

## Comparison of knowledge and behavior on genital care between health and non-health faculty students at Universitas Airlangga

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### Abstract

One of the factors that influences health behavior is knowledge. Differences in the field of science allow for differences in behavior. Previous research has shown that there are differences in knowledge between students of health and non-health faculties, but there are also studies that show that non-health faculty students behave better than health faculty students. This research aims to find out the differences in knowledge and behavior of genital care between health and non-health faculty students at Universitas Airlangga. The research method is a comparative analytical method with a cross-sectional approach. Data collection was carried out in January–February 2023 at Universitas Airlangga. The total sample was 96 students, 48 students from health faculty, and 48 students from non-health faculty. The sampling technique is purposive sampling. The research instrument is an online questionnaire through Google Forms. The data was analyzed using the Mann-Whitney test. Test results on knowledge data are 0,000 (p value < 0,005) and behavioral data are 0,003 (p value < 0,005). Conclusion: The results of this study show that health faculty students have better knowledge and behavior about genital care than non-health faculty students.

**Keywords:** Genital Care; Knowledge; Behavior; College Student; Reproductive Health

### 1. Introduction

Reproductive health is defined by the World Health Organization (WHO) as a state of complete physical, mental, and social well-being, free from disease or disability in all matters relating to the reproductive system, its functions, roles, and processes. Maintaining reproductive health begins with genital hygiene. Poor genital care can increase the risk of reproductive tract infections. (RTI). Other data from the SDKI (Indonesian Health Demographic Survey) mentioned that of the 9971 respondents, only 24.7% of teenage girls know where to get information and consultation about reproductive health. The survey also found that 28.6% of teenage girls never discussed reproductive health with anyone else (1). Based on the data, it can be seen that teenage girls in Indonesia need to improve their knowledge about reproductive health. According to Green's theory of health behavior, to form good health behaviors, good knowledge is needed (2).

The age range of college students in Indonesia is between 18 and 24 years old. Based on the division of adolescent ages by BKKBN and WHO, college students are included in the late adolescent age group (3). Based on the field of science studied, students are divided into two groups, namely, the group of students of the faculty of health and the student group of non-health faculty. Students of the faculty of health are candidates for health care professional, so in their studies they learn a lot of things related to health. On the other hand, non-health faculty students do not study or study little about health-related matters.

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Previous research has noted that there is a significant relationship between student characteristics based on the field of science studied and the status of genital hygiene and students from health faculty are 1.8 times more likely to have a better genital hygiene status than non-health faculty students (4). Other studies show that the level of knowledge of health students is higher than that of non-health students (5). Unlike the two studies, the results of research on self-medication patterns on acne mentioned that non-health faculty students had better knowledge of the psychological impact of acne than students of health faculty (6). In line with the study, studies on oral health also mentioned that non-health faculty students had better behavior in choosing the use of oral hygiene products than students of health faculty (7).

There were differences in results in some of these studies, suggesting that non-health faculty students were more likely to have better knowledge and behavior than health school students. This can be due to experience factors, childhood habits, and a good understanding of the information or learning acquired (2). This research is a continuation of previous research. What is different from previous research is that this study focuses on one of the teenage reproductive health services, namely, genital care.

## 2. Material and Methods

The research design is quantitative, with a type of comparative analytical research and a cross-sectional approach. The research was conducted from January to February 2023 at Universitas Airlangga. Populations in this study are students of Universitas Airlangga. Sampling is done using purposive sampling techniques based on inclusion and exclusion criteria. The total sample for this study was 96 students: 48 students from health faculty, and 48 other students from non-health faculty. The study was conducted by comparing the knowledge and behavior of genital care in two groups of non-pairing samples, namely the student sample group of health faculty and non-health faculty.

In this study, the Faculty of Medicine and the Faculty of Fisheries and Marine were the faculty selected by the researchers to represent both sample groups. This research instrument is a questionnaire with closed-end questions and was created independently by researchers based on literature. This research questionnaire has been tested for validity and reliability. Data analysis using the Mann-Whitney comparative test.

## 3. Results and Discussion

### 3.1. Comparison of Knowledge on Genital Care Between Health and Non-Health Faculty Students at Universitas Airlangga

**Table 1** Comparison of Knowledge on Genital Care Between Health and Non-Health Faculty at Universitas Airlangga

Categories of Knowledge	Sample Group				p Value
	Health Faculty		Non-Health Faculty		
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	
Very Good	16	33.33	3	6.25	0.000
Good	29	60.42	32	66.67	
Low	3	6.25	13	27.08	
Total	48	100	48	100	

Based on the results of the statistical tests, p value = 0,000 (p value < 0,005), it can be concluded that there is a significant difference in knowledge of genital care between students of health and non-health. Non-health faculty students with low knowledge had a greater percentage than health faculty students, which was 27,06%. This may be due to differences in the fields studied during the course. Health faculty students have studied reproductive health since their first year. This condition is different from non-health faculty students who have not studied human health since the beginning of their studies.

