 rejected
Function	0.277	H1 rejected
Form	0.237	H1 rejected

4. DISCUSSION

Table 6 shows that 26% of the 50 respondents bought at the supermarket. according to Suryadarma et al., (2007) [15] consumers will not be careless in choosing cosmetics and supermarkets are believed to provide a clean and healthy environment and do not sell goods past the expiration date.

On In this study, there were several respondents who used beauty clinic products but bought them at online stores. According to PerBPOM 2020, it explains that there are distribution facilities so that some document checks, storage methods, and so on are needed. Even these business actors must be responsible for the cosmetics they sell BPOM RI, 2020 [16].

The existence of a relationship between the reasons for use and the level of knowledge is supported by the statement Arnold et al., (2015) [9] which stated that choosing a facial wash, respondents pay attention to skin conditions and look for products that suit their skin needs. Therefore, it is necessary to read before buying to minimize side effects and knowledge will be higher.

Thing this is also supported by Fadila et al., (2020) [17] that there is a relationship between the level of knowledge with the selection of facial care cosmetics and also someone has strong considerations and knowledge to determine the cosmetics to be purchased.

5. CONCLUSION

1. The results of the level of knowledge of the respondents in the pretest questionnaire were mostly at the "Less" knowledge level of 50% and in the posttest questionnaire there was an increase, namely the most at the "Good" knowledge level of 88%. This is in accordance with the results of the T test which resulted in a significance value of 0.000 so that there was a difference between before and after the treatment was given.

2. There is a relationship between the level of knowledge and the choice of facial wash cosmetics because the Chi-square test resulted in a significance value of more than 0.05.

References

- [1] R.I. Tranggono and F. Latifah, "Cosmetic Science Handbook,," In: *Cosmetic Science Handbook*.
- [2] F. Djamaluddin and A. Imbaruddin, "Kepatuhan Pelayanan Farmasi di Klinik di Rumah Sakit Dr Wahidin Sudirohusodo,," *Jurnal Administrasi Negara*. vol. 25, pp. 176–193, 2019.
- [3] A. Syarofatun, "The impact of the use of chemical-based cosmetics on business development,," *Essay*. p.
- [4] A.D. Nurhan and T.M. P, "Knowledge of Mothers About Safe Cosmetics,," *Journal of Community Pharmacy*. vol. 4, no. 1, pp. 15–19,.
- [5] Y.S. Kunto and I.K. Khoe, "Market analysis of male customers for facial wash products in the city of Surabaya,," *Journal of Marketing Management*. vol. 2, no. 1, pp. 21–30,.
- [6] A. Daughter, "The Development of the Use of Cosmetic Products in Indonesia, 2016,," *Scientific Journal of the University of Surabaya Students*. vol. 7, no. 1, pp. 59–64,.
- [7] A. Hutagalung, "Comparison of Brand Equity of Pond's and Garnier Products (Case Study of Pond's and Garnier Consumers at Ozzie Mart Jember Minimarket,," *Angewandte Chemie International Edition*. vol. 6, no. 11, pp. 951–952 , 5–24,.
- [8] H. Agustin, "Pengabaian Konservasi Terumbu Karang Dalam Kurikulum Sekolah Menengah Kejuruan Pariwisata Di Pangandaran,," *Jurnal Common*. vol. 3, no. 2, pp. 142–152, 2020.
- [9] R.M. Arnold, Prijana, and Sukaesih, "The potential for reading textbooks,," *Journal of Information & Library Studies*. vol. 3, no. 1, pp. 81–88,.
- [10] A.K. Iswandi, "Analysis of the Knowledge Level of UNS Medical Students about the Causes and Treatment of Sensitive Facial Skin in Adolescents,,"
- [11] R. Sinto, "Pemeriksaan Kadar Laktat pada Tata Laksana Sepsis: Apakah Benar Diperlukan?,," *Jurnal Penyakit Dalam Indonesia*. vol. 3, no. 1, p. 1, 2017.
- [12] A.F. Putri, "The Importance of Early Adults Completing Their Developmental Tasks,," *SCHOULID: Indonesian Journal of School Counseling*. vol. 3, no. 2, p. 35,.

- [13] R.M. Cholishiyana, "The Effect of Counseling on the Level of Knowledge of Pregnant Women About Childbirth at the Ngorisan Public Health Center Surakarta.," *Eleven March University*. vol. 1, no. 2, pp. 1–4,.
- [14] M.S. Dahlan, *Statistics for Medicine and Health. Indonesian Epidemiology*.
- [15] D. Suryadarma, A. Poesoro, S. Budiyati, Akhmadi, and M. Rosfadhila, "Impact Of Supermarkets On Traditional Markets And Retailers In Indonesia's Urban Centers (K.,"
- [16] R.I. BPOM, "Regulation of the Food and Drug Supervisory Agency of the Republic of Indonesia.," *Pharmacovigilance*. vol. 53, pp. 1689–1699,.
- [17] I. Fadila, P. Minerva, and M. Astuti, "The Relationship between Knowledge of Cosmetics and the Selection of Facial Skin Care Cosmetics for Class XI Students of the Beauty Management Department at Smk Negeri 7 Padang.," *Journal of Cosmetology and Beauty*. vol. 1, no. 2, p.