



Conference Paper

Factors Affecting Proper Self-Medication Behavior of Gastritis Drugs

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Abstract.

Behavior is one of the important factors in health problems. Efforts to improve health behavior in a community can include increasing public awareness and independence in the accuracy of self-medicating. The accuracy that needs to be considered includes appropriate symptoms, indications, dosage, route of administration, alert for side effects and follow-up. Gastritis is an inflammation of the mucosal tissue in the stomach which is characterized by pain in the pit of the stomach. The purpose of this study was to determine the effect of knowledge and attitudes on the appropriate self-medication behavior of gastritis medication in Kauman Village, Srengat District, Blitar Regency. This was quantitative research with a descriptive observational approach. A questionnaire was used to collect the data which were analyzed using the Chi-square test. According to the findings, knowledge significantly affected the self-medication behavior (p = 0.015), as did attitudes (p < 0.001).

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1. INTRODUCTION

Health development that occurs in Indonesia is one of the important values to face health problems in the current era. One of the factors of health problems is the behavior of the community itself (1). The theory of Lawrence Green (1998) describes that a person's behavior regarding health can be determined from the knowledge, attitudes, beliefs, traditions of the person. One of the efforts to improve health behavior is to increase public awareness and independence in healthy living.

Increase awareness and independence seen from the accuracy of the community in self-medicating. Self-medication can be more risky, especially when cases of irresponsible self-medication occur. Lack of knowledge in self-medication can cause problems for patients such as drug resistance, drug side effects, drug interactions, and even death (2).

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Quoted from Central Bureau of Statistics 2020 (3), the prevalence of self-medication in Indonesian society in 2019 reached 71.46%. While in East Java in 2019, self-medication patients were 71.04%. The prevalence of self-medication in Blitar Regency in 2019 was 71.07%.

Self-medication is often done by the community, namely overcoming diseases with mild complaints, namely fever, dizziness, cough, pain, influenza, gastritis, diarrhea, intestinal worms, other skin diseases (4). The incidence of gastritis that occurs in all countries is 1.8 - 2.1 million of the entire population each year. According to reviews Hooi et al (2017) (5) the number of percentages for gastritis from various countries in the world, namely in Africa by 71.0%, Australia by 24.6% and Asia by 66.6%. Quoted from Ministry of Health (2019) (6) The incidence of gastritis in Indonesia is 40.8% while in East Java the incidence of gastritis is 31.2%. According to Central Bureau of Statistics of Blitar Regency (2019) (7) the incidence of gastritis in Blitar Regency in 2018 occupied 3 of the 10 highest diseases, namely 34,443 people.

People usually know gastritis as an ulcer. Many people think that ulcer disease is a mild disease that is easy to treat. While gastritis is an inflammation of the mucosal tissue in the stomach. This inflammation can cause swelling, causing discomfort which is marked by pain in the pit of the stomach (8).

The main management of gastritis therapy is to relieve pain, inflammation and prevent peptic ulcers and complications that can occur in the stomach (9). The use of drugs for self-medication of gastritis can be overcome with the antacid class of drugs contained in the Guidelines for Over-the-counter and Limited-Free Drugs. Meanwhile, Pharmacy Compulsory Drugs (OWA) include famotidine, ranitidine, sucralfate and omeprazole (10).

Previous research conducted by Suherman, (2018) (11) In the influence of gender, age and knowledge on self-medication, the level of knowledge of self-medication patients in three pharmacies in Medan Sunggal District is moderate knowledge of 48% and rationality of self-medication of patients is classified as rational as much as 73.7%. Other research conducted Octavia, (2020) (12), the level of public knowledge about rational self-medication in Lamongan is classified as good at 66.1% and lack of knowledge by 6.8%. according to Persulesi et al., (2018) (13) In the study, the level of knowledge and accuracy of using analgesic drugs in pain self-medication in Hinekombe Village, Sentani District, Jayapura Regency, was the level of knowledge of self-medication "adequate" 48% and the accuracy of self-medication "good" 67%.



