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 an effort to treat 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 self-medication 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. Self-medication 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 self-medication 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). Previous illness experience 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 years. 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 self-medicate against minor illnesses (Alam et al., 2015). Referring to the background above, the researcher is interested in researching self-medication 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 or data collection at once. Data 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
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

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:

\[ n = \frac{N \times e^2}{N + ne^2} \]

\[ n = \frac{(5523) \times 0.15}{5523} \]

\[ n = \frac{56.23}{56.23} \]

\[ n = 98.22 \approx 100 \]

\[ n = \text{Number of samples} \]
\[ N = \text{Total population} \]
\[ e = \text{Error tolerance} \]

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>
<thead>
<tr>
<th>No</th>
<th>Based on Gender</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Man</td>
<td>63</td>
<td>63%</td>
</tr>
</tbody>
</table>

2. Number and Percentage of Age of Respondents

Table 2. Amount and Percentage of Respondent Age

<table>
<thead>
<tr>
<th>No</th>
<th>Based on Gender</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Early Adolescence (12-16 years old)</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>2.</td>
<td>Late Teenagers (17-25 years)</td>
<td>90</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

3. Number and Percentage of respondents based on last education

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

<table>
<thead>
<tr>
<th>No</th>
<th>Based on Gender</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Not completed in primary school</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2.</td>
<td>primary school</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3.</td>
<td>SD</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>4.</td>
<td>JUNIOR HIGH</td>
<td>26</td>
<td>26%</td>
</tr>
<tr>
<td>5.</td>
<td>SCHOOL</td>
<td>64</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

4. Number and Percentage of respondents based on Occupation

Table 4. Number and Percentage of respondents based on Work

<table>
<thead>
<tr>
<th>No</th>
<th>Based on Gender</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Student</td>
<td>38</td>
<td>38%</td>
</tr>
<tr>
<td>2.</td>
<td>Teacher</td>
<td>12</td>
<td>12%</td>
</tr>
<tr>
<td>3.</td>
<td>Farmer</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>4.</td>
<td>Other</td>
<td>32</td>
<td>32%</td>
</tr>
<tr>
<td>5.</td>
<td>Doesn't work</td>
<td>16</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>
5. Knowledge Level of Adolescents on Self-medication in Simpang Selayang Village

Table 5. Adolescent Knowledge Level

<table>
<thead>
<tr>
<th>No</th>
<th>Knowledge Level</th>
<th>Amount</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bad</td>
<td>20</td>
<td>20%</td>
</tr>
<tr>
<td>2.</td>
<td>Currently</td>
<td>18</td>
<td>18%</td>
</tr>
<tr>
<td>3.</td>
<td>Good</td>
<td>62</td>
<td>62%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

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 questionnaire 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 tertiary education towards self-medication is higher than those who have the last education, both elementary, junior high and high school.
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 self-medication is higher than other jobs.

5. 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 self-medication 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 items), followed by Bodrexin (10 items), Promag (12 items). Teenagers are still using hard drugs and antibiotics without a 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). Self-medication 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).
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 self-medication 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
Pharmaceutical Service Standards in Pharmacies, Jakarta.


Republic of Indonesia Ministry of Health. (2007). Guidelines for the use of free and limited free drugs. Jakarta: Ministry of Health RI.