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The relationship analysis of the traditional medicine knowledge level and self-medication knowledge level on the practice the use of traditional medicine at the University of Darussalam Gontor

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ABSTRACT
The use of traditional medicine aims to provide preventive, promotive, curative, and rehabilitative measures against a disease. Self-medication is one of the curative health efforts that is often carried out by the community to prevent the disease they are suffering from, as an act of selecting and using medication without a doctor's prescription to treat disorders and symptoms of disease. This research aims to increase understanding, knowledge, and practice of traditional medicine self-medication. This type of research is observational-quantitative, using a cross-sectional approach, which is a research design to study correlation techniques between risk factors and the factors that influence them. Data collection used questionnaires distributed directly with a sample size of 481 respondents. Descriptive analysis was used to describe the entire research sample data in the form of sociodemographic data, level of knowledge, self-medication, and practice of using traditional medicine. The inferential analysis used is the Spearman rank correlation test to see the relationship between variables. The results of the research show that there is a significant relationship between the level of knowledge of traditional medicine and the practice of using traditional medicine by respondents of (p value=0.001) and r value = 0.146 and there is a significant relationship between knowledge of self-medication and the practice of using traditional medicine of (p value= 0.005) and r value = 0.128 so this research is in the same direction.

Keywords: knowledge, practice, self-medication, traditional medicine

ABSTRAK
Penggunaan obat tradisional bertujuan sebagai tindakan preventif, promotif, kuratif dan rehabilitatif terhadap suatu penyakit. Swamedikasi merupakan salah satu upaya kesehatan kuratif yang sering dilakukan oleh masyarakat untuk melakukan pencegahan terhadap penyakit yang diderita, sebagai tindakan pemilihan dan penggunaan obat tanpa resep dokter untuk mengatasi gangguan dan gejala penyakit. Penelitian ini bertujuan untuk meningkatkan pengetahuan dan praktek swamedikasi obat tradisional. Jenis penelitian ini adalah observasional-kuantitatif, desain dengan menggunakan pendekatan cross sectional, yang merupakan desain penelitian untuk mempelajari tentang teknik korelasi antar faktor resiko dan faktor yang mempengaruhinya. Pengumpulan data menggunakan kuesioner yang didistribusikan secara langsung dengan besaran sampel 481 responden. Analisis deskriptif digunakan untuk menggambarkan keseluruhan data sampel penelitian berupa data sosiodemografi, tingkat pengetahuan, swamedikasi dan praktek penggunaan obat tradisional. Analisis inferensial yang digunakan yaitu uji korelasi spearman rank correlation untuk melihat hubungan antar variabel. Hasil penelitian menunjukkan bahwa adanya hubungan yang signifikan antara tingkat pengetahuan obat tradisional terhadap praktek penggunaan obat tradisional oleh responden sebesar (p value=0,001) dan nilai r = 0,146 dan terdapat hubungan yang signifikan antara pengetahuan swamedikasi terhadap praktek penggunaan obat tradisional sebesar (p value=0,005) dan nilai r = 0,128 sehingga penelitian ini searah.

Kata Kunci: *pengetahuan, praktek, swamedikasi, obat tradisional*

1. INTRODUCTION

Self-medication is the act of selecting and using medicines, both traditional medicines and modern medicines to treat illnesses or symptoms so that they can recognize themselves (1). The Ministry of Health defines self-medication as one of the community's curative health efforts to prevent the diseases they suffer without having to consult a doctor first. Self-medication is generally used to treat minor illnesses such as fever, cough, flu, pain, arthritis gas, and diarrhea (2). The World Health Organization WHO states that self-medication is the act of selecting and using medication without a doctor's prescription to treat disorders or symptoms of disease experienced (3). This action is carried out by someone to overcome health problems by using medicines that can be consumed without supervision from a doctor. Self-medication is generally used for minor health problems because it is a cheap, fast, and comfortable solution without the need to go to a health service center (4).

The practice of self-medication is based on that self-medication is sufficient to treat the health problems experienced without involving health workers (5). Another reason is because the costs to the doctor are expensive, there is not enough time for treatment and there is no access to health facilities. Self-medication includes obtaining medicines without a prescription, purchasing medicines based on old prescriptions previously received, sharing medicines with relatives or members of one's social circle, or using leftover medicines stored at home (6).

