ANALYSIS OF THE RELATIONSHIP BETWEEN KNOWLEDGE LEVELS AND STUDENTS ATTITUDES TOWARDS THE SELECTION OF HEALTH SUPPLEMENTS IN FACING COVID 19 IN THE PANDEMIC ERA

Heny Puspasari[*], Weni Puspita, Sinta

Yarsi Pharmacy Academy of Pontianak
Jl. Panglima Aim No.2, Dalam Bugis, Pontianak, Kalimantan Barat,78232, Indonesia

*Corresponding author: Heny Puspasari (heny24puspasari@gmail.com)

Abstract

Background: Coronavirus Disease 2019 (Covid 19) has happened declared by WHO a global pandemic. Covid 19 in Indonesia has displayed a type of disease that causes public health emergencies and non-natural disasters, which cause death and considerable economic losses. Objective: This study determined the relationship between student knowledge and attitudes towards selecting health supplements in dealing with Covid 19. Methods: The research has been carried out using a descriptive survey method with a prospective approach. Sampling has been done using a stratified random sampling technique for active students at the Akademi Farmasi Yarsi Pontianak at all levels/semesters. In addition, this research has conducted by giving a questionnaire via a google form. Results: The study obtained was processed with the chi-square analysis test. Results show from the chi-square analysis that there is a relationship between the level of knowledge and attitudes of students towards the selection of health supplements in dealing with Covid 19 in the pandemic era with a value (p-value (0.000) < alpha (0.05). Conclusion: The analysis results show a relationship between the level of knowledge and student attitudes towards selecting health supplements in the face of Covid 19 in the pandemic era.

Key words: analysis, covid 19, health supplement, relationship

Introduction

The Coronavirus Disease 2019 (Covid 19) was declared a global pandemic by WHO. Covid 19 in Indonesia is declared a type of disease that causes public health emergencies and non-natural disasters, which cause death and cause considerable economic losses. On July 12, the Indonesian government announced 75,699 confirmed cases of COVID 19, 3,606 points died, and 35,638 cases recovered from 460 districts/cities in all 34 provinces. Based on this, it is necessary to take countermeasures, including prevention and control. The pandemic of Covid 19 that is currently happening worldwide, including in Indonesia, has impacted various sectors, including the health sector.[1]

Today, in line with the increase in public education and knowledge and the ease of obtaining information, in addition to the high cost of health care, it is increasingly encouraging people to self-medicate with over-the-counter medicines. A survey by the Ministry of Health of the Republic of Indonesia in 3 major cities in Indonesia showed that 60.9% of sick people were self-medicating. Excessive promotion and inconsistent drug information from drug companies can lead to a public misunderstanding about drugs and their use. That will make it difficult for people to choose the correct medicine. In addition, people are also increasingly aware of their right to obtain information on the drugs they receive.[2]

A person who already knows about a piece of specific information will be able to determine and decide on how he should deal with it. When a person has information about covid-19, then he will be able to determine how he should behave toward covid-19.[3] According to the Knowledge-Attitude-Behavioral Model theory, knowledge is an essential factor that can influence behavior change, and individuals can acquire knowledge and skills through the learning process.[4]

Some health supplement ingredients have a role in the normal function of power human body resistance, namely Vitamin C, Vitamin D, Vitamin E, probiotics, Zinc, and Selenium. Vitamin C is an essential nutrient involved in various enzymatic processes in the immune system and has other physiological functions in the human body. Previously, Vitamin C has been proposed to have theoretical benefit in immune defense against COVID-19 infection, based on known traits and hypotheses, and there is evidence to support their role in mitigating symptoms of the common cold.[5]

Methods

This research is a descriptive survey research with a quantitative analysis approach, prospective data collected from active students at the Akademi Farmasi Yarsi Pontianak at all levels or semesters, conducted at the Akademi Farmasi Yarsi Pontianak in March-May 2021.

