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The Relationship of Sociodemographic Characteristics Toward The Level of Vitamin Swamedication Knowledge in the Community at A Pharmacy X, Cirebon Regency

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Abstract. Knowledge of a person's health determines behavior when seeking treatment. Vitamin self-medication is a self-medication activity that uses vitamins needed by the body for normal metabolic processes and growth. This study was conducted to determine the relationship between sociodemographic characteristics and the level of knowledge of vitamin self-medication at Apotek X, Cirebon Regency. The method used is a cross sectional method with a sampling technique of consecutive sampling as many as 80 respondents. The data were analyzed by Spearman test using Statistical Product And Service Solutions (SPSS) version 25. The results showed the sociodemographic characteristics of the majority of respondents aged 26-45 years (44%), female gender (65%), education level SMA/SMK/MA (49%), and 55% of other occupations. Having sufficient knowledge level (63%) and having a relationship between sociodemographic characteristics in the form of education level with knowledge level of vitamin self-medication with pValue = 0.015 ($p<0.05$). The conclusion of the study is that there is a significant relationship between the level of education and the level of knowledge of vitamin self-medication

Keywords: Sosiodemographic Characteristics, Knowledge, Vitamin Self-Medication

INTRODUCTION

Self-medication is an activity carried out for self-medication. Self-medication drugs are all types of drugs that are given not with a doctor's prescription, including over-the-counter drugs, limited over-the-counter drugs, mandatory pharmacy drugs (OWA), and traditional medicines (TR) (Ilmi et al., 2021).

Vitamins are substances that the body needs for average growth and function. Vitamins are needed for various biological processes, including growth, digestive processes, mental development, and the body's resistance to infection (Rotulung et al., 2021). Two groups of vitamins benefit the body: fat-soluble vitamins in vitamins A, D, E, and K and water-soluble vitamins in vitamins B and C (Dhiani et al., 2021).

When taking vitamins, they must be appropriately used because if you do not take them according to the rules, they can cause side effects from the drug (Sukmawati et al., 2021). Excessive intake of water-soluble vitamins, such as vitamins B and C, interferes with kidney function by forcing the kidneys to excrete large amounts of compounds. Excessive intake of fat-soluble vitamins, such as vitamins A, D, E, and K, produces compounds in tissues such as the brain, bones, and liver, which can lead to high blood pressure (Dhiani et al., 2021).

Various related problems in the use of drugs often occur in society. For example, there is a lack of understanding of the correct and rational use of drugs and excessive use of over-the-counter drugs, where health workers may be less considered to lack adequate information about drug use (Zulkarni et al., 2019). Therefore, as self-medics, people need knowledge about the correct use of vitamins according to the rules. Knowledge influences treatment beliefs (Rotulung et al., 2021).

Some studies state that self-medication behavior is influenced by sociodemographic factors such as age, gender, and social environment. That is why researchers are interested in researching the Relationship of Sociodemographic Characteristics to the Level of Knowledge of Vitamin Self-medication in the Community in one of the Cirebon Regency Pharmacies.

METHOD

Research Design

The method used is the *cross sectional method* with a sampling technique in the form of *consecutive sampling*. Data was collected directly using previously validated and reliable questionnaires.

Population and Sample

The population in the study was all people who came to Apotek X to buy vitamins with a sample of 80 respondents who met the inclusion criteria. The number of samples is calculated using *the Yamane* formula (Sugiyono, 2021):

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

Information:

n = number of samples required

N = total population

e = sampling error rate 5%

In this study, N = 100 patients, so:

$$n = \frac{100}{1 + 100(0{,}05)^2}$$

$$n = \frac{100}{1{,}25}$$

$$n = 80$$

Inclusion Criteria and Exclusion Criteria

Keiteria Inklusi

The inclusion criteria of this study are:

Patients who buy vitamins at Apotek X Kota Cirebon

Patient aged >17 years

Patients willing to be respondents

Exclusion Criteria

The exclusion criteria in this study were respondents who did not fill out the questionnaire.

DISCUSSION

Characteristics of Respondents

The sociodemographic characteristics of the study sample include age, gender, education level, and occupation. Data on respondent characteristics are found in Table.1.

Table. 1 Characteristics of respondents

Characteristics of Respondents	Frequency (n)	Percentage
Age		
17-25 years	21	26%
26-45 years	35	44%
46-65 years old	23	29%
>65 years old	1	1%
Gender		
Woman	52	65%
Man	28	35%
Education Level		
Not finished SD/MI	1	1%

SD/MI	20	25%
SMP/MTS	9	11%
SMA/SMK/MA	39	49%
College	11	14%
Work		
Student	8	10%
Housewives	19	24%
Health workers	1	1%
ASN	3	4%
Entrepreneurial	5	6%
Other	44	55%
Total	80	100%

Based on Table. 1, the characteristics of most respondents aged 26-45 years (44%). The study results are similar to Putri's research (2018), which states that the age group of 26-45 years is the highest compared to other age groups. Age influences self-medication decisions (Widyaningrum et al., 2021).

The gender of respondents was predominantly female (65%). This result is similar to a study conducted by Purnamayanti and Artini (2020), which showed that women's survey samples were higher than men's. This is because more female visitors are self-medicating and willing to participate in the study. Women also pay more attention to their health than men (Octavia et al., 2019).

