DESCRIPTION OF THE KNOWLEDGE LEVEL OF KYPERCHOLESTROLEMIA PATIENTS IN USING THE DRUG SIMVASTATIN AT THE WEST SIOMPU HEALTH CENTER

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A B S T R A C T

Hypercholesterolemia is a medical condition in which blood cholesterol levels are above regular. cholesterol is a fat that is essential for many body functions, such as producing cell walls and producing certain hormones. However, cholesterol levels that are too high, especially LDL (Low-Density Lipoprotein) cholesterol, namely "bad" cholesterol, can boom the hazard of cardiovascular disorder, such as coronary heart ailment and stroke. Simvastatin is this simvastatin containsthe statin gathering. Statins are a gathering of this function to lower cholesterol levels in the blood, especially "bad cholesterol". Simvastatin is often prescribed to lessen the threat of cardiovascular sickness, along with heart disorder and stroke, in sufferers with hypercholesterolemia or those who have high risk factors. The goal of this take a look at is for obtain level data. Knowledge of hypercholesterolemia patients on the use of simvastatin at the West Siompu Health Center using a qualitative method. This type of research uses a survey method where researchers distribute knowledge questionnaires to respondents. This research was conducted at the West Siompu Health Center with a total of 54 respondents In the West Siompu Community Health Center area regarding the use of the drug simvastatin, there were 45 respondents categorized as having good knowledge with a presentation of 83%, 9 respondents with sufficient knowledge with a presentation of 13% and none with poor knowledge. In general, the level of knowledge of patients at the West Siompu Health Center is labeled as correct with a percentage of 87%.

INTRODUCTION

Knowledge is the result obtained from completing a problem following up on discoveries regarding a specific problem. The discovery applies to the emanations of the body parts of creatures, namely seeing, hearing, smelling, tasting and feeling. Understanding and psychological areas create awareness and will be crucial in producing a person's actions. The quality of understanding in the psychological area involves 6 levels. Testing knowledge can be done through questions and answers or opinions to question the level of knowledge. This will test the patient's understanding of the topic being studied (Notoatmodjo., 2012). Medicines play a very important role in health services. There are various types of treatment options that are effective in compliance with medication use, so that a proper and effective review of the choice of therapy for the disease suffered is expected. The large number of types of drugs available can actually cause specific problems in practice, especially regarding the selection and use of drugs correctly and safety. Medication administration aims to achieve results that can improve the patient's quality of life. Inaccuracy in prescribing, patient non-compliance, and inaccuracy in monitoring cause less than optimal treatment effects on patients. Adherence in taking medication is one of the goals of winning or successful treatment, and compliance in using systatin is claimed to be mandatory and to maintain it, one of the efforts that can be taken is to use cholesterol medication, therefore it is necessary to consider the use of cholesterol medication used to ensure suitability. between cholesterol drugs used in conditions of hypercholesterolemia sufferers (Restiyono., 2016).

Cholesterol is a steroid that is mainly found in animals and very rarely in plants. Cholesterol is the primary human food and is also synthesized in the body. This compound is an important food precursor of steroid hormones and bile acids, an emulsifier of fats that are excreted into the small intestine. Cholesterol levels in the bloodstream are determined by many factors including diet and food metabolism in the body (Sanhia et al., 2015). Cholesterol is fat in the blood circulation or body cells which is actually needed for the formation of cell walls and as a standard ingredient for various hormones. Normal cholesterol should be below 200 mg/dl. If it is above 240 mg/dl, there is a high risk

of disease such as a heart attack or stroke. Cholesterol is naturally formed by the body, the rest is obtained from animal foods, such as meat, poultry, fish, margarine, cheese and milk. Cholesterol does not dissolve in the blood, so it needs to be bound using its transporter, namely lipoproteins. That's why cholesterol is also divided into Low-Density Lipoprotein (LDL) and High-Density Lipoprotein (HDL) (Sihotang., 2014). Hypercholesterolemia means a condition where the cholesterol level in the blood exceeds the normal limit which is characterized by an increase in total blood cholesterol, LDL (Low Density Lipoprotein), and VLDL (Very Low Density Lipoprotein) in the blood. Hypercholesterolemia is one of the risk factors for cardiovascular disease which occurs in many people (Eleanor & Jonathan., 2007).

