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Enhancing Adolescent Awareness on Safe Cosmetic Use: A Community Education at Santa Patricia High School, Tangerang

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ABSTRACT

Cosmetics are products designed for use on the external parts of the human body to clean, alter appearance, provide fragrance, improve body odor, or maintain health. The cosmetic industry in Indonesia has experienced significant growth. Technology and beauty stereotypes disseminated through social media have influenced the increasing demand for cosmetics among teenagers. Research shows that 45.4% of teenagers in Indonesia use skincare products before the age of 19, and 46% experience skin health issues due to unsafe products. The Community Service Program aims to enhance teenagers' knowledge about safe cosmetics. This program was conducted through interactive lectures and a peel-off mask-making workshop at Santa Patricia High School in Tangerang, involving 72 students from 10th and 11th grades. Evaluation was performed through pretests and posttests, showing a 16% increase in participants' knowledge. A total of 82% of participants achieved good scores in the posttest. Additionally, 97% of participants understood the material presented, and 99% were satisfied with the overall event. This educational initiative successfully increased students' awareness and knowledge about the safety of cosmetic use, providing new insights into safe ingredients and steps for choosing appropriate cosmetics. Similar activities are encouraged to broaden teenagers' understanding of cosmetic safety.

Keywords: education, cosmetics, teenagers

INTRODUCTION

Cosmetics are materials or products that are designed to be used topically. This part includes the epidermis, hair, lips, nails, external genital organs, as well as the mucous membranes of the mouth and teeth. Cosmetics aim to cleanse, change external appearance, give scent, improve body odor, or maintain body health. The cosmetics industry in Indonesia showed significant growth, even during the pandemic. In 2019, the cosmetics industry experienced a growth of 7%, and in 2021, the growth increased to 9.61%. The number of registered cosmetics industries reached 819 in 2021 and increased to 913 in July 2022. This increase in the number of manufacturers is in line with the increasing demand for cosmetics. Revenue from the cosmetics sector in Indonesia in 2022 is estimated to reach IDR 199 trillion, with projected revenue in 2024 to continue to increase to IDR 135 trillion (PPOM Number 8 of 2021, 2021; Rachmawati, 2023).

Over time, the use of cosmetics has expanded beyond adults to include adolescents. This is influenced by technology, which has led to a high percentage of skincare product

promotions. This causes various levels of society, including teenagers, to find out different kind of cosmetics. Besides technology, the use of cosmetics by teenagers is also influenced by societal stereotypes and beauty standards.

The development of technology is a challenge in sorting out the correct information, including in the selection of cosmetics. The demand factor for cosmetics tends to be influenced by technology that facilitates access to product information. Persuasive content disseminated through online platforms by video bloggers or beauty enthusiasts, as well as their credibility, plays an important role in the purchase decision of cosmetics. Endorsements by well-known individuals in the cosmetics industry have a significant influence.

Based on Nisa research (2023), it was found that as many as 45.4% of adolescents in Indonesia use skincare under the age of 19 and as many as 46% of adolescents in Indonesia who are 16-18 years old experience skin health problems due to unsafe skincare use. This percentage can be said to be quite high and quite worrying. Of course, this percentage will increase as the years go by if it is not accompanied by preventive measures and learning about safety in choosing cosmetics. Therefore, a Community Service Program was carried out with the topic of how to select safe skincare for teenagers (Nisa, 2023).

This activity was carried out to increase the knowledge of adolescents who are still in high school about cosmetics, including safe ingredients in cosmetics, the adverse effects of using cosmetics with unsafe ingredients and steps that can be taken to ensure that a cosmetic is safe to use. In addition, this activity was also accompanied by a workshop on making peel-off masks from safe materials. The implementation of this activity is expected to enhance teenagers' knowledge and meticulousness in using skincare. The hope of this education is to contribute to reducing the percentage of adolescents who experience skin health problems due to the use of unsafe skincare.

METHOD

Educational activities are divided into three stages: preparation, implementation, and evaluation, as shown in Figure 1. The preparation stage is carried out for 8 weeks. Preparations include finding partners to carry out educational activities with adolescent subjects, accommodation planning, material preparation, workshop session simulations, and event rehearsals. The education implementation stage was carried out directly to high school students in grades 10 and 11 at Santa Patricia High School Tangerang on Wednesday, May 29, 2024. Education was delivered using an interactive lecture method, including a question-and-answer session with participants, followed by a workshop session to reinforce the educational content. The workshop was to make cosmetic preparations, namely peel off masks. The final stage is the evaluation stage. The evaluation of activities is seen from the pretest and posttest scores, as well as the evaluation of the entire event by the participants.