Traditional medicine is an ingredient form of plant ingredients, animal ingredients, mineral ingredients, extract of medicinal preparations (galenic), or a mixture of these ingredients which have been used for generations for treatment, and can be applied by the norms applicable in society (7). The use of traditional medicine has advantages, including having relatively low side effects, in a mixture with a variety of ingredients. The weakness is that the pharmacological effects are mostly weak, the raw materials have not been standardized, and a series of tests have not been carried out to ensure their effectiveness and safety. Another advantage of traditional medicine is that it is easy to obtain, the raw materials can be grown in the local environment, it is cheap and it can be used by everyone (8).

The use of traditional medicine aims to provide preventive, promotive, curative, and rehabilitative measures against a disease. Traditional medicine in Indonesia has been used from since old time for generations as the nation's cultural heritage (9). Traditional medicine become integrated into society and is used to treat health problems. People's ability to treat themselves, regarding the symptoms of disease, and maintaining health needs to be improved to maintain health. So traditional medicine has great potential because it is well known by the public, easy to obtain, and is part of the community's social culture (1). Traditional medicine has a special place for some Indonesian people because it is cheap, easy to obtain, and also simple in terms of processing (10).

31.4% use traditional health services and 12.9% use traditional health efforts themselves. As many as 48% of the traditional health products used are in the form of ready-made concoctions and 31.8% are in the form of homemade concoctions (11).

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Then research by Ratna Sari Dewi, et al. Regarding the use of traditional medicine by people in Pekanbaru City, the use of traditional medicine obtained describes that the type of traditional medicine used by the community is herbal medicine (52.38%), with the reason that people use traditional medicine because it is made from natural ingredients (37.50%) and the sources of information obtained were from print or electronic media (47.62%), places to obtain traditional medicine from pharmacies (64.29%), the type of disease most commonly suffered was colds (37.50%) and the dosage form used. Mostly used are liquids (92.86%) (12).

The use of herbal medicines in the family environment at Darussalam Gontor University has increased in recent years. This use is based on the health need. Understanding herbal medicines is said to have more guaranteed safety than chemical medicines. In addition, herbal medicines made from natural ingredients are more halal than synthetic chemical medicines developed by industrialized Western countries (13).

Based on the results of previous research on factors in the use of herbal medicines in the UNIDA Gontor Campus, the reasons for choosing herbal medicines were the most common, safety from side effects 25 people, Sunnah of the Prophet 20 people, minimal side effects 20 people, and other reasons 33 people. Reasons based on the percentage of treating 18% and preventing disease 82%. Identification related to the level of understanding of respondents regarding features included: packaging that was not suitable for use 64 people with a percentage of 72%, dosage 54%, natural ingredients content 67%, attractive product packaging 71%, MUI halal label 72%, and date label expired 67%. Understanding of benefits related to effective drugs 62%, quality drugs 49%; good taste, smell and color of herbal medicine 48%, form of medicine 70%, packaging suitable for use 71%, and storage of herbal medicine 71%. Understanding the function related to the composition of herbal medicines 11%, interest in understanding how herbal medicines work 52%, suitability of indications for herbal medicines 31%, and the presence of side effects 25% (13).

Based on the results of previous research and survey results, both in general in Indonesia and research specifically at Darussalam Gontor University there are still few people who consume traditional medicine and have minimal understanding of traditional medicine as part of prevention and self-treatment. Efforts to prevent deviations in self-medication must be based on an understanding that drug use must be as rational as possible. The criteria for rational medicine include accuracy in drug selection, accuracy in drug dosage, no contraindications, no dangerous side effects, no drug interactions, and no polypharmacy (14). Steps that can be taken to reduce the incidence of irrational self-medication to increase public knowledge (15).

The selection of the research object at Darussalam Gontor University is because the unique element of Darussalam Gontor University is a university based on Islamic boarding schools. The vision of Darussalam Gontor University is a university with an Islamic boarding school system as a center for the development of science oriented towards the Islamization of contemporary science and as a center for the study of the language of the Qur'an for the welfare of humanity. So that the output of this study is

to be able to develop the Islamization of science through the use of traditional medicine.

2. METHODOLOGY

Research Design

This research is an observational-quantitative study, observational-quantitative research, using a cross-sectional data collection approach. ethical clearance has been issued with number 294/KEPK-FIK/IV/2024 The instrument used is a questionnaire which contains a list of several questions and statements used by researchers to obtain data that comes directly from sources. The questionnaire describes the level of knowledge and practice of self-medication at the University of Darussalam Gontor. The location of this research is at the University of Darussalam Gontor, Ponorogo, Indonesia, population and sample of Human Resources on the campus University of Darussalam Gontor consisting of lecturers, education staff, staff, students, students class 12, employees/workers.