Although there are significant differences, there is still a small percentage (6.25%) of health faculty students whose questionnaire scores are below the average. As for some assessment items that most students from both faculties

answered with answers that did not match the theory, namely on the items of assessment of the number of types of vaginal discharge, the definition of vaginal douching, the type of water used when washing the genitals, and the correct statement about genital care. In fact, such assessment items are fundamental and can be found in a woman's day life. Meanwhile, health faculty students are healthcare professional's candidates who are expected to be able to provide public knowledge about proper genital care. If their knowledge is limited, it can have a negative impact on society.

This condition is likely related to the implementation of an online learning system as a form of prevention against the spread of the COVID-19 virus. All students involved in this study followed the online learning system for about 2 years. Some studies say that some health faculty students find online learning less effective to build knowledge and skills compared to face-to-face learning (offline) (8–10)

Latest study stated that only 24.6% of 500 students from various programs had access to reproductive health information online (via websites and social media) (11). In line with the study, a study involving 469 undergraduate students from various study programs in Nepal stated that the majority (61%) of students had a limited level of health literacy. The study also mentions that non-health faculty students are more likely to have a limited level of health literacy (12). Based on the results of this research and supported by previous research, it can be concluded that students, both from health and non-health faculties, need to improve their knowledge of reproductive health, including how to treat the genitals correctly. It aims to enable students to increase empowerment and form good behaviors in reproductive health.

### 3.2. Comparison of Behavior on Genital Care Between Health and Non-Health Faculty Students at Universitas Airlangga

**Table 2** Comparison of Behavior on Genital Care Between Health and Non-Health Faculty at Universitas Airlangga

Categories of Behavior	Sample Group				p Value
	Health Faculty		Non-Health Faculty		
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	
Good	35	72.92	21	43.75	0.003
Bad	13	27.08	27	56.25	
Total	48	100	48	100	

Based on the results of the statistical tests obtained from the analysis of p value = 0,003 ( $p$  value < 0,005), it can be concluded that there is a significant difference in the behavior of genital care between students of health and non-health. The percentage of health faculty students who have good genital care behavior is greater than non-health faculty students, which is 72.92%. The results of this study are consistent with previous research findings that stated that most health faculty students have good genital care behaviors (13,14).

In this study, health faculty students had better knowledge and behavior about genital care than non-health faculty students. Thus, it can be concluded that someone who has good knowledge also has good behavior as well. The results of this study are in line with Green's health behavioral theory, which states that one of the factors affecting a person's behavior is the predisposition factor of knowledge (2).

Based on behavioral data, among the students of the health faculty, there are some students who have bad behavior on genital care. As for some assessment items that most students, both from health and non-health faculties, do things that are not in accordance with the theory, among them are the frequency of changing menstrual pads, the frequency of changing underwear, and the frequency of changing underwear during menstruation. Another study also found that 21.6% of 356 students never changed their underwear during their time on campus. Most of them say there's no special reason, and they just don't want to change it (15). It can increase the risk of pruritus vulvae and vaginal discharge due to wet underwear not being changed regularly (16).

Meanwhile, Universitas Airlangga has many facilities that can support their students to care for their genitals well, including a clean toilet, clean water flowing smoothly, a health care center (PLK), a lot of seminary activities on reproductive health, both online and offline (face-to-face) that can add knowledge to their students, and even creating

an application called Indonesian MANTABS Generation as a form of collaboration between the Faculty of Public Health (FKM) Universitas Airlangga and the Indonesian Ministry of Health (Indonesian Ministry of Health). This application aims to accommodate complaints about reproductive health problems experienced by students.

The app also comes with screening and educational features on reproductive health. It can be concluded that Universitas Airlangga has facilitated means and facilities of good health and quality for its students. According to Green's theory, adequate knowledge and practices can support the occurrence of health behaviors (2). The existence of adequate health facilities is not enough to create good health behavior without the proper use of such facilities.

College students have a role as agents of change. They are expected to be the perpetrators, pioneers, and drivers of reproductive health programs. Although they feel uncomfortable when discussing or accessing matters relating to reproductive health, their role as active subjects is essential to creating the facilities and services of adolescent reproductive health that are more suited to the needs and desires of adolescents in order to further enhance the empowerment and effectiveness of these services (17)

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#### 4. Conclusion

Research results show that health faculty students have better knowledge and behavior about genital care than non-health faculty graduates. The comparative test results on knowledge and behavior were  $p$  value  $< 0,005$  which means there were significant differences in knowledge and conduct of genital care between health faculty and non-health faculty students at Universitas Airlangga.

The researchers recommend that educational institutions maintain the quality of reproductive health facilities that have been available and promote or invite students to take advantage of such facilities. The researchers also advised students to be more active and not embarrassed in searching for information on reliable sources about genital care, although this does not include what was studied during lectures. For further research, researchers suggest using research methods that have a high degree of objectivity, such as qualitative methods.

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#### Compliance with Ethical Standards

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##### *Disclosure of Conflict of interest*

The authors declare that there is no conflict of interest.

##### *Statement of informed consent*

All samples in the study have stated their consent to be used as samples by signing an informed consent.

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