Cholesterol disease is a disease that is feared by the general public, because cholesterol is a risk factor for heart disease which ends in death. Anti-cholesterol drugs in the statin class, including simvastatin, are the best-selling drugs globally because they can lower blood pressure and provide benefits for improving cardiovascular health. (Hasanah., 2018). High cholesterol is not always influenced by obesity, but is more influenced by the consumption of foods that contain lots of cholesterol such as consuming meat, offal and eggs which can increase cholesterol levels in the blood because foods such as meat, offal and eggs contain sufficient cholesterol. high (Nugraha., 2014). As humans age, their body's metabolic system decreases, and this also causes the human body to convert bad fats into something useful for the body, which is greatly reduced and cholesterol will accumulate in the blood circulation of an elderly person. As a result, the older a person gets, the higher the total cholesterol level in his blood. This shows that age can influence a person's total cholesterol levels (Rosmaini et al., 2022). The use of medicines, both chemical and herbal, definitely requires specific dosage or concentration. Insufficient doses or concentrations are unlikely to have an effect on the disease suffered, and vice versa. If excessive doses or concentrations are not good to use because they are dangerous for health (Tandraini et al., 2020).

A person's level of knowledge consists of six strata, namely (Notoatmodjo., 2014) understanding (Know), the process of remembering material or stimuli that have been received and studied more specifically. Understanding (Comprehension), a person's ability to express and master a valid hearing object. application, a person's ability to carry out or practice material that he has mastered correctly. Analysis, a person's ability to describe material or objects that work together with each other. Synthesis, a person's ability to arrange and combine one part using other parts so that a new idea or thought is formed. evaluation, affiliated with using one's knowledge to compare an object. predetermined standard synchronization. Hypercholesterolemia is a disorder characterized by an increase in total blood cholesterol levels of more than 240 mg/dl (Keteyian SJ., 2009). A simvastatin dose of 80 mg a day also increases the risk of side effects of muscle disorders so it is not recommended for use in initial therapy except in patients who have used this dose for 12 months or more without evidence of muscle disorders (Association of Indonesian Cardiovascular Specialists. 2013). Based on the description above, it is necessary to conduct research on the relationship between the level of knowledge of hypercholesterolemia patients in using the drug simvastatin at the West Siompu Health Center. The research was conducted in pharmacies because pharmacies are one of the places for pharmaceutical practice by pharmacists and a means of pharmaceutical services in the community.

METHODOLOGY

This research was carried out at the West Siompu Health Center and was conducted in June-July 2024. The population in this study were patients diagnosed with hypercholesterolemia who used the drug simvastatin at the West Siompu Health Center in July-November 2023 with a total of 119 patients. Number of respondents which was applied in the research here, respondents at the West Siompu Health Center. The number of samples is calculated based on the Slovin formula as follows:

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

Data collection is in the form of a questionnaire where researchers submit a list of questions for patients to fill in themselves. Statements are made in the form of test instruments and respondents are expected to answer questions by marking the correct option on the question list. The assessment of public knowledge about cholesterol drugs was measured using 20 questions contained in a questionnaire format, namely using an Optional scale. Regarding the formula for knowing the percentage score of a question (Arikunto., 2006):

$$P = \frac{X}{N} x\ 100\%$$

RESULTS & DISCUSSION

Based on research conducted at the West Siompu Health Center, data on drug use in hypercholesterolemia patients was obtained from patient data for the period 1 June - 1 July 2024, totaling 54 samples. The data obtained is classified into: Gender, Age, and Type of Medication.

