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ADOLESCENT LEVEL OF KNOWLEDGE OF SELF-MEDICATION IN SIMPANG SELAYANG VILLAGE, MEDAN

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Abstract

Self-medication is the most common action taken before finally deciding to see a doctor. Self-medication is known as self medication or self-medication is defined as a treatment effort using drugs purchased at pharmacies or drug stores freely without a prescription from a doctor. Self-medication is done because it is sufficient to treat health problems experienced, for example, illnesses with mild symptoms and can heal themselves in a short time such as pain, fever, cough, cold, and minor injuries. Drugs without a doctor's prescription such as free and limited free drugs are relatively safe to use for self-medication. This type of research is quantitative analytical research with descriptive. This study is to determine the level of knowledge of selfmedication in adolescents in Simpang Selayang Village by approaching, observing or collecting data at once and providing education. Based on questionnaire data, it is known that the gender of female adolescents has a higher level of knowledge of self-medication than male adolescents. It can be concluded that the age level of late adolescents has a higher level of knowledge of self-medication than early adolescents. In this study, the level of knowledge of the last education of higher education towards self-medication is higher than those who have the last education either elementary, junior high or high school. The study concluded that the level of knowledge of students towards self-medication was higher than other occupations. The level of knowledge of self-medication practices in adolescents in Simpang Selayang is classified as good (62.0%).

Keywords: Knowledge Level, Self-medication, Adolescent, Descriptive

1. INTRODUCTION

Self-medication is the most commonly performed action before finally deciding to go to a doctor. Selfmedication is known as*self medication* or self-medication is defined as an effort to treat using drugs purchased at pharmacies or drug stores freely without a prescription from a doctor. Self-medication is carried out because it is sufficient to treat health problems experienced, for example, illness with mild symptoms and can heal itself in a short time, such as pain, fever, cough, runny nose, and minor injuries (Muharni et al, 2015).

The main factors underlying selfmedication behavior are drugs and expensive medical expenses, lack of education and knowledge in the health sector, drugs that are freely available in shops, selling drugs without a doctor's prescription and lack of strict supervision from the relevant government. distribution of drugs, unavailability of medical facilities, and poverty (Naveed et al., 2018, 2018). experience Previous illness and recommendations from friends and family based on past illnesses are also supporting factors for self-medication (Helal and Abou-Elwafa, 2017). Research on self-medication behavior has also been conducted on the people of Wuhan, China. In this research, it was found that the majority of people self-medicate because their illnesses are mild and they don't have time to go to the doctor (Lei et al., 2018).

Self-medication has several advantages if done correctly, including saving time and money in treatment at health facilities (Lei *et al.*, 2018). In developing countries there are several risks of self-medication regarding a low level of health knowledge which increases the risk of inappropriate drug use (Ahmed *et al*, 2020).

Based on the health indicators from the Central Statistics Agency (BPS, 2019) in 2019, 71.46% of Indonesian people are self-medicating. This figure has continued to rise over the past 3 vears. BPS data for 2020 shows that the percentage of the population doing self-medication in Indonesia is 72.19%, while in North Sumatra the population doing self-medication is 77.49 (BPS, 2020). Adolescents, especially college students, are recognized as educated people and higher education have a broader level of knowledge, therefore the higher the level of knowledge a person can encourage them to selfmedicate against minor illnesses (Alam

et al., 2015). Referring the to background above, the researcher is interested in researching selfmedication behavior in adolescents, especially adolescents in Medan City in the Simpang Selayang Village in 2023. The aim of this research is to determine the level of knowledge of adolescents regarding self-medication knowledge with attitudes towards correct drug use in adolescents in Simpang Selayang Village in 2023.

2. RESEARCH METHODOLOGY

This research will be conducted from December 2022 to January 2023 with a research location in Simpang Selayang Village, Medan City. The ethical Letter number 013.D/KEP-MLP/I/2023. This type of research is quantitative analytic research with descriptive research. This study was to determine the level of knowledge of self-medication in adolescents in the Simpang Selayang Village and the factors that influence self-medication, by means of an approach, observation data collection at once. Data or collection was carried out by first asking teenagers whether teenagers had ever bought drugs without a doctor's prescription. If so, the researcher explains the intent and purpose and asks the youth whether they are willing to spend their time. If the adolescent agrees, a questionnaire in the form of a Google form will be given.

Data obtained from the results of filling out the questionnaire were collected and analyzed descriptively (Univariate) by checking and seeing whether all the answers were filled in. Then coding is done for each answer by giving a certain score or value. In the self-medication knowledge questionnaire, each "correct" answer is given a value of 2, "wrong" answers are given a value of 1.

