

CORRELATION OF KNOWLEDGE AND ATTITUDE OF 2019'S CLASS BATCH STUDENTS OF THE FACULTY OF MEDICINE UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA ON WOUND HEALING WOUNDED BY ALOE VERA GEL (ALOE VERA)

Ranggi Heryagung S¹, Yenita²

¹*Faculty of Medicine, Universitas Muhammadiyah Sumatera Utara*

²*Department of Pharmacology, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia*

yenita@gmail.com

ABSTRACT

Wounds are still a public health problem. Various ways are done by humans to treat wounds such as using modern medicine and traditional medicine, one of the traditional medicines to treat wounds is aloe vera gel, where aloe vera gel is already available in packaged form. Human knowledge is based on curiosity, effort in finding out, and experience. Attitude is an action that predisposes to the action of behavior. To determine the relationship between knowledge and attitudes of 2019's Class Batch Students of the Faculty of Medicine, University Muhammadiyah Sumatera Utara regarding Wound Healing Given Aloe Vera Gel (Aloe Vera). This research uses a descriptive-analytic method with a cross-sectional and uses a questionnaire as a research instrument. The sample used was 2019's class batch UMSU's Medical Students with consecutive sampling techniques. Research shows that the level of knowledge of medical students in the Class of 2019 has a good category of 61 respondents (91.0%), in the fair category 3 respondents (4.5%) and the less category 3 respondents (4.5%), based on the attitude category positive 61 respondents (91.0%) and negative category 6 respondents (9.0%). On average, 2019's class batch students of UMSU's Faculty of Medicine have good knowledge and positive attitudes towards aloe vera gel with wound healing.

Keyword : Aloe vera gel, attitude, level of knowledge, wound healing

Corresponding Author:

Yenita

Department of Surgery, Faculty of Medicine

Universitas Muhammadiyah Sumatera Utara

Jalan Kapten Muktar Basri No 3 Medan 20238, Indonesia.

yenita@gmail.com

1. INTRODUCTION

Injury is the loss of body tissue caused by a factor that interferes with the body's protection system, such factors as being stabbed or even slashed knives that often occur in household activities. There are some kinds of injuries. Acute injuries and chronic injuries, occurring from household injuries or accidents.

Generally, wounds can heal on their own. Wounds can experience healing failure if there are faculties so that ordinary wounds become extraordinarily difficult to heal. Wound healing is the process of repair caused by tissue injury and involves inflammatory mediators such as blood cells, extracellular matrix, and cell parenchyma. The process usually consists of hemostasis, inflammation, proliferation, as well as maturation, and remodeling. This phase occurs when the injury is likely approximately the fifth day.¹

According to WHO 2014, it is estimated that there are currently 6 million people with acute and chronic injuries worldwide, this number continues to grow along with the high mobility of a person and the many factors that cause a person to be injured.² Based on RISKESDAS 2013, the most causes of injuries caused by falls (40.9%) and motorcycle accidents (40.6%), then the causes of injuries due to being hit by sharp or blunt objects (7.3%), other land transportation (7.1%) and falls (2.5%). As for the cause that has not been mentioned, the proportion is very small. Based on one type of wound is the type of abrasions/bruises.³

Based on data obtained from the North Sumatra Health Office in 2018, the number of people injured due to traffic accidents in the city of Medan is as many as 10,928 people. Iris / torn / puncture injuries ranked second after abrasions/bruises/bruises that are acute injuries.⁴ Various ways are done by humans to treat wounds, such as using modern medicine and traditional medicine. Folk remedies such as aloe vera can treat wounds and the absence of side effects, so it is safe to use. substances that are beneficial in wound healing, including saponins, tannins, flavonoids, and polyphenols. Saponins can be clean and antiseptic so that they can be effective in healing open wounds, while tannin compounds play a role for anti-inflammatory, antioxidant, and antibacterial that can prevent infection in wounds, flavonoids, and polyphenols have anti-inflammatory activity as well. Aloe vera stimulates skin growth factors, increases fibroblasts, and the formation of new blood vessels so that it can treat wounds.