Research Materials and Subjects

a. Research Materials
   The research material used in this research is primary data which is data sourced from the results of questionnaires directly with respondents who have used traditional medicine in the last 3 months.
b. Population Limitation
   - Inclusion Criteria
     1) The respondent has a relationship with the University of Darussalam Gontor
     2) Have used traditional medicine in the last 3 months
     3) Agree to participate in the research
     4) Minimum age 18 years and maximum 65 years
   - Exclusion Criteria
     1) Respondents who use traditional medicine to treat their families
     2) Respondents who have a history of mental illness
c. Research Sample Size
   According to Sugiyono, the sample is part of the number and characteristics of the population. This sample was taken because this research could not possibly examine all members of the consumer population (17). The total research sample size in this study uses the Slovin formula because in this formula the number of samples can represent the total population (18):

$$n = \frac{N}{1 + N\,(e^2)}$$

$$n = \frac{1720}{1 + 1720\,(0{,}05^2)}$$

n = 481 responded

Explanation:
N = Total Population (1.720)
n = Number of Samples
e = Margin of Error (0,05)

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Determination of the division of the number of samples for each respondent is calculated using a proportional formula, namely the formula:

$$s = \frac{n}{N} \times S$$

Explanation:
s = the number of samples per unit is proportional
S = total number of samples obtained
N = population size
n = the number of each population unit

The following are the results of the distribution of respondents based on the proportional formula: 106 lecturers, 22 education staff, 19 staff, 132 students, 154 grade 6 students.

Sampling Technique

The sampling technique used in this research was non-probability sampling with a survey method. Non-probability sampling technique is a sampling technique that does not provide an equal opportunity for each member of the population to be sampled (16). Respondents are determined using proportional techniques, this technique determines the population that has certain characteristics by the predetermined number (16). The non-probability sampling method used is accidental sampling, namely a sample determination technique based on chance, anyone who coincidentally/incidentally meets the researcher can be used as a sample, if it is deemed that the person who is met by chance is suitable as a data source (17).

The sampling method in the field was directly carried out using the survey method. The survey method is a quantitative research method whose use is to obtain current and past data. The main instrument in this research is a questionnaire using two methods, namely online via Google Forms and offline via questionnaire sheets. Respondents with lecturers, education staff, staff, and students used Google Forms for time efficiency and convenience, while KMI class 12 students and employees used questionnaire sheets.

Validity Test

In this research, a content validity test was used. Content validity is the validity estimated through testing the feasibility or relevance of an instrument through rational analysis by expert judgment. Content validity ensures that a measure includes a representative and adequate set of items that reveal the concept. Or validity describes how well the dimensions of a concept are described (19).

After content validation was carried out by experts, the questionnaire was then tested again using face validity to find out which question items were not understood or were difficult for respondents to understand. In this questionnaire there were 30 respondents to carry out trials, then some of these respondents provided input and suggestions regarding questions that were not understood by the respondents.

Research Data Analysis

Data analysis in this study used IBM SPSS Statistics 25 software using descriptive and inferential analysis methods. There are several stages of statistical analysis in this research, namely as follows:

a. Descriptive Analysis

For analysis of sample characteristics, descriptive analysis is used, where this analysis is used to describe the entire research sample data in the form of sociodemographic characteristic data and general information of respondents.

b. Spearman Rank Correlation Test

The Spearman Rank Correlation test is used for ordinal or ranking scales and is free of distribution (non-parametric). The Spearman rank correlation value is between -1 to 1. If the value obtained = 0, it means there is a relationship between variables. The level of relationship between variables can be seen in the table. This test is conducted to measure the relationship between the level of knowledge of traditional medicine and the practice of traditional medicine self-medication.

3. RESULTS AND DISCUSSION

Overview of Sociodemographic Characteristics

The total research sample was 500 respondents, while the exclusion criteria were 19 respondents, so the total number of respondents after deducting the exclusion criteria was 481 respondents. Based on research conducted during the period 2023 to 2024 at Darussalam Gontor University, the total research sample was 481 people consisting of lecturers, education staff, staff, students, students and employees.