The sample in this study were some

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of the youth in the Simpang Selayang Village, Medan City. Sampling was carried out using a systematic random sampling method until the required number of samples was met (Swarjana, 2012).

- A. Inclusion Criteria
- 1. Teenagers who have self-medicated at a pharmacy for themselves.
- 2. Teenagers who are willing to cooperate with researchers
- 3. Teenagers live in Simpang Selayang Village.
- B. Exclusion Criteria
- 1. People who are not included in the inclusion criteria.
- 2. Teenagers who work or study in the health sector.

Based on the Slovin formula, the number of samples for each number of adolescents can be calculated as follows:

$$n = \frac{n}{\frac{1+N It is^2}{5.523}}$$

$$n = \frac{\frac{5.523}{1+(5.523)x0,1^2}}{\frac{5.523}{1+(5.523x0,01)}}$$

$$n = \frac{\frac{5.523}{56,23}}{\frac{56,23}{56,23}}$$

n= 98,22 ~ 100

n = Number of samples

N = Total population

e = Error tolerance

Based on the results of the calculation above, the number of respondents needed for this study was 98.22 people and this was completed to 100 teenagers in Simpang Selayang Village, Medan City.

3. RESULTS Research result

1. Number and gender of respondents

Table 1.Number and PercentageGender of respondents

No	Based on	Amount	Percenta
	Gender		ge
			(%)
1.	Man	63	63%

2. Number and Percentage of Age of Respondents

Table 2. Amount and PerwithntaseRespondent Age

No	Based on Gender	Amount	Percenta ge (%)
1.	Early Adolescence (12- 16 years old)	10	10%
2.	Late Teenagers (17-25 years)	90	90%
	Total	100	100

3. Number and Percentage of respondents based on last education.

Table 3. Number and Percentage ofrespondents based on last education

No	Based on Gender	Amount	Percenta ge (%)
1.	Not completed in	0	0%
2.	primary school	0	0%
3.	SD	10	10%
4.	JUNIOR HIGH	26	26%
5.	SCHOOL	64	64%
	SMA		
	College		
	Total	100	100

4. Number and Percentage of respondents based on Occupation

Table 4. Number and Percentage ofrespondents basedWork

No	Based on Gender	Amount	Percenta
			ge (%)
1.	Student	38	38%
2.	Teacher	12	12%
3.	Farmer	2	2%
4.	Other	32	32%
5.	Doesn't work	16	16%
	Total	100	100

5. Knowledge Level of Adolescents on Self-medication in Simpang Selayang Village

No	Knowledge	Amount Percent	
	level		age
			(%)
1.	Bad	20	20%
2.	Currently	18	18%
3.	Good	62	62%
	Total	100	100

4. Discussion

This research will be conducted from December 2022 to January 2023 with a research location in Simpang Selayang Village, Medan City. A total of 100 respondents were given filled out questionnaires and given education to respondents through a *flyer*.

1. Number and gender of respondents

The results of the description of the respondents showed that the majority of respondents were women, 63 people or 63%, while men were 37 people or 37%. Men answered 50 questions correctly, namely 19 people. Based on these data, it is known that women have a higher level of knowledge about self-medication than men.

2. Number and Percentage of Age of Respondents

The respondents consisted of Early Adolescents and Late Adolescents. The results of the description of the respondents showed that the majority of respondents were Late Adolescents as many as 90 people while Early Adolescents were 10 people. Based on the data obtained by the questionnaire it was known that the majority of the auestionnaire fillers were Late Adolescents. From these data it was known that 80%, namely 72 Late Adolescents answered the questions correctly. Meanwhile, for Early Adolescents, almost 50% answered questions correctly, namely a total of 5 people. From these data it can be concluded that the Late Adolescent Age Level has a higher level of knowledge about self-medication than Early Adolescents.

3. Number and Percentage of respondents based on last education.

In this study, respondents were divided into five categories who did not finish elementary school, elementary school, junior high school, high school, university. The data collection that has been carried out resulted in the majority of respondent data being respondents with the last education from Higher Education.

From the data obtained from the questionnaire, it is known that the most questionnaire fillers are Higher Education Jobs. From this data it is known that as many as 0 people have last education in elementary school, 10 people have last education in junior high school, 26 people have last education in high school and a total of 64 people have last education in tertiary education. From this data as much as 90% of the Last College Education answered the question correctly, namely as many as 58 people. Meanwhile, for senior high school education, 60% answered questions correctly, namely 21 people and for junior high school final education, 5 people answered questions correctly.

