



Research Paper

## The Relationship between Knowledge and Attitudes Regarding Traditional Medicine and Modern Medicine Toward the Medicine Selection Action for Self-Medicine Among Students

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**ABSTRACT:** The attitude of seeking treatment is a person's actions when suffering from illness or accident. This attitude will vary from doing self-medication to seeking health service assistance. Self-medication is an attempt by a person to self-medicate using both traditional and modern medicine. This research aims to determine the relationship between attitudes regarding traditional medicine and modern medicine towards the medicine selection action for self-medication among students. This research is an observational study with a cross sectional design. The sampling technique was carried out by using cluster sampling method combined with non random accidental sampling method. The research instrument was a questionnaire with the target of Academy Pharmacy students of the Poltekkes Kemenkes Tasikmalaya. Data analysis used Fisher and Chi Square test. Respondents with poor, moderate and good knowledge mostly chose traditional medicine in self-medication. However, the relationship between the knowledge variable towards the traditional medicine selection action is not significant ( $> 0.05$ ). The results of testing the relationship between knowledge towards the modern medicine selection action are also not significant ( $> 0.05$ ). The results of testing the relationship between attitudes towards the traditional medicine selection action were significant ( $<0.05$ ). The results of testing the relationship between attitudes towards the action of traditional drug selection are significant ( $<0.05$ ). The results of the study stated that there was no relationship between the level of knowledge towards the selection between traditional medicine and modern medicine. As for the attitude variable, there is a relationship between the attitude towards the selection of traditional medicine and modern medicine.

**KEYWORDS:** Knowledge, Attitudes, Traditional Medicine, Modern Medicine, Self-Medicine

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### I. INTRODUCTION

Medicine is a substance or chemical compound to help diagnose, treat, cure, prevent a disease or abnormal condition.<sup>[1]</sup> A person obtains medicine, either by coming to a doctor and obtaining medicine by prescription or by self-medicating. Self-medication means the management of common health problems with appropriate drugs without medical supervision and approval, that the treatment is safe and effective to use.<sup>[2]</sup> Self-medication is also known as self-medication.<sup>[3]</sup>

In Indonesia, there are two methods of treatment, there are modern medicine and traditional medicine. Modern medicine is treatment using methods, tools or materials that have received medical standards while traditional medicine is treatment that is carried out from generation to generation, traditional, based on ancestral prescriptions, customs, beliefs or local customs, both magic and traditional knowledge.<sup>[4]</sup> The tendency of the community in choosing treatment depends on the information obtained by the community itself. The information that the public has will form an attitude that will be shown in the action of selecting treatment. Usually people will tend to choose traditional medicine because this treatment is easier to do, easy to implement, an idea that the use of

traditional medicine is for chronic diseases and is widely available in the community. On the other hand, people will tend to choose modern medicine when people feel that it is more practical in use, the reaction or effect is faster or because the idea is that modern medicine is better than traditional medicine.<sup>[5]</sup>

Limitation in public information about medicine selection and utilization is the cause of irrational treatment if it is not accompanied with the provision of correct information.<sup>[6]</sup> The irrational attitude that is carried out by someone in the action of choosing both traditional medicine and modern medicine can cause errors in treatment.<sup>[7]</sup> One of the factors that will influence a person's attitude in medicine selection is knowledge. Knowledge is a very important domain for the formation of one's actions while attitude is an important component as a preparation for someone to act. The better a person's knowledge and attitudes about both traditional and modern medicine will affect his actions in choosing medicine.<sup>[8]</sup> Knowledge and rational attitude in self-medication can reduce the risk of errors in using medicine.<sup>[9]</sup>

Tasikmalaya has several institutions engaged in health education in the city area. Health education that is being carried out by health students is very important in socialize traditional medicine and modern medicine after these students graduate and enter the world of work. Education in college is one of the provisions for health students to improve the standard of public health. This research was conducted to determine the relationship between knowledge and attitudes of health students in the Academy Pharmacy Study Program of the Poltekkes Kemenkes Tasikmalaya regarding traditional medicine and modern medicine in self-medication.

## II. SUBJECT AND METHOD

Subject:

The subjects used in this study were students of the Academy Pharmacy Study Program, Pharmacy, Health Polytechnic of the Ministry of Health, Tasikmalaya.