Table 1. Sociodemographic Characteristics of Respondents

Characteristics	Amount Respondents	Percentage
Gender		
• Male	211	43,9%
• Female	270	56,1%
Age		
• 15-25 Years	226	47%
• 26-35 Years	236	49,1%
• 36-45 Years	15	3,1%
• 46-55 Years	2	0,4%
• 56 Years and above	2	0,4%
Marital status		
• Un-married	297	61,7%
• Marry	179	37,2%
• Widow/Widower	5	1%
Last education		
• Elementary school	0	0%
• Junior High School	77	16%
• Senior High School	146	30,4%
• Bachelor (S1)	112	23,3%
• Post-Bachelor (S2/S3)	146	30,4%
Job Status		
• Work	232	48,2%
• Doesn't work	9	1,9%

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Characteristics	Amount Respondents	Percentage
• Currently Studying (Student)	209	43,5%
• Internship	30	6,2%
• Retired	0	0%
Profession		
• Lecturer	138	28,7%
• Academic Staff	46	9,6%
• Internship	21	4,4%
• College student	152	31,6%
• Student	86	17,8%
• Employee	38	7,9%
Monthly Income		
• Under 1 million	188	39,1%
• 1 – 2.5 million	233	48,3%
• 2.5 – 5 million	52	10,8%
• 5 – 10 million	8	1,7%
• 10 – 20 million	0	0
• 20 million and above	0	0
Status in the Household		
• Head of family	105	21,8%
• Family Member (Wife)	116	24,1%
• Family Members (Children)	260	54%
Have you ever done self-medication?	437	90,9%
• Have you ever done self-medication	44	9,1%
• Haven't ever done self-medication		
The type of disease suffered		
• Minor Disease	427	88,8%
• Chronic Disease	54	11,2%
Long use of traditional medicine	360	74,8%
• Under 3 months	68	14,1%
• 3 - 6 months	26	5,4%
• 6 - 12 months	27	5,6%
• 1 year and above		

Based on the description in Table 1 regarding the sociodemographic characteristics of respondents, the use of traditional medicine is mostly dominated by females as much as 56.1%, and male respondents as much as 43.9%, the age of respondents is in the age range of 15-25 years as much as 47%, and the age range of 26-35 years as much as 49.1%. The education of respondents is Bachelor, Master, and Doctorate as much as 53.7% and high school level as much as 30.4%. Marital status shows that most respondents are not married, this is because most of the respondent classifications are dominated by students, college students, and employees who are not married. Based on the research that has been conducted, the status of respondents is mostly working as much as 48.2% and respondents are studying as students / pupils as much as 43.5%. Most respondents have a monthly income of below 5 million, which is 90%. Most respondents stated that they had treated themselves with traditional medicine and a small number had never treated themselves with traditional medicine.

The group of diseases suffered by respondents is mostly a group of mild diseases and the rest of the respondents have a history of chronic diseases.

General Information Characteristics of Respondents

The general information characteristics of respondents in this study are information about the respondent's experience related to information about diseases that the respondent has suffered from and the respondent's experience of self-medication using traditional medicine. The distribution of respondents' general information characteristics is presented in the form of table 2 below:

Table 2. General Information Characteristics of Respondents

Characteristics	Amount Respondents	Percentage (%)
Have you had any pain in the last 3 months?		
• Yes	391	81,3%
• Not	90	18,7%
The purpose of using traditional medicine to overcome?		
• Minor Disease (cough, fever, flu, ulcer, diarrhea, etc.)	446	92,7%
• Chronic Disease (cancer, hypertension, heart disease, etc.)	35	7,3%
Do you self-medicate with traditional medicine to treat this disease?		
• Yes	393	81,7%
• Not	88	19,3%
What type of traditional medicine do you use to treat your disease?		
• Traditional Herbal Medicine	249	51,8%
• Standardized Herbal Medicine	193	40%
• Phytopharmaceuticals	39	8,2%
What form of traditional medicine is used?		
• Instant traditional medicinal ingredients	361	75,1%
• Homemade traditional medicine concoctions	120	24,9%
What type of traditional medicine is used?		
• Habbatussauda, honey, ginger, *beras kencur*, tamarind turmeric	394	82%
• Other traditional medicines	86	18%
Do you feel unwanted symptoms appearing after consuming traditional medicine?		
• Yes	137	28,5%
• Not	344	71,5%
What symptoms do you experience after consuming traditional medicine?		
• Did not feel any symptoms of side effects	344	71,5%
• Dizziness, nausea, vomiting, stomach discomfort	98	20,3%
• Feeling other symptoms	39	8,1%
Where do you get information related to traditional medicine?		
• Advertisement	29	6%
• Health posters	34	7%
• Knowledge of books	72	15%
• Friend recommendations	221	46%
• Based on the Qur'an and Hadits	91	19%
• Another facility	34	7%
Where do you get traditional medicine?		
• Pharmacy	192	40%