2. RESEARCH METHODS

This research is a quantitative research with a descriptive observational approach. The instrument used refers to previous research (11), (14) with sentence modification and has been tested for validity and reliability by researchers. The sampling technique used is non-probability sampling with quota sampling technique, namely taking samples from populations that have certain or predetermined characteristics. Calculation of the number of respondents using the formula Slovin and Taro Yamane obtained 100 samples. The data obtained is primary data consisting of supporting data, knowledge, attitudes and behavior of self-medication appropriately in Kauman Village, Srengat District, Blitar Regency.

The data analysis used is univariate and bivariate. Univariate analysis to describe the characteristics of each variable, namely the knowledge, Village, Srengat District, Blitar Regency. The data obtained are as follows.

3. RESULTS AND DISCUSSION

This research was carried out from June 16 to June 26 2021 in Kauman:

In Table 1 above, it can be explained that the majority of respondents in this study chose promag (31%). Promag is the product of choice (15) Respondents bought gastritis drugs for self-medication in various places. The majority of respondents chose pharmacies (66%). This is in accordance with the Ministry of Health of the Republic of Indonesia that drugs sold in pharmacies can be trusted for their safety, quality and authenticity (11). From the data on the duration of using gastritis drugs, people using gastritis drugs for a period of less than 3 days are (41%). This is in line with the supporting theory in the Smart Use Medicine book that drug self-medication should only be done for 3 days to minimize irrational self-medication (16). People when choosing drugs have various considerations. From the consideration data taken when choosing gastritis drugs, the majority of respondents chose information from pharmacists as much as 31%. In Permenkes Number 35 of 2014, regarding the standard of pharmaceutical services by pharmacists. Pharmacists have duties related to communication, information and education (KIE) to the public (17). When people do self-medication and buy drugs at pharmacies, a pharmacist will provide information regarding the drugs to be purchased or the use of drugs properly and correctly so that unwanted self-medication does not occur.

TABLE 1: Characteristics of Respondents Supporting Data.

Supporting data	Number of Respondents	Percentage (%)		
Name Gatritis Medication Used Self-Medication				
Doen Antacids	10	10		
Bufantacid	3	3		
Dexanta	2	2		
Gastrucid	4	4		
Hufamag	7	7		
Mylanta	21	21		
Novamag	5	5		
Polysilane	12	12		
Promag	31	31		
Sanmag	5	5		
Gastritis Medicine Purchase				
Pharmacy	66	66		
Supermarket/Stall	34	34		
Duration of Gastritis Drug Use				
< 3 Days	41	41		
3-7 Days	13	13		
1 week	11	11		
Until the symptoms go away	35	35		
Considerations Taken When Choosing Gastritis Medication				
Information from pharmacy staff	31	31		
Medicines that the doctor has given	23	23		
Information from friends/family	26	26		
Advertisement	20	20		

3.1. Normality test

The normality test used is the One-Sample Kolmogorov-Smirnov SPSS 23.0 analysis technique. The results obtained are 0.200 which means the data can be distributed normally. After the data were normally distributed, the analysis was carried out using the Chi-square test.



TABLE 2: Frequency Distribution of Knowledge, Attitude and Behavior of Self-Medication of Gastritis Drugs Appropriately.

Variable	Category	Number of Respondents	Percentage (%)	
Knowledge				
Good	76%-100%	80	80	
Enough	60%-75%	19	19	
Not enough	<59%	1	1	
Attitude				
Positive	T score < 50	56	56	
Negative	T score ⊠ 50)	44	44	
Variable	Category	Number of Respondents	Percentage (%)	
Self-medication Behavior of Gastritis Drugs Appropriately				
Appropriate	T score < 50	60	60	
Incorrect	T score ⊠ 50)	40	40	

3.1.1. Univariate Analysis

In Table 2 it is found that the knowledge of respondents in carrying out self-medication is classified as knowledgeablegood, namely 80 people (80%). Respondents' knowledge is said to be good if the learning process carried out makes the respondent know and receive information related to self-medication of gastritis drugs appropriately (18). So that the better a person's knowledge, the more likely they are to take the correct self-medication action. The results of this study are in line with research Oi & Nurmainah (2019) (19) namely the level of knowledge of self-medication of ulcer drugs at Tanjungpura University Health Students is classified as good as many as 186 respondents (61.59%).