Methods:

This research is a survey research with a cross sectional approach. The instrument used in this study was a questionnaire whose validity and reliability had been tested. The questions in the questionnaire are a combination of closed questions and open-ended questions. There are three parts to the questionnaire. The first part is some open-ended questions to see how the pattern of student self-medication. The second part is a statement describing the respondent's knowledge regarding traditional medicine and modern medicine. The statements in the questionnaire are made using a closed question model. Respondents choose one of the answers from the statements made in accordance with what the respondent knows. The answer options provided are a.yes; b. no; and c. don't know.

The third part of this questionnaire contains statements regarding the respondent's attitude and actions towards the selection and use of traditional and modern medicine in self-medication.

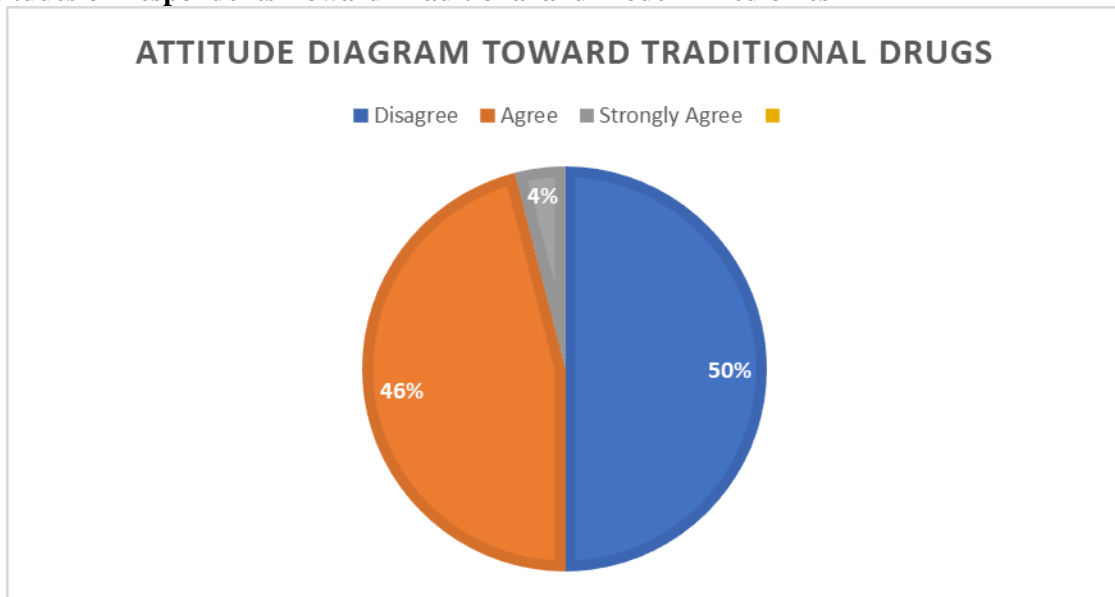
## III. RESULTS

### Respondents' Knowledge of Traditional and Modern Medicine

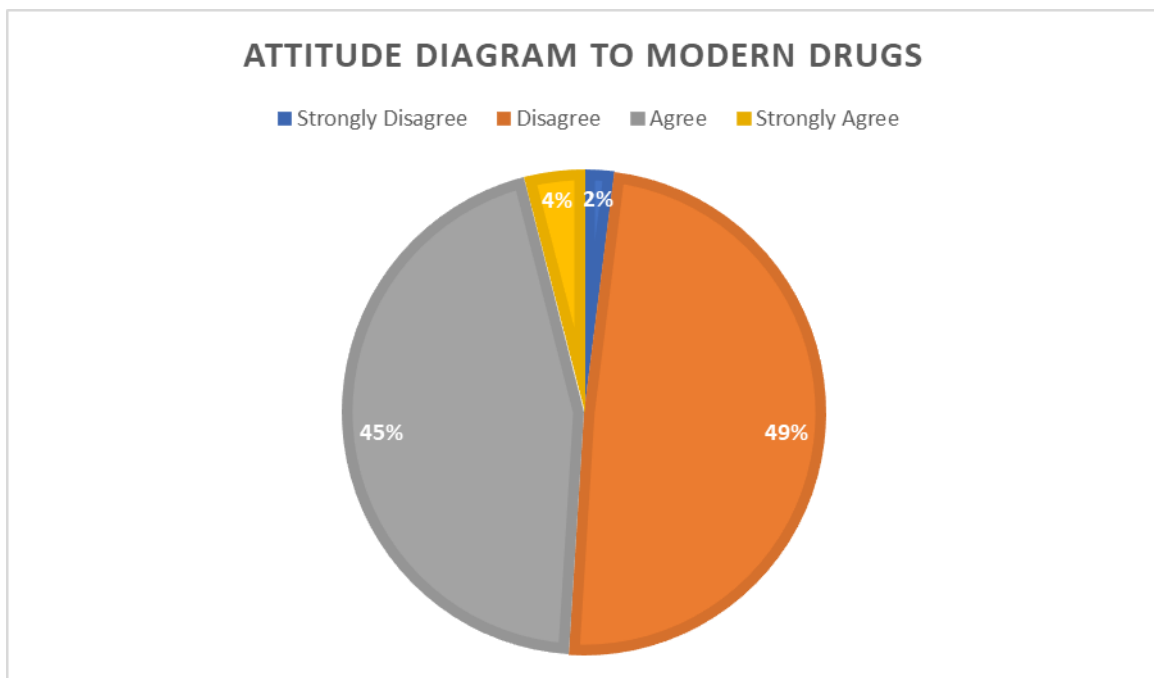
**Table 1. Percentage of respondents' knowledge categories**

Score	Knowledge Category	Amount (n=161)	Percentage (%)
< 50	Poor	1	0,62
50 – 75	Moderate	4	2,48
> 75	Good	156	96,90
Total		161	100