In college students, it is important to remember folk remedies such as aloe vera gel that have no side effects and can heal wounds; for example, in research, aloe vera has a significant stimulating effect on cell proliferation and migration of fibroblasts and keratinocytes.¹ Based on the description above, the author is interested in knowing about the relationship of knowledge and attitudes about wound healing given aloe vera gel where the subject is a student of the Faculty of Medicine UMSU Class of 2019.

2. METHOD

This research uses quantitative methods in empirical research whose data is in the form of numbers. This type of research is observational with a cross-sectional approach.⁵ The research was conducted at the Faculty of Medicine, Universitas Muhammadiyah Sumatera Utara. The research sample was a student of the Faculty of Medicine Class of 2019 with technique sampling using consecutive sampling based on a code of ethics. Research is carried out starting with the submission of titles, proposal seminars, Passing Ethics on June 11, 2021, until completion.

Attitude measurement is divided over positive attitudes and negative attitudes using the summated rating method developed by Likert, the minimum score shows a negative attitude, and the maximal score shows a positive attitude.⁵

3. RESULTS

The data that has been obtained is directly entered into the data process through the process of data editing, scoring, coding entry, cleaning, and saving. It is found in the following table.

Table 1: Frequency distribution based on knowledge

Knowledge	n	%
Good	61	91.0
Moderate	3	4.5
Lack	3	4.5
Total	67	100

Based on table 1 analysis of frequency can be known that the level of knowledge of us medical school students in the class of 2019 in the category of enough as many as three respondents (4.5%), and the good category as many as 61 respondents (91.0%)

Table 2: Frequency distribution based on attitude

Attitude	n	%
Negative	6	9.0
Positive	61	91.0
Total	67	100

Based on table 2 analysis of univariate frequency distribution can be known that the attitude of medical students in the class of 2019, in a sample of negative categories as many as six respondents (9.0%), while positive categories as many as 61 respondents (91.0%).

Table 3: Relationship of knowledge with wound healing

Knowledge	Healing				Total	p-value
	Good		Lack			
Good	60	89.5%	1	1.5%	91%	0.000
Moderate	1	1.5%	2	3%	4.5%	
Lack	2	3%	1	1.5%	4.5%	
Total	63	94%	4	6%	100%	

Based on table 3. Above, based on the results of the bivariate analysis is known as the asymptomatic significance value ($p < 0.05$), it was concluded that “there is a relationship between the level of knowledge of UMSU medical students and the 2019 association to wound healing”.

Table 4. Relationship of attitude with healing

Attitude	Healing				Total	p-value
	Good		Lack			
Negative	3	4.5%	3	4.5%	9%	0.000
Positive	60	89.5%	1	1.5%	91%	
Total	63	94%	4	6%	100%	

Based on table 4. Above the results of the bivariate analysis are known asymptomatic

significance values ($p < 0.05$), it was concluded that "there is a relationship between student attitude and wound healing.

Table 5: Knowledge relationship with the use of Aloe vera gel

Knowledge	Aloe vera gel		Total	p-value
	Good	Lack		
Good	43 64.1%	18 26.9%	91%	0.000
Moderate	1 1.5%	2 3%	4.5%	
Lack	2 3%	1 1.5%	4.4%	
Total	46 68.6%	21 31.4%	100%	

Based on table 5. Above, based on the results of the bivariate analysis is known as asymptomatic significance value ($p > 0.05$), it was concluded that "there is no relationship of knowledge of UMSU medical students in the class of 2019 about the use of aloe vera gel."

Table 6: Knowledge Relationship with the Use of Aloe Vera Gel

Attitude	Aloe vera gel		Total	p-value
	Good	Lack		
Negative	5 7.5%	1 1.5%	9%	0.00
Positive	41 61.2%	2 0%	91%	
Total	46 68.7%	2 1%	100%	

Based on table 6. Above, based on the results of the bivariate analysis is known as asymptomatic significance value ($p > 0.05$), it was concluded that then "there is no relationship between the attitude of UMSU medical students in the class of 2019 about the use of aloe vera gel".