Patient Frequency Characteristics

Table. 1.1. Patient Demographic Data

Demografi	Amount	%
Gender Group		
Man	24	44%
Woman	30	56%
Age		
31-40	6	11%
41-50	13	24%
51-60	22	41%
61-70	7	13%
71-80	6	11%
Education		
elementary school	8	15%
Jujior High School	12	22%
Senior High School	28	52%
College	6	11%
Work		
Fisherman	15	28%
Businessman	6	11%
Teacher	6	11%
Doesn't work	27	50%

Source: Data primer, 2024

From table 1.1. It can be seen that the majority of cholestrolemia sufferers are women, namely 30 patients (56%) while men (44%). This shows that women are most often affected by cholesterol. Age analysis of 54 respondents shows that of the 54 respondents, there are 6 people aged between 31 and 40 years with a percentage of (11%), 13 people aged between 41 and 50 years with a percentage of (24%), 22 people aged between 51 and 60 years with a percentage (41%), 7 people aged between 61 to 70 years with a percentage (13%) and 6 people aged 71 to 80 with a percentage (11%). Based on the latest education of the 54 respondents, 28 people had elementary school education with a percentage of (15%), 12 people had junior high school education with a percentage of (22%), 8 people had high school education with a percentage of (52%) and 6 people had tertiary education with a percentage of (11%). Based on the work of the 54 respondents, 15 people work as fishermen with a percentage of (28%), 6 people work as entrepreneurs with a percentage of (11%), 6 people work as teachers with a percentage of (11%) and 27 people do not work with a percentage of (50 %). It can be seen that the majority of cholestrolemia sufferers are women, namely 30 patients (56%) while men (44%). This shows that women are most often affected by cholesterol. Age analysis of 54 respondents shows that of the 54 respondents, there are 6 people aged between 31 and 40 years with a percentage of (11%), 13 people aged between 41 and 50 years with a percentage of (24%), 22 people aged between 51 and 60 years with a percentage (41%), 7 people aged between 61 to 70 years with a percentage (13%) and 6 people aged 71 to 80 with a percentage (11%). Based on the latest education of the 54 respondents, 28 people had elementary school education with a percentage of (15%), 12 people had junior high school education with a percentage of (22%), 8 people had high school education with a percentage of (52%) and 6 people had tertiary education with a percentage of (11%). Based on the work of the 54 respondents, 15 people work as fishermen with a percentage of (28%), 6 people work as entrepreneurs with a percentage of (11%), 6 people work as teachers with a percentage of (11%) and 27 people do not work with a percentage of (50 %).

Results of Analysis of Patient Knowledge Level

Table 1. Frequency Distribution of Patient Knowledge Level Based on Drug Side Effects

Knowledge	Amount	%
Good	50	92%
Enough	2	4%
Not enough	2	4%
Total	54	100%

Source: Data primer, 2024

It can be seen from the statistics above that 50 patients have good knowledge with a percentage of 92%. Those with sufficient knowledge were 2 patients with a percentage of 4% and those with insufficient knowledge were 2 patients with a percentage of 4%. From this data, it can be seen that the majority of patients have a good level of knowledge, namely 50 patients or 92% based on the total respondents. This shows that the majority of patients have understood the relevant information well. Meanwhile, only 2 patients or 4% had a sufficient level of understanding. Apart from that, it refers if there is a small half of patients who may need additional information or further education in order to improve their understanding. Apart from that, there were 2 patients or 4% who had a poor level of knowledge. This percentage indicates that, although the number is small, there are patients who still require special attention in terms of providing more effective information or education.

Table 2. Frequency Distribution of Patient Knowledge Level Based on Exact Drug Dosage

Knowledge	Amount	%
Good	45	84%
Enough	8	14%
Not enough	1	2%
Total	54	100%

Source: Data primer, 2024

Based on table 2.2. above shows 45 patients with good knowledge with a percentage of 84%. Those with sufficient knowledge were 8 patients with a percentage of 14% and those with insufficient knowledge were 1 patient with a percentage of 2%. The data obtained shows that the majority of patients, namely 45 people (84%), have good knowledge, indicating a fairly high understanding of the topics discussed. A total of 8 patients (14%) had sufficient knowledge, which shows that there are some patients who still need to improve their understanding. Meanwhile, only 1 patient (2%) had insufficient knowledge, indicating that additional education may be needed for a small number of patients so that their understanding can be improved. Overall, these data suggest that the majority of patients have adequate knowledge, but there is still room to improve knowledge in a minority of patients.