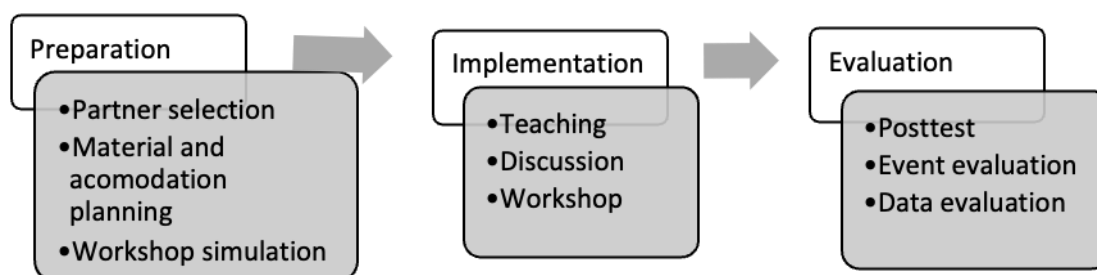


Figure 1. Community service implementation methods

The educational activity began with a pretest containing 10 questions about general knowledge of cosmetics and cosmetic safety. The activity continued with a 30-minute interactive lecture on the material which ended with a 10-minute question and answer session. Then, education was implemented with a workshop on making peel off masks which was carried out by all participants for 75 minutes. The event was closed with a posttest and filling out an evaluation. Pretest, posttest, and evaluation questions are attached to Tables 1 and 2.

Table 1. List of pretest and posttest questions

No.	Question
1	What is the topic of the seminar that will be presented today?
2	What are cosmetics?
3	What is the purpose of using skincare?
4	What are the points to check before buying cosmetics?
5	Which BPOM regulations regulate the technical requirements for cosmetic claims?
6	How do we make sure the cosmetics that we buy is safe?
7	Which ingredients are not recommended in cosmetic products?
8	What are some examples of claims that should not be made in cosmetics?
9	Which content is teratogenic (harmful to the fetus)?
10	What is the impact of using cosmetics that are unsafe for health?

Table 2. Event success evaluation questions list

No.	Question
1	Do you understand the seminar material?
2	Is educational material new knowledge for you?
3	What is the level of satisfaction regarding the way the resource person presents the material?
4	What is the level of satisfaction regarding the way the speakers present the workshop?
5	What is the success rate of this event?
6	Evaluation and suggestions for today's activity

The answer options for the questions in Table 1 are all multiple-choice with options A to E. The choice of questions in Table 2 is a Likert scale with options very bad (1), not good (2), enough (3), good (4), and very good (5). Question number 6 is an open question. (Sullivan & Artino, 2013) Table of indicators of achievement of educational activities is attached to Table 3.

Table 3. Event success indicators

Indicator	Achievement Criteria
Educating students about safety in the use of cosmetics	As many as 75% of the total 80 participants attended the activity and filled in the attendance
Improving students' understanding of safety in the use of cosmetics	As many as 75% of participants received posttest scores in the good category based on the evaluation questionnaire collected
Holding good and useful educational activities for students to increase education about the safety of using cosmetics	As many as 75% of participants were satisfied with the overall event carried out with an average evaluation index of ≥ 15

RESULTS AND DISCUSSION

The target of community service is to increase awareness and knowledge more deeply about the impacts that can be caused by the use of unsafe cosmetics and ingredients that should not be contained in cosmetics. In addition, this service also provides an in-depth look at the steps that need to be taken to choose the right and safe cosmetics. The activity was attended by 72 students with the proportion of students in grades 10 and 11 as shown in Figure 2. The number of students who attended had met the indicator, which was 75% of the total 80 participants attended. In total, around 90% of participants attended the educational activities.

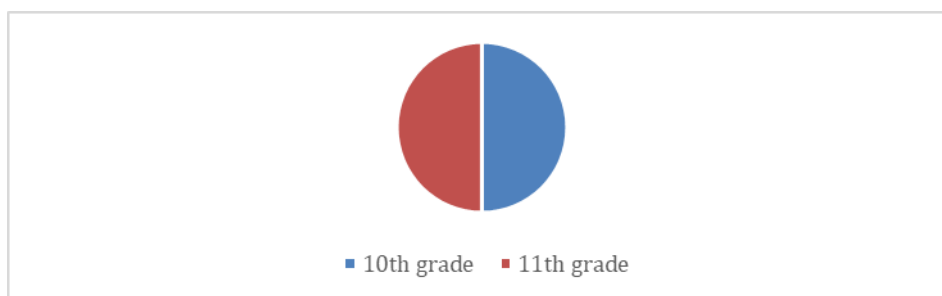


Figure 2. Proportion of participants

This educational activity was welcomed with enthusiasm by the participants. Participants were active in asking questions in the question and answer session and answering questions asked by the speakers during the activity. Cosmetic education has also been carried out by Adjeng et al (2023) and Rachmawati et al (2024). The educational process with the lecture method was proven to increase participants' knowledge when compared between pretest and posttest scores. This lecture method is a form of teacher-centred learning (TCL). Several studies have stated that science-based education, including cosmetic education, needs to begin with TCL as the basis for students to practice it in the outside world (Al-Balushi et al., 2020; Belbase, 2015; Haris et al., 2018).