4. Discussions

This study shows that the level of knowledge of medical students in the Class of 2019 has a good category of 62 respondents (91.0%). Sample knowledge of the educational material provided (knowledge). Knowledge is a domain that is so important to shape one's actions. According to Notoadmojo, the higher a person's education, the easier they receive information, and finally, the more knowledge they have, the knowledge that varies due to the learning ability of a different person.⁶

Based on the results of the study, it is known that attitudes towards UMSU medical school students in the class of 2019 were positive as many as 61 respondents (91.0%). According to Notoadmojo, attitude always influences actions, and actions are always in line with attitudes.⁶

Based on the results of the study showed that the knowledge of medical students in the class of 2019 about wound healing, well-informed students there were 60 students (89%) who did good healing, and there was one student (1.5%) who were well-knowledgeable who still did good healing, for knowledgeable students, there was one student (1.5%) who did bad healing and two students (3%) who were knowledgeable enough to do enough—healing badly.

Based on the results of the study showed that the attitude of medical students in the class of 2019 in dealing with wound healing, there were as many as 60 students (89.6%) students who were positive in healing wounds well, and one student (1.5%) responding to wound healing badly. As for negative students, there are three people (4.5%) who respond to wound healing well and three students (4.5%) who are negative in responding to wound healing badly. It can be known that medical students in the class of 2019 respond to wound healing well. In the Chi-Square Test analysis test, the p-value of $0.000 < 0.05$, so there is a relationship between UMSU medical students' attitude class of 2019 with wound healers. From the results of this study, knowledge about wound healing belongs to the good group. According to Notoadmojo, where the level has entered into adaptation, adaptation is an activity or action that has developed and done well and repeatedly. Changes in attitudes and behaviors can be due to positive pressure from groups or individuals.⁷

Based on this study shows the relationship of medical students' knowledge in the class of 2019 to the use of aloe vera gel against wounds. From the table, it can be known that well-informed students there are 43 students (64.3%) who use aloe vera gel as a cure for wounds, and 18 students (26.9%), students who do not understand and use aloe vera gel. For students who are knowledgeable enough, there is one student (1.5%) who visits and uses aloe vera gel and two students (4%) who are knowledgeable enough to understand and do not use aloe vera gel. While knowledgeable students are less, there are two students (3%) who use crocodile tongue gel well, and one student (1.5%) understands and uses aloe vera gel. In the Chi-Square Test analysis test p-value of $0.398 > 0.05$, there was no significant association with knowledge with the use of aloe vera gel in wounds. This study is in line with research by Evan P. K (2015) that medical students in Tamela, Ghana are less aware of the existence of traditional medicine. Twenty-three in his research that has also been spelled out what plants are asked to the questionnaire and one of the plants is aloe vera as an herbal remedy or alternative medicine for skin conditions.⁸

This study showed the results of tests of students' attitudes towards understanding and using aloe vera gel against wounds. In the table above, it can be known that the attitude of medical students in the class of 2019 positively responded to the use of aloe vera gel as a wound medicine, there were 41 students (61.2%) who responded to the use of aloe vera gel well, and there were 20 students (30%) who responded to healing poorly. But in a negative attitude, five people (7.5%) use aloe vera gel well. And one student (1.5%) responded to the use of aloe vera gel less well. In the Chi-Square Test analysis test, the value of $p\ 0.417 > 0.05$, there was no attitude relationship towards the use of aloe vera as against wounds. This can be caused by a lack of information on the use of aloe vera gel on wound healing, and attitudes are not only caused by age, social status, and education that result in inappropriate attitudes.⁶

The conclusion of this study was obtained from the level of knowledge of UMSU medical school students in the class of 2019 is good and has a positive attitude towards wound healing given aloe vera gel, there is a relationship and attitude between students' knowledge about wound healing, but there is no relationship and attitude between the use of aloe vera gel in wounds.

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Medicina Biomedica Journal

Vol. 2, No. 1, January 2023, pp. 20 ~ 25

ISSN: 2827- 8275, DOI: 10.30596/mbj.v1i1

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