From these data it is known that the level of knowledge of the last towards selftertiary education medication is higher than those who education, both have the last elementary, junior high and high school.

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4. Number and Percentage of respondents based on Occupation

It is known that the respondents are divided into four, namely students, teachers, farmers, others and not working. The data collection that has been carried out resulted in the majority of respondent data being respondents who work as students, namely 38 respondents. Respondents who work as teachers are 12 people, as farmers are 2 people and other jobs as many as 32 people.

Then for respondents who did not work as many as 16 people. Based on these data it is known that as many as 80% of student respondents answered questions correctly as many as 31 people.

While the respondents who worked as teachers answered questions correctly as much as 70%, namely 9 people. Meanwhile, those who worked as farmers answered questions correctly as many as 50%, namely 1 person.

Based on other jobs, 60% answered questions correctly, namely 19 people. For respondents who did not work, 50% answered questions correctly, namely as many as 8 people. From these data it can be concluded that the student's knowledge level on selfmedication is higher than other jobs.

 Knowledge Level of Adolescents on Self-medication in Simpang Selayang Village

Knowledge is one of the factors that influence self-medication behavior (Rauf, 2021). Based on the research results, it was found that most of the respondents had a good level of selfmedication knowledge in this study, namely 62.0%.

Based on their level of knowledge, the respondents in this study were divided into 3 categories, namely moderate (18.0%), good (62.0%) and bad (20.0%) categories.

6. Indications and Drug Names Mentioned by Teenagers

Indications and Drug Names Mentioned by Teenagers Based on experience with drug samples, teenagers were more familiar with the drug paracetamol (80 items). In patent drugs, teenagers are more familiar with Paramex (23 items), Bodrex (27 items), Betadine (10 followed items), by Bodrexin (10 items), Promag (12 items). Teenagers using still hard drugs are and antibiotics. without а doctor's prescription because many use amoxicillin and other hard drugs.

Self-medication or what is called self-medication is an effort that is mostly done by the community to deal with symptoms of the disease before seeking help from health workers (Sihombing et al., 2022). Selfmedication aims to overcome minor ailments. Self-medication is carried out by the community because it is cheap, and relatively safe if carried out according to procedures (Sihombing et al., 2022).

Self-medication must be carried out according to the type of disease experienced. The implementation of self-medication should comply with the rules of rational drug use, including the right drug, the right drug dosage, knowing side effects, no contraindications, no drug interactions, and no polypharmacy.

In self-medication, it is still common to use incorrect drugs, such as the wrong type and dosage of drugs. If this happens repeatedly and for a long time, it can increase health problems. Improper self-medication will also affect the increase in medical costs (Artini and Kusumaningtyas, 2020). Jurnal Kesehatan Masyarakat & Gizi, e-ISSN: 2655-0849 Vol. 5 No.2 Edisi November 2022-April 2023 <u>https://ejournal.medistra.ac.id/index.php/JKG</u>

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5. CONCLUSION

The conclusions of this study are as follows:

- 1. The level of self-medication practice knowledge among adolescents at Simpang Selayang is good (62.0%).
- 2. Based on the questionnaire data, it is known that female adolescents have a higher level of knowledge about self-medication than male adolescents.
- 3. Based on the data, it can be concluded that the Late Adolescents have a higher level of knowledge about self-medication than Early Adolescents.
- 4. Based on the data, it is known that the knowledge level of the last tertiary education towards selfmedication is higher than those who have the last education, both elementary, middle and high school.
- 5. Based on the data, it can be concluded that the student's knowledge level of self-medication is higher than other jobs.

BIBLIOGRAPHY

- Ahmed, S.M., Sundby, J., Aragaw, Y.A., dan Abebe, F,.(2020). Selfmedication and safety profile of medicines used among pregnant women in a tertiary teaching hospital in jimma, Ethiopia: A cross-sectional study. International Journal of Environmental Research and Public Health, 17(11)
- Alam N., Saffoon N and Uddin R., (2015).Self-medication Among Medical and Pharmacy Students in Bangladesh, BMC Research Notes, 8 (1), 0–6.
- Artini dan Kusumaningtyas Siwi. "Hubungan Tingkat Pengetahuan Pasien Terhadap Perilaku Swamedikasi Nyeri Yang Rasional Di Apotek Harish Farma Kabupaten Sukoharjo." *INPHARNMED Journal*

(Indonesian Pharmacy and Natural Medicine Journal) 4.2 (2020): 34-42.