**Attitudes of Respondents Toward Traditional and Modern Medicines**



**Figure 1. Attitudes of Respondents Toward Traditional Medicine**



**Figure 2. Attitudes of Respondents Toward Modern Medicine**

Respondents' Actions Regarding Traditional and Modern Medicine

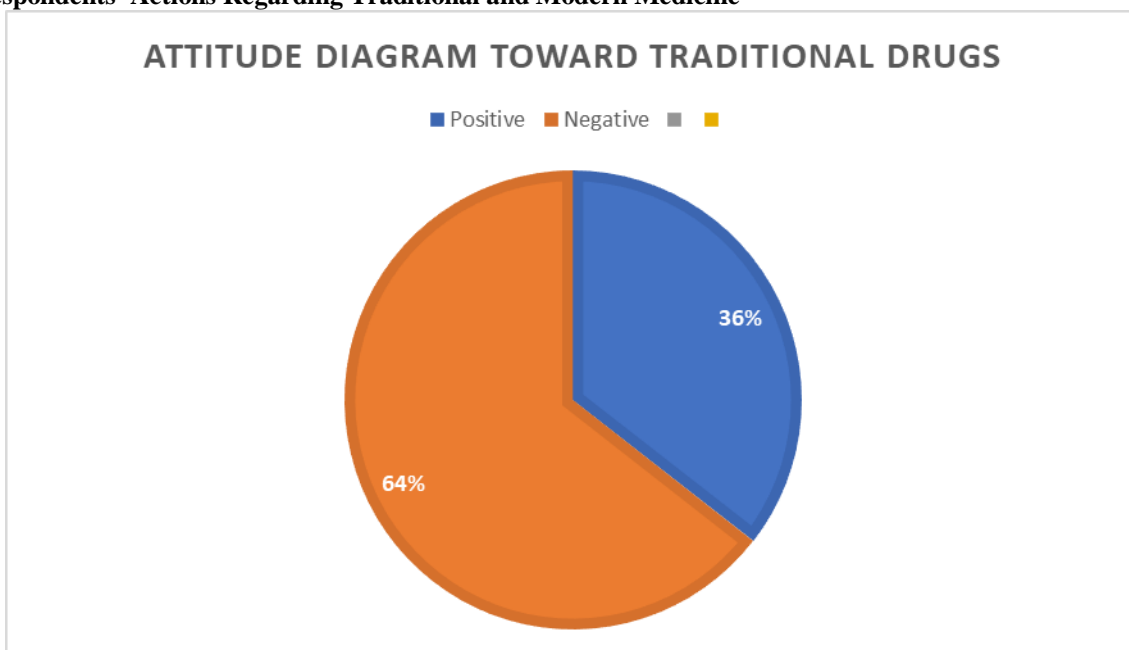


Figure 3. Attitudes of Respondents Toward Traditional Medicine

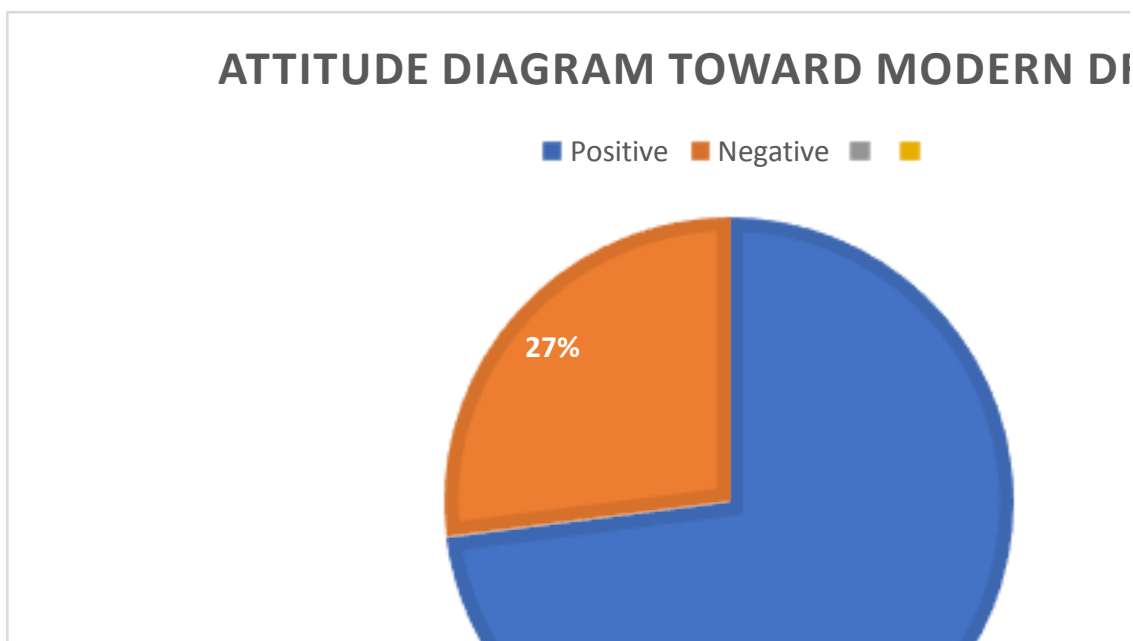


Figure 4. Attitudes of Respondents Toward Modern Medicine

The Relationship between Knowledge and Attitudes towards Respondents' Actions in the Selection of Traditional and Modern Medicines

Table 2. Fisher's Test of Knowledge Level towards Traditional Medicine Selection Action

No.	Knowledge	Traditional Medicine Selection Action		Total (100%)	Sig.
		Positive	Negative		
1	Poor	1 (100%)	-	1	0,585
2	Moderate	3 (75%)	1 (25%)	4	
3	Good	103 (66%)	53 (34%)	156	

**Table 3. Fisher's Test of Knowledge Level towards Modern Medicine Selection Action**

No.	Knowledge	Modern Medicine Selection Action		Total (100%)	Sig.
		Positive	Negative		
1	Poor	1 (100%)	-	1	0,282
2	Moderate	4 (100%)	-	4	
3	Good	113 (72%)	43 (28%)	156	

**Table 4. Fisher's Test of Attitudes towards Traditional Medicine Selection Action**

No.	Attitudes	Traditional Medicine Selection Action		Total (100%)	Sig.
		Positive	Negative		
1	Positive	105 (69%)	48 (31%)	153	0,018
2	Negative	2 (25%)	6 (75%)	8	