Table 3. Frequency Distribution of Patient Knowledge Level Based on Medication Use

Knowledge	Amount	%
Good	46	85%
Enough	7	13%
Not enough	1	2%
Total	54	100%

Source: Data primer, 2024

Based on table 2.3. above shows 46 patients with good knowledge with a percentage of 85%. Those with sufficient knowledge were 7 patients with a percentage of 13% and those with insufficient knowledge were 1 patient with a percentage of 2%. The research results showed that of the total patients studied, 46 patients or 85% had good understanding. This indicates that the majority of patients have a fairly in-depth and accurate understanding of the topic that is the focus of the research. Good knowledge in the majority of these patients may be the result of effective educational programs or information that is readily available and easily accessible to them. Apart from that, there were 7 patients or 13% who had sufficient knowledge. Even if they don't fully understand the topic, their knowledge is still at a sufficient level. This group may need a little additional information or further explanation to deepen their understanding, so as to reach a better level of knowledge. On the other hand, there was 1 patient or 2% who had insufficient knowledge. Even though the number is small, this is still important to note because it shows that there are patients who do not fully understand the topic being studied. Factors such as lack of access to information, low quality of education, or

limitations in providing explanations may contribute to this low level of knowledge. Therefore, special interventions are needed to increase their understanding, for example through more intensive education or providing information that is more easily accessed and understood.

Table 4. Frequency Distribution of Patient Knowledge Level Based on Medication Storage Method

Knowledge	Amount	%
Good	45	84%
Enough	8	14%
Not enough	1	2%
Total	54	100%

Source: Data primer, 2024

Based on table 2.4. above shows 45 patients with good knowledge with a percentage of 84%. Those with sufficient knowledge were 8 patients with a percentage of 14% and those with insufficient knowledge were 1 patient with a percentage of 2%. The statistics obtained show that the majority of patients, namely 45 people (84%), have good knowledge, indicating a fairly high understanding of the topics discussed. A total of 8 patients (14%) had sufficient knowledge, which shows that there are some patients who still need to improve their understanding. Meanwhile, only 1 patient (2%) had insufficient knowledge, indicating that additional education may be needed for a small number of patients so that their understanding can be improved. Overall, these data suggest that the majority of patients have adequate knowledge, but there is still room to improve knowledge in a minority of patients.

Table 5. Frequency Distribution of Overall Patient Knowledge Level

Knowledge	Amount	%
Good	45	83%
Enough	9	17%
Not enough	-	-
Total	54	100%

Source: Data primer, 2024

Based on the qualifications above, it shows that there are 45 patients who have good knowledge with a percentage of 83% and 9 people have a sufficient level of knowledge with a percentage of 17%. The cumulative knowledge score of all respondents regarding the level of knowledge of hypercholesterolemia patients regarding the use of the drug simvastatin is 946. The overall level of knowledge of respondents at the West Sompu Community Health Center regarding the use of simvastatin bats is:

$$Persentase = \frac{Jumlah\ skor\ yang\ Diperoleh}{Jumlah\ Skor\ Maksimal} x100\%$$

$$\text{Persetase} = \frac{946}{1080} x100\% = 87\%.$$

CONCLUSION

The results of this study show that the level of knowledge of patients in the West Siompu Health Center area regarding the use of the drug simvastatin is categorized as good knowledge, there are 45 respondents with a presentation of 83%.

The limitation of the research is that when distributing questionnaires in research it can affect the smoothness and results of the research, such as when filling out the questionnaire considering that the average respondent is elderly, some of whom cannot write. However, with good planning, appropriate distribution strategies, and an understanding of respondents' needs, these obstacles can be overcome, so that data collection can take place effectively and competently.

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