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Characteristics	Amount Respondents	Percentage (%)
• Health shop	96	20%
• Supermarket	24	5%
• Market	96	20%
• Marketplace (online)	24	5%
• Another place	48	10%

Based on the distribution in Table 2 about the characteristics of general information of respondents, the characteristics of general information of respondents are diverse and varied. Based on the research that has been conducted, the average group of traditional medicines that have been used by respondents in this study are the traditional medicine groups "jamu" and "Standardized Herbal Medicine (OHT)", then a small portion uses drugs with the "phytopharmaca" group. Respondents prefer the type and form of traditional medicine used as a ready-made concoction compared to consuming homemade traditional medicine. Respondents' choices related to the type of traditional medicine used types of medicine such as habbatussauda, honey, temulawak, turmeric tamarind by 82%, while respondents who use other traditional medicines are 18%. Most respondents get information related to traditional medicine based on recommendations from friends, then successively get information based on the Qur'an and Hadith, through knowledge from books, advertisements and activity posters. Respondents get traditional medicine from pharmacies, then followed by health stores, supermarkets, markets, marketplaces (online), the rest get traditional medicine from other places such as gardens, and medical centers on campus.

The relationship between the level of knowledge of traditional medicine and knowledge of self-medication in the practice of using traditional medicine

In this study, the Spearman rank correlation test was used to find relationships or to test the significance between research variables. In general, using the correlation test with the Spearman rank technique is one way to find out the extent of the correlation or relationship between two or more variables in a study. In this research, correlational testing uses the Spearman rank technique to determine the relationship between the variables of the level of knowledge of traditional medicine, knowledge of traditional medicine self-medication as the independent variable and the practice of using traditional medicine as the dependent variable. The Spearman rank analysis technique is a non-parametric statistical technique (21). The following are the results of the Spearman rank test on the practice of using traditional medicine:

Table 3. The relationship between the level of knowledge of traditional medicine and knowledge of self-medication in the practice of using traditional medicine

Variable	Level of knowledge of traditional medicine		Level of self-medication knowledge		Practice the use of traditional medicine	
	p-value	***r***	***p-value***	***r***	***p-value***	***r***
Level of knowledge of traditional medicine			0,000	0,181"	0,001*	0,146"
Level of self-medication knowledge	0,000	0,181"			0,005*	0,128"

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Practice the use of traditional medicine	0,001	0,146"	0,005	0,128"

**. Correlation is significant at the 0,05 level (2-tailed).*
***. Correlation is significant at the 0,01 level (2-tailed).*

Based on Table 3 regarding the relationship between the variables of the level of knowledge of traditional medicine, knowledge of self-medication and the practice of using traditional medicine at Darussalam Gontor University above, using Spearman's rank correlation test analysis between the variable values for the level of knowledge of traditional medicine and the practice of using traditional medicine, the correlation coefficient value p value = 0.001 < significance level 0.05 and r 0.146 shows a positive value, meaning the results are in the same direction and there is a positive relationship. significant relationship between the variable value of the level of knowledge of traditional medicine and the practice of using respondents' traditional medicine.

These findings and results support previous research, such as the results of research by Melizsa et al., 2022 regarding the relationship between the level of knowledge and self-medication behavior for analgesic drugs. Based on the Spearman rank correlation test, a significant correlation was obtained with a calculated r-value of 0.516 and p-value = 0.000, which shows that there is a fairly strong and significant relationship between the level of knowledge regarding the behavior of self-medicating analgesic drugs with a positive relationship direction (22).

Next is research (23) Regarding the relationship between the level of knowledge and self-medication behavior for scabies in Islamic boarding schools, the results of the research show that the level of self-medication knowledge among students is in the good category with a percentage of 52% and the self-medication behavior for scabies is also in the good category with a percentage 76%. There is a relationship between the level of knowledge and self-medication behavior for scabies with a correlation value of 0.701 and a significance of 0.000 (23). Then research by Yuda et al., 2022 titled The Relationship between the Level of Knowledge and Self-medication Behavior for Dyspepsia Students at Mataram University, shows that the results of the Pearson correlation show that there is a relationship between the level of knowledge and behavior, with a correlation value of 0.095 and a significance value of 0.039, the results of the relationship between these two variables less meaningful (24).