- Central Bureau of Statistics., (2021). Percentage of Population Who Have Self-Medicated in the Last Month by Province 2020-2021. BPS-Statistics Indonesia (Online), https://sumbar.bps.go.id/ accessed 25 November 2022.
- Corwin, E.J. (2009). Pathophysiology Pocket Book. Jakarta: EGC; Second edition. P.160, 387-388.
- Dipiro, J. T., Talbert, R. L., Yee, G. C., Matzke, G. R., Wells, B. G., & Posey, L. M. (2008). *Pharmacotherapy A Pathophysiologic Approach* (7th ed.). Mc Graw-Hill.
- Food and Drug Supervisory Agency., (2014). Towards Safe Selfmedication. POM Info Magazine, 15 (1): Pages 1-12.
- Helal, R. M., & Abou-ElWafa, H. S. (2017). Self-medication in university students from the city of Mansoura, Egypt. Journal of environmental and public health, 2017.
- Kristina, S.A, Prabandari, Y., and Sudjaswadi, R. (2008). Rational Self-Medication Behavior in the Community of Depok and Cangkringan Districts of Sleman Regency. Indonesian Pharmacy Magazine. 19(1): Hal. 287.
- Lei, X., Jiang, H., Liu, C., Ferrier, A., & Mugavin, J. (2018). Selfmedication practice and associated factors among residents in Wuhan, China. International Journal of Environmental Research and Public Health, 15(1).
- Ministry of Health of the Republic of Indonesia, (1997). Compendium of Free Drugs. Edition II. Jakarta: Ministry of Health of the Republic of Indonesia.
- Ministry of Health of the Republic of Indonesia, (2006). Technical Guidelines for Implementation of

Jurnal Kesehatan Masyarakat & Gizi, e-ISSN: 2655-0849 Vol. 5 No.2 Edisi November 2022-April 2023 <u>https://ejournal.medistra.ac.id/index.php/JKG</u> Received: 27 April 2023 :: Accepted: 30 April 2023 :: Published: 30 April 2023

Pharmaceutical Service Standards in Pharmacies, Jakarta.

- Ministry of Health of the Republic of Indonesia, (2006). Guidelines for the use of free and limited free drugs. Jakarta: Ministry of Health of the Republic of Indonesia.
- MOH, RI. (2009).*Indonesian Health Profile*. Ministry of Health of the Republic of Indonesia.
- Ministry of Health of the Republic of Indonesia. (2008). Training Materials for Increasing Knowledge and Skills in Choosing Drugs for Health Workers. Jakarta: Ministry of Health of the Republic of Indonesia.
- Naveed, M., Hejazi, V., Abbas, M., Kamboh, A. A., Khan, G. J., Shumzaid, M& XiaoHui, Z. (2018). Chlorogenic acid (CGA): A pharmacological review and call for further research. *Biomedicine & Pharmacotherapy*, 97, 67-74.
- Muharni, S., Fina, A., and Maysharah, (2015). Description М. of Pharmacv Staff in Providina Information to Self-medication Actors at Pharmacies in Tampan District, Pekanbaru. Journal of Pharmaceutical & Clinical Sciences. 2(1): 47-53.
- Manan, E. (2014). Self-medication Smart Book. Yogyakarta: Saufa.
- Notoatmodjojo PDS. (2003). Health Education and Behavior. Jakarta: Rineka Cipta.
- Rauf, Zulkarni, et al. "Knowledge, Attitudes, and Families Practices in Selecting, Obtaining, Using, Storing, and Disposing of Self-Medication Medicines on Indonesia." Open Behavior in Access Macedonian Journal of Medical Sciences 9.E (2021): 1570-1577.
- Republic of Indonesia Ministry of Health. (2007). Guidelines for the use of free and limited free drugs. Jakarta: Ministry of Health RI.

Matter. 3, 9, 10-13, 23, 28-31, 34-35, 36, 39-40, 48.

- Sihombing, Y., Marbun, R., Zebua, K. C., & Lestari, D. (2022). The EVALUATION OF THE USE OF ANTI-INFLAMMATORY DRUGSIN PATIENTS RHEUMATOID OUTPATIENT ARTHRITIS AT GRANDMED HOSPITAL LUBUK PAKAM. JURNAL FARMASIMED (JFM), 5(1), 80-86. https://doi.org/10.35451/jfm.v5i1. 1315.
- Swarjana, I. K., & SKM, M. (2012). Metodologi penelitian kesehatan. Penerbit Andi.