Population and sample

The population in this study were active students of the Akademi Farmasi Yarsi Pontianak at all levels or semesters. The research sample is part of the number and characteristics possessed by the population. This study used a selection of 100 respondents with details of level one as many as 35 people, level two as 33 people, and level three as many as 32 people.

Method

This study uses stratified random sampling as a sampling technique. This sampling technique is a type of probability sampling technique, namely a sampling technique that provides equal opportunities for each element or member. The population selected for this research sample with a sampling process by dividing the population into strata, preferring a simple random sample from each stratum and combining it into strata in a selection to estimate the population parameters.[6]

Tools

In this study, data collection or research sampling was carried out prospectively by directly observing the object under investigation to obtain relevant data. The instrument (tool) of data collection used in this research uses a questionnaire distributed via google forms according to the BPOM guide line of Health Supplements in Facing Covid 19.[7] The analyzed resulting descriptively data using the data obtained from the results of the chi-square test analysis.

Result

Results obtained from active students of the Akademi Farmasi Yarsi Pontianak in 2021 at all levels or semesters were 100 people. Characteristics of respondents can be seen by age group at the Akademi Farmasi Yarsi Pontianak in the table below.

Table 1. Characteristics of Respondents by Age at the Akademi Farmasi Yarsi Pontianak in 2021

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17	2	2.0	2.0	2.0
	18	21	21.0	21.0	23.0
	19	35	35.0	35.0	58.0
	20	22	22.0	22.0	80.0
	21	13	13.0	13.0	93.0
	22	2	2.0	2.0	95.0
	23	1	1.0	1.0	96.0
	24	1	1.0	1.0	97.0
	25	1	1.0	1.0	98.0
	26	1	1.0	1.0	99.0
	27	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Table 2. Level of Student Knowledge About the Selection of Health Supplements in Facing Covid 19 at the Akademi Farmasi Yarsi Pontianak in 2021

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Enough	8	8.0	8.0	8.0
	Good	92	92.0	92.0	100.0
	Total	100	100.0	100.0	

Table 3. Frequency Distribution of Student Attitudes About the Selection of Health Supplements in Facing Covid 19 at the Akademi Farmasi Yarsi Pontianak in 2021

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negatif	16	16.0	16.0	16.0
	Positive	84	84.0	84.0	100.0
	Total	100	100.0	100.0	

Table 4. The Relationship between Knowledge Levels and Students' Attitudes towards the Selection of Health Supplements in Facing Covid 19 in the Pandemic Era Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	42.455[a]	1	.000	.000	.000
Continuity Correction	36.302	1	.000		
Likelihood Ratio	32.246	1	.000	.000	.000
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	42.031[c]	1	.000	.000	.000
N of Valid Cases	100				

a. one cell (25.0%) has an expected count of less than 5. Therefore, the minimum expected count is 1.36.

b. Computed only for a 2x2 table

Discussion

Table 1 above shows that out of 100 students at the Akademi Farmasi Yarsi Pontianak in 2021, most students aged 19 years were 35 people (35.0%). Age is a significant factor in the use of supplements. Kolodziej's research in 2019 stated that increasing age affects knowledge in supplement consumption. Supplement consumption has indicated that age affects knowledge and awareness of health. Age affects a person's grasping power and mindset. As age increases, a person's attitude and capture power will develop to obtain more knowledge.[8] The following distribution table 2 of respondents is based on the level of student knowledge regarding selecting health supplements in the face of Covid 19.

Table 2 above shows that out of 100 students at the Akademi Farmasi Yarsi Pontianak in 2021, more students had a good level of knowledge than 92 people (92.0%). Under the opinion of, which states that an individual's actions, including independence and responsibility in behavior, are strongly influenced by the cognitive domain of knowledge.[9] Knowledge results from knowing, which occurs after people have sensed particular objects. Good knowledge of respondents about the benefits of health supplements will affect them in consuming these supplements. The following distribution table of respondents is based on student attitudes towards selecting health supplements in the face of Covid 19 can be seen below.