Then, the results of research by Wahyudi et al., 2021 regarding the influence of the level of public knowledge on self-medication, show that the research results show that the level of public knowledge is 46% and self-medication for pain is 45%. The test results of the relationship between knowledge and pain self-medication show that there is an influence between knowledge and pain self-medication in the community in South Banjarmasin District ($p<0.05$) (25). Research result (26) regarding the relationship between the level of patient knowledge and self-medication behavior, in the analysis obtained a calculated r of 0.309 and a significance value of 0.004 which shows the relationship between knowledge and self-medication behavior (26). However, this is different from the results of Sari & Sutrisna's research, 2022, regarding the relationship between knowledge, attitudes, and actions towards the self-

medication use of phytopharmaceuticals among pharmacy students at the Mahaganesha College of Pharmacy. The results of the significance analysis show that there is no relationship between knowledge and attitude and knowledge and action, whereas there is a significant relationship between attitude and action of 0.000 with a strong relationship of 0.548 and the direction of the relationship is positive, namely the higher the attitude, the higher the action (28). Amalia & Dewi's research, 2021, describes the level of knowledge and attitudes towards the use of traditional medicine as community self-medication. The observation results show that the level of knowledge is in the poor category and the community's attitude towards traditional medicine is in the good category (30).

Based on research on the relationship between the variables of self-medication knowledge of traditional medicine and the practice of using traditional medicine by respondents at Darussalam Gontor University above using Spearman's rank correlation test analysis, a correlation coefficient value of p-value = 0.005 < significance level of 0.05 and an r-value of 0.128 was obtained. These results mean a significant relationship between the self-medication knowledge variable and the respondent's practice of using traditional medicine.

Based on these results, supports and confirm several previous studies, such as Tursina Kamila Putri's research on "The Relationship between Community Knowledge Level and Self-Medication Behavior". The results of this study show that the results obtained were not significant with a p-value of 0.063, which shows that there is an insignificant relationship between the level of knowledge and self-medication behavior (31). Then Ni Putu Dewi Agustin's research on "Level of Knowledge on the Use of Traditional Medicinal Plants as an Alternative Treatment in the Bindu Tourism Village Community". The results of the analysis of questionnaire data obtained from 104 respondents showed that 51 people (49%) had a good level of knowledge, 46 people (44%) had a sufficient level of knowledge and 7 people (7%) had a poor level of knowledge. The average knowledge value of 104 respondents is 77% which is included in the range (76%-100%), so the level of knowledge of respondents is good (32).

Then the results of Yunita Liana's research on "Analysis of factors that influence families in using traditional medicine as self-medication in Tuguharum Village, Madang Raya District". The results of the multivariate analysis showed that there was an influence of knowledge on the use of traditional medicine, p-value = 0.000, so the conclusion was that the factor that had the most influence on the use of traditional medicine was knowledge (1). The results of Sari N. K. D. N.'s research, regarding "the relationship between knowledge, attitudes and actions towards the self-medicated use of phytopharmaceuticals among pharmacy students at the Mahaganesha College of Pharmacy". The results of the significance analysis show that there is no relationship between knowledge and attitude and knowledge and action, whereas there is a significant relationship between attitude and action of 0.000 with a strong relationship of 0.548 and the direction of the relationship is positive, namely the higher the attitude, the higher the action (27). The results of Gina Aulia's research on "the level of community knowledge regarding the use of traditional medicines and synthetic

chemical medicines in Kedaung Village, Depok City". The results of the research show that the level of public knowledge about the use of traditional medicine is 83.3% and synthetic medicine is 72.7%, thus stating that public knowledge about traditional medicine is higher than synthetic chemical medicine (33).

4. CONCLUSION

From the results of the analysis in the discussion, the conclusions in this research are as follows:

a. There is a significant relationship between the level of knowledge of traditional medicine and the practice of using traditional medicine by respondents at the University of Darussalam Gontor (p-value = 0.001) and r-value = 0.146.
b. There is a significant relationship between self-medication knowledge and the practice of using traditional medicine by respondents at the University of Darussalam Gontor of (p-value = 0.005) and r value = 0.128, for both variables the r value is positive so the results of this study are in the same direction.

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