The education level of most SMA/SMK/MA graduates (49%). The study's results are similar to the research conducted by Suherman & Febrina (2018); the survey showed that the respondents' last education was included in the high school category. Other major occupations (private employees, SPG, and private workers) account for 55%.

Level of Knowledge of Vitamin Self-medication

Vitamin self-medication knowledge is above three levels of knowledge: suitable, sufficient, and lack of knowledge. The survey results show that the level of vitamin self-medication knowledge is sufficient (63%). The study's results are similar to the research of Widyaningrum et al. (2021), which stated that most respondents' knowledge level was quite good. The distribution of data on the level of vitamin self-medication knowledge can be seen in the Table 2.

Table. 2 Level of Knowledge of Vitamin Self-medication in Respondents

Knowledge Level	Frequency (n)	Percentage
Good	13	16%
Enough	50	63%
Less	17	21%
Total	80	100%

Relationship between Sociodemographic Characteristics and Level of Vitamin Self-medication

- Relationship between Age and Level of Vitamin Self-medication Knowledge

  The relationship between age and the level of vitamin self-medication knowledge was not significant, with *pValue* = 0.069 (p>0.05). The results of this study are similar to Harahap et al (2017) showing no significant relationship between age and the level of knowledge of vitamin self-medication respondents. Data on the relationship between age and the level of vitamin self-medication knowledge can be seen in the table. 3.

Table.3 Relationship between Age and Level of Vitamin Self-medication Knowledge

Age	Level of knowledge						Total		P *Value*
	Good		Enough		Less				
	N	%	N	%	N	%	N	%	
17-25 years	3	15	17	34	1	10	21	26	
26-45 years	8	40	19	38	8	80	35	44	0,069
46-65 years old	1	40	14	28	8	10	23	29	
> 65 years old	1	5	0	0	0	0	1	1	
Total	13		50		17		80	100	

- Relationship between Sex and Level of Vitamin Self-medication Knowledge

  The relationship between sex and the level of vitamin self-medication knowledge was not significant, with a value of *pValue* = 0.651 (p>0.05). The results of this study are similar to Purnamayanti &; Artini (2020) which states that gender does not have a statistically significant effect on the level of knowledge. Some people believe knowledge is influenced by gender. However, regardless of gender, people tend to have a higher level of knowledge if they are still productive, educated, and experienced (Kholifah, 2018; Ningrum, 2019). Data on the relationship between sex and the level of knowledge of vitamin self-medication are presented in the Table. 4.

Table. 4 Relationship between Age and Level of Vitamin Self-medication Knowledge

Gender	Level of knowledge						Total		P *Value*
	Good		Enough		Less				
	N	%	N	%	N	%	N	%	
Woman	9	69	34	68	9	53	52	65	0,651
Man	4	31	16	32	8	47	28	35	
Total	13		50		17		80	100	

- Relationship between Education Level and Vitamin Self-medication Knowledge Level

  The relationship of sociodemographic characteristics based on education level with vitamin self-medication knowledge level has a significant relationship with *pValue* value = 0.015 ($p<0.05$). The results of the study are in accordance with Harahap et al (2017) which states the level of education is related to the level of knowledge. The level of education determines whether or not someone easily understands the knowledge gained (Suryaningsih et al., 2022). The distribution of data on the relationship between the level of education and the level of knowledge of vitamin self-medication can be seen in the Table. 5.

Table. 5 Relationship between Age and Level of Vitamin Self-medication Knowledge

Education Level	Level of knowledge						Total		P *Value*
	Good		Enough		Less				
	N	%	N	%	n	%	N	%	
Not finished SD/MI	0	0	0	0	1	0	1	1	
SD/MI	1	8	14	28	6	86	20	25	
SMP/MTS	0	0	7	14	0	0	9	11	0,015
SMA/SMA/ MA	7	54	25	50	0	0	39	49	
Recent education	5	38	4	8	1	14	11	14	
Total	13		50		17		80	100	

- Job Relationship with Vitamin Self-medication Knowledge Level

  With *pValue* = 0.994 ($p>0.05$), there was no significant relationship between the sociodemographic characteristics of the occupation and the level of vitamin self-medication knowledge. The results of this study are similar to the research of Damayanti et al (2021) stating that there is no relationship between work and level of knowledge. The distribution of data on the relationship between work and the level of knowledge of vitamin self-medication can be seen in Table.6.

Table. 6 Relationship between Age and Level of Knowledge of Vitamin Samedication

Work	Level of knowledge						Total		P *Value*
	Good		Enough		Less				
	N	%	N	%	N	%	N	%	
Student / student	1	8	7	14	0	0	8	10	
Housewives	2	15	11	22	6	35	19	24	
Health workers	1	8	0	0	0	0	1	1	
ASN	1	8	2	2	0	0	3	3	0,994
Entrepreneurial	0	0	4	8	1	6	5	6	
Other	8	61	26	54	10	59	44	56	
Total	13		50		17		80	100	

CONCLUSION

Sociodemographic characteristics with the level of vitamin self-medication knowledge that have a meaningful relationship are only the level of education. While sociodemographic characteristics based on age, sex and occupation there was no significant relationship.

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