Table 3 above shows that out of 100 students at the Akademi Farmasi Yarsi Pontianak in 2021, more students have a positive attitude than 84 people (84.0%). Following the theory explained by Newcomb in, attitude is a person's readiness or willingness to act (not yet an action).[10] In addition, a person's attitude in behavior that also influenced by the knowledge he has, where the higher the level of a person's understanding of something, the better the attitude he has about it.

Selecting health supplements in the face of Covid 19 can be seen in the analysis of the relationship between the level of knowledge and student attitudes in table 4, which results from a bivariate (chi-square) analysis. Based on table 4 above, a study conducted on 100 students at the Akademi Farmasi Yarsi Pontianak in 2021 showed one cell (25.0%) with an expected frequency value of <5. expected less than 5, and a maximum of 20% of the number of cells. If it does not meet the requirements of the chi-square test, then the alternative test is used, namely the Fisher test. The table above does not meet the needs of the chi-square test, so the results used are in the Fisher's Exact Test column by paying attention to the Exact Sig (2-sided) column with a value of 0.000. Therefore,

the chi-square statistical analysis results showed a p-value of 0.000. indicates that p-value < alpha (0.05) then H0 is rejected, meaning a relationship between the level of knowledge and student attitudes towards selecting health supplements in the face of covid 19 in the pandemic era. Public knowledge about consuming supplements during the COVID-19 pandemic did not affect people's behavior in 3 provinces. In theory, if the acceptance of a new behavior or adopting behavior is based on knowledge, awareness, and a positive attitude, the behavior will be long-lasting. On the other hand, if the behavior is not based on knowledge and understanding, it will not last long.[11]

Conclusion

This research showed a relationship between the level of knowledge and attitudes of students towards the selection of health supplements in the face of covid 19 in the pandemic era.

Acknowledgment

References

1. Kemenkes RI. KMK413-pedoman pencegahan dan pengendalian covid 19. Jakarta; 2020.
2. Arenatha F. Analisis pelayanan kefarmasian pengobatan swamedikasi diukur dari penerapan pendekatan diagnosis diferensial dan 8 karakter KIE ideal. J Ilm Mhs Univ Surabaya. 2014;3(1):1–19.
3. Ahmadi. Kesehatan masyarakat teori dan aplikasi. Jakarta: Raja Grafindo; 2013.
4. Purnamasari I, Anisa E. Tingkat pengetahuan dan perilaku masyarakat kabupaten Wonosobo tentang COVID 19. J Ilmu Kesehat. 2020;10(1):33–42.
5. Pangestika R, Mardianto R, et.al. Edukasi tentang suplemen kesehatan dalam menghadapi Covid 19 di desa Sumbersuko kabupaten Malang. J Abdi Moestopo. 2022;5(1).
6. Sugiyono. Metode penelitian kuantitatif dan R&D. Bandung: Alfabeta; 2018.
7. BPOM RI. Pedoman penggunaan herbal dan suplemen kesehatan dalam menghadapi COVID 19 di Indonesia. Jakarta; 2020.
8. Nengah I. Hubungan usia dengan pengetahuan dan perilaku penggunaan suplemen pada mahasiswa Institut Teknologi Sepuluh Nopember. J Farm Komunitas. 2020;7(1):1–7.
9. Notoatmojo S. Ilmu perilaku kesehatan. Jakarta: PT Rineka Cipta; 2010.
10. Notoatmojo S. Metodologi penelitian kesehatan. Jakarta: PT Rineka Cipta; 2014.
11. Yuliawati K, Djannah S. Bagaimana pengetahuan, sikap dan perilaku masyarakat tentang konsumsi multivitamin/supplemen selama pandemi Covid-19. J Kesehat Masy Khatulistiwa. 2020;7(3):123–4.