The attitude of respondents in doing self-medication was classified as positive as many as 56 people (56%). A positive attitude can provide an attitude that evaluates an object and can be expressed or interpreted appropriately, attitude is also a tendency to act which is influenced by several factors (18).

These results are in line with previous research by Husniar, (2017) (20) which took Health Student respondents at the University of Muhammadiyah Malang, namely respondents who were positive in self-medication of ulcer drugs as much as 57% and negative attitudes in self-medication of ulcer drugs as much as 40%.

The correct behavior of self-medication of gastritis medicine in Kauman Village, Srengat District, Blitar Regency is classified as appropriate behavior by 60 people (60%). Appropriate behavior means that a person can examine the reasons behind the actions



taken so that it will bring up an appropriate and in line action, so it can be said that the treatment carried out can run well in accordance with the accuracy of drug use (18). This study is in line with previous research conducted by Oi & Nurmainah, (2019) (19) that the behavior of self-medication of ulcer drugs in Tanjungpura University Health Students was classified as appropriate, namely as many as 229 respondents (75.83%).

3.1.2. Bivariate Analysis

Variable Gastritis Drug Self-Medication Behavior p-value Incorrect **Appropriate** Frequency % Frequency % Knowledge 0.015 Good 53 88.33 27 67.5 10 13 32.5 Enough Not enough 1.67 0 60 40 100 100 Total Attitude 0.000 Positive 3 53 88.33 7.5 Negative 11.67 37 92.5 60 100 40 100 Total

TABLE 3: Chi-square test analysis.

From the test results *chi-square*obtained p-value knowledge of 0.015 <0.05 which means it is accepted, then knowledge affects the behavior of self-medication of gastritis drugs appropriately. H_1 : Knowledge is an important aspect in the formation of one's behavior. The results of this study are directly proportional to research Trilia, (2017) (21) with Nursing Student respondents at STIKES Muhammadiyah Palembang that there is a relationship between knowledge (p-value = 0.030) and self-medication of over-the-counter analgesic drugs. It is also supported by research Wulandari. A, (2016) (22) which states that there is a relationship between the level of knowledge p-value = 0.000 with fever self-medication behavior in ISTN Pharmacy Students. However, this is in contrast to research Pariyana et al., (2021) (23) which states that there is no significant relationship between knowledge and self-medication behavior of the community as assessed from the p-value of the Chi-Square test results obtained, which is 0.564 <0.05.

This can be caused by other factors that influence the behavior of respondents in self-medication, besides knowledge. Lawrence green theory 1998 (quoted in Priyoto, 2020 (24)) states that there are several factors that influence human behavior, including belief, knowledge, attitudes, traditions, and environmental factors. In this case, it can



be seen that comprehensive knowledge about self-medication of gastritis drugs will affect public knowledge about good and correct use of drugs. This will make a good knowledge in the formation of a behavior. The better the knowledge possessed by the community, it can produce the right behavior (18).

From the test results chi-square obtained p-value 0.000 < 0.05 attitude which means it is accepted, then the attitude affects the behavior of self-medication of gastritis medication appropriately. Attitude is an important domain for the formation of one's actions because from experience, behavior based on attitudes will be better than behavior that is not based on attitudes. These results are in accordance with previous research by Trilia, (2017) (21) with respondents, namely Nursing Students 2015 at STIKES Muhammadiyah Palembang that there is a significant relationship between attitudes (pvalue = 0.033) towards self-medication in the use of over-the-counter analysesic drugs. It is also supported by research Kardewi, (2018) (25) with respondents, namely students of STIKES Bina Husada that there is a relationship between attitude factors towards self-medication behavior using over-the-counter analgesic drugs with an OR value of 1.542. In another study conducted by Shrestha et al., (2020) (26) it is also in line with the authors that there is a relationship between attitudes towards self-medication of Pharmacy Students in Pariyaram Kannur with p-value = 0.067. However, there are studies that are not in line, namely the research of Datta et al., (2018) (27) that there is no relationship or influence between knowledge and attitudes towards self-medication behavior of health workers in Nepal as seen from the results of the Chi-Square test of knowledge (p-value = 0.397). and attitude (p-value = 0.330). H_1 :

Attitude is the readiness to react to objects in a certain environment as an appreciation of the object. The attitude of the respondent will have an impact on his own health, personal experience becomes the basis of a person's attitude which will have an impact on his health. As well as attitude theory which explains that attitude is an evaluation made by an individual towards himself or others in response to objects that can cause feelings accompanied by actions (18).

Based on *p-value* It was found that the attitude factor influenced the behavior of self-medication of gastritis drugs appropriately, seen from the *p-value* the attitude factor is 0.000.

4. CONCLUSION

Based on 100 respondents, 80% "good" knowledge was obtained, 56% "positive" attitude and 60% "correct" self-medication behavior for gastritis medication. The results



of the Chi-Square analysis showed that knowledge (p-value = 0.015) and attitudes (p-value = 0.000) in the Kauman Village community, Srengat District, Blitar Regency had an influence on the behavior of self-medication of gastritis medication appropriately.

Based on the results of Chi-Square, attitude factors more influence the behavior of self-medication of gastritis medication appropriately (p-value = 0.000).

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References

- [1] Merita, Sapitri WI, Sukandar I. Hubungan Tingkat Stress Dan Pola Konsumsi Dengan Kejadian Gastritis Di Puskesmas Pakuan Baru Jambi. J Akad Baiturrahim. 2016;5(1):51–8.
- [2] Rashid M, Chhabra M, Kashyap A, Undela K, Gudi SK. Prevalence and Predictors of Self-Medication Practices in India: A Systematic Literature Review and Meta-Analysis. Curr Clin Pharmacol. 2019;15(2):90–101.
- [3] Badan Pusat Statistik. Persentase Penduduk yang Mengobati Sendiri Selama Sebulan Terakhir. 2020;21(1):1–9.
- [4] Restiyono A. Analisis Faktor yang Berpengaruh dalam Swamedikasi Antibiotik pada Ibu Rumah Tangga di Kelurahan Kajen Kebupaten Pekalongan. J Promosi Kesehat Indones. 2016;11(1):14.
- [5] Hooi JKY, Lai WY, Ng WK, Suen MMY, Underwood FE, Tanyingoh D, et al. Global Prevalence of Helicobacter pylori Infection: Systematic Review and Meta-Analysis. Gastroenterology. 2017;153(2):420–9.
- [6] Kementrian Kesehatan RI. Profil Kesehatan Indonesia 2019. Kementrian Kesehat RI. 2019;8(9):1–58.
- [7] Blitar BPSK. Kabupaten Blitar Dalam Angka Blitar Regency in Figures 2019. Vol. 53, Journal of Chemical Information and Modeling. 2019. 446 hal.
- [8] Sunarmi. FAKTOR-FAKTOR YANG BERISIKO DENGAN KEJADIAN PENYAKIT GASTRITIS DI POLIKLINIK PENYAKIT DALAM RUMAH SAKIT MUHAMMADIYAH



- PALEMBANG TAHUN 2018 Sunarmi STIKES "Aisyiyah Palembang , Program Studi DIII Keperawatan PENDAHULUAN Gastrit. 2018;8.
- [9] Asiki YS, Tuloli TS, Mustapa MA. Kajian Penatalaksanaan Terapi Pada Pasien Gastritis Di Instalasi Rawat Jalan Di Puskesmas Dungingi. J Syifa Sci Clin Res. 2020;2(2):1–10.
- [10] Anggaranti I. Profil Pelayanan Swamedikasi Oleh Apoteker Di 6 Apotek Kota Surakarta. 2018;
- [11] Suherman H. PENGARUH FAKTOR USIA, JENIS KELAMIN, DAN PENGETAHUAN TERHADAP SWAMEDIKASI OBAT. Viva Med. 2018:94–108.
- [12] Octavia et al. Jurnal surya. Media Komun Ilmu Kesehat. 2020;12(02):70-6.
- [13] Persulesi RB, Tukayo LA, Soegiharti P. Distrik Sentani Kabupaten Jayapura Tahun 2018. 2018;10:66–74.
- [14] Oktaviana E. Pengaruh Pengetahuan terhadap Penggunaan Obat Parasetamol yang Rasional dalam Swamedikasi (Studi pada Ibu Rumah Tangga di Desa Sumberpoh Kecamatan Maron Kabupaten Probolinggo). J Farm Dan Ilmu Kefarmasian Indones. 2017;4(1):44–51.
- [15] Kalbe. Laporan Tahunan 2017 Annual Report. 2017 ed. Kalbe, editor. 2017.
- [16] Nasution REP. Cara Cerdas Gunakan Obat. 2020. 1–38 hal.
- [17] Prabandari S. Gambaran Manajemen Standar Pelayanan Kefarmasian Di Apotek Permata Kota Tegal. J Para Pemikir. 2018;7(1):202–8.
- [18] Wawan, A. & M. D. Teori dan Pengukuran Pengetahuan, Sikap, dan Perilaku Manusia. Teori dan Pengukuran Pengetahuan, Sikap, dan Perilaku Manusia. 2018.
- [19] Oi SR, Nurmainah. KAJIAN TINGKAT PENGETAHUAN DAN PERILAKU SWAMEDIKASI MAAG PADA MAHASISWA KESEHATAN. 2019;4:2–12.
- [20] Husniar WR. The Influence Of Attitudes Against The Use Of Rational Antacid Drugs In Self-Medication. Universitas Muhammadiyah Malang. 2017.
- [21] Trilia T. HUBUNGAN PENGETAHUAN DAN SIKAP DALAM PENGGUNAAN OBAT ANALGETIK BEBAS UNTUK PENGOBATAN SENDIRI PADA MAHASISWA PSIK ANGKATAN 2015 STIKes MUHAMMADIYAH PALEMBANG. Masker Med. 2017;5(1):303–14.
- [22] Wulandari. A; Permata M.A. Hubungan Tingkat Pengetahuan Mahasiswa Farmasi ISTN Terhadap Tindakan Swamedikasi Demam. 2016;9(2):7–11.
- [23] Pariyana P, Mariana M, Liana Y. Perilaku Swamedikasi Masyarakat Pada Masa Pandemi Covid-19 Di Kota Palembang. Pros Semin Nas STIKES syedza saintika. 2021;403–15.



- [24] Priyoto. Teori sikap dan perilaku dalam kesehatan: dilengkapi contoh kuesioner / Priyoto. In: ISBN: 978-602-1547-53-3. 2020.
- [25] Kardewi E. Hubungan Pengetahuan, Sikap dan Perilaku Terhadap Self Medication Penggunaan Obat Analgesik Bebas di Sekolah Tinggi Ilmu Kesehatan Bina Husada. Sriwij J Med. 2018;1(1):16–23.
- [26] Shrestha L, Pokhrel S, Shrivastava AK, Pokhrel BR, Chhetri P. Knowledge, Attitude and Practice of Health Care Professionals towards Antimicrobial Resistance and its stewardship at tertiary care teaching Hospital | Journal of Karnali Academy of Health Sciences. 2020;3(3):1–9.
- [27] Datta N, Pal M, Roy U, Mitra R, Pradhan A. THE KNOWLEDGE, ATTITUDE AND PRACTICE OF SELF- MEDICATION AMONG PHARMACY STUDENTS Kiron. World J Pharm Res. 2018