This educational activity was also continued with a workshop on making peel-off masks. This workshop is a form of student-centred learning (SCL). The use of workshops in the educational process is expected to be able to increase participants' understanding of the material that has been presented previously. Student involvement in SCL can increase engagement which will later affect learning outcomes. The workshop session was also attended by participants actively and full of curiosity to try to make peel-off masks with the ingredients that have been provided. (Bonney, 2015; Stephenson et al., 2016) This activity can be carried out in an orderly manner because participants are able to listen and follow directions from the committee.



Figure 3. Presentation of material on cosmetic safety



Figure 4. Workshop on making peel-off masks

The measurement of the success of this educational activity is evaluated through the provision of pretest and posttest to see the knowledge of students before and after the presentation of the material. The average pretest result of a total of 72 students in grades 10 and 11 was 58.9, while the posttest increased the average score to 74.9. The increase in the score indicates that the participants have a good enough knowledge about safety in the use of cosmetics after being given the material presentation, marked by an increase in the participant's knowledge by 16%. The success indicator of the educational process has been met, with 82% of participants achieving a good posttest score. (the number of correct answers is 7 to 10) based on the evaluation questionnaire collected. The results can be seen in Figure 5. This is in accordance with previous research that education plays a key role in consumer knowledge which will later be able to sort out safe cosmetics. The increasing selection of safe cosmetics should also be the first step to eradicate unsafe cosmetics because the demand will decrease.

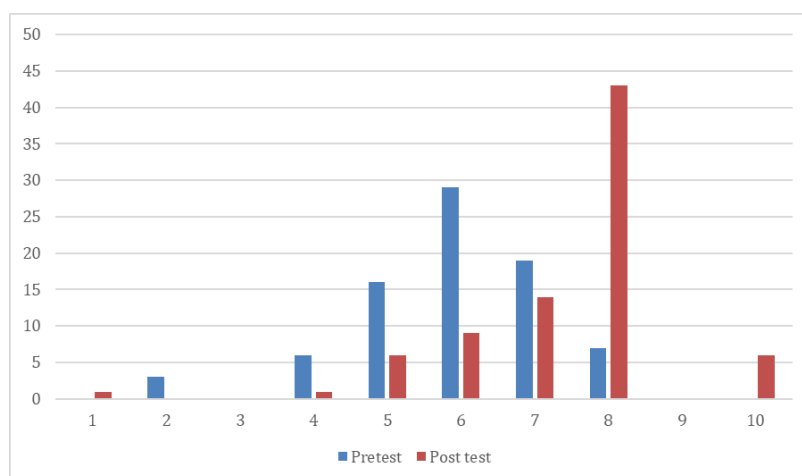


Figure 5. Distribution of pretest and posttest scores of participants

Based on the results of the evaluation questionnaire, the number of participants who chose the Likert scale 4 and 5 was combined to be made into one category "Very Satisfied". This category was chosen for the calculation of the percentage of each evaluation point so that as many as 97% of the participants understood the material presented regarding safety in the use of cosmetics. As many as 93% of participants stated that this material was new knowledge for them. As many as 99% of participants were satisfied with the way the speakers presented the material. As many as 97% of participants were satisfied with the way the committee presented the activity workshop that has been done. As many as 68% of participants felt that the duration of the activities carried out was very appropriate. As many as 99% of participants stated that this educational activity was successfully carried out.

Based on this data, the success indicator has been achieved, which is more than equal to 75% of participants who are satisfied with the overall event carried out with an average evaluation index of 18.7. This service event was carried out after the participants' lesson hours were over, so that this event did not interfere with the participants' time. Community service members consist of 1 lecturer as a speaker and 4 students of the Pharmacy Study Program FKIK UAJ class of 2021. In addition, there are also partners who participate in helping the success of this event, namely 1 person from the marketing of Atma Jaya Catholic University.

One of the obstacles during this community service process was the limited tools and materials, preventing all participants from making a peel-off mask during the workshop session. In addition, due to the lack of service members, when the participants who are not doing workshop, the condition became less conducive because there were no

service members who took care of the participants. Another obstacle is the projector screen that occasionally turns off in the middle of the event, so it takes more time to repair the projector first.



Figure 6. Photos of the community service team and participants

CONCLUSION

The use of cosmetics by adolescents in Indonesia should be the main concern for all of us so that adolescents can avoid the negative impact of the use of illegal cosmetics that can cause side effects. Education on the use of cosmetics at Santa Patricia High School has a positive impact as seen from the increase in student understanding by 16%. The educational process provides new knowledge for students. The enthusiasm of students for the entire event was considered very good with 99% of participants feeling very satisfied with the education carried out. Similar activities should be held more often to expand the reach of adolescents' equitable understanding of cosmetic safety so that adolescents can avoid the side effects of cosmetic use.

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