**Table 5. Chi-Square Test of Attitudes towards the Action of Modern Medicine Selection**

No.	Attitudes	Modern Medicine Selection Action		Total (100%)	Sig.
		Positive	Negative		
1	Positive	68 (86%)	11 (14%)	79	0,000
2	Negative	50 (61%)	32 (39%)	82	

#### IV. DISCUSSION

##### Respondents' Knowledge about Traditional and Modern Medicine

Based on table 1, a summary of the results of respondents' knowledge regarding the meaning of traditional and modern medicine, dosage, dosage form, drug class, indications, rules of use, side effects, contra indications and their use in self-medication is obtained. Based on this, it was found that 96.9% (156 respondents) had good knowledge. 2.48% (4 respondents) had moderate or sufficient knowledge and 0.62% (1 respondent) had poor knowledge.

##### Attitudes of Respondents Toward Traditional and Modern Medicines

The respondent's attitude is measured by giving a value to each statement. Giving a positive attitude, that is, if the respondent chooses the answer "strongly agrees" and "agrees", the same applies to negative attitudes, namely if the respondent chooses the answer "strongly disagrees" and "disagrees".

The following is a summary of the respondents' attitudes towards traditional and modern medicine as a whole. Based on Figure 1, data is obtained that 22% (36 respondents) strongly agreed to use traditional medicine, 73% (117 respondents) agreed to use traditional medicine and 5% (8 respondents) stated that they did not agree to using traditional medicine.

Based on Figure 2, data is obtained that 4% (6 respondents) strongly agreed to use modern medicine, 45% (73 respondents) agreed to use modern medicine, 49% (79 respondents) stated that they did not agree to using modern medicine and 2% (3 respondents) ) strongly disapproves of using modern medicine.

##### Respondents' Actions Regarding Traditional and Modern Medicine

The respondent's actions are measured by giving a value to each statement. Giving a positive attitude, that is, if the respondent chooses the answer "yes", the same applies to a negative attitude, that is, if the respondent chooses the answer "no". The following are the conclusions of the respondents' actions towards traditional and modern medicine.

Based on Figure 3, data is obtained that 66% (107 respondents) stated positive results for traditional medicines and 34% (54 respondents) stated negative results for traditional medicines.

Based on Figure 4, it is obtained data that 73% (118 respondents) stated positive results for modern medicine and 27% (43 respondents) stated negative results for modern medicine.

##### The Relationship between Knowledge and Attitudes towards Respondents' Actions in the Selection of Traditional and Modern Medicines

The variables of knowledge, attitudes and actions in this study are non-parametric data so that testing the relationship between variables uses the chi square test. Data that does not meet the requirements (If the contingency table is 2 X 2, then there should not be only 1 cell that has an

expected frequency or also called an expected count less than 5) then it will be tested using the Fisher method.

In the variable level of knowledge towards action, the Fisher test is used to see the relationship between the two. Before using the Fisher test, a Chi-square test was carried out on this variable but because it did not meet the requirements because the expected value obtained was less than 50%, the test used alternative test, that is the Fisher test.

Ho will be accepted if the significance value is  $> 0.05$  and rejected if the significance value is  $< 0.05$ . Table 2 shows that respondents with poor, moderate, and good knowledge mostly chose traditional medicine in self-medication. However, the relationship between the knowledge variable and the traditional medicine selection is not significant ( $> 0.05$ ). Based on these results, Ho is accepted, that is, there is no relationship between the level of knowledge and the choice of traditional medicine.

The test results based on Table 3 states that the relationship between knowledge and the action of selecting modern drugs is also insignificant ( $> 0.05$ ), so based on these results there is no relationship between the level of knowledge and the action of selecting modern drugs.

The test results based on Table 4 state that the relationship between attitudes towards the choice of traditional medicine is significant ( $< 0.05$ ). Based on these results, the relationship between attitudes towards the act of selecting traditional medicines.

The test results based on Table 5 indicate the relationship between attitudes towards the act of selecting traditional medicines is significant ( $< 0.05$ ). Based on these results, there is a relationship between attitudes towards the choice of modern medicine.

## V. CONCLUSION

Based on the research results, it can be concluded that:

1. There is no relationship between the level of knowledge towards the action of selecting traditional medicine and modern medicine.
2. There is a relationship between attitudes towards the action of selecting traditional medicine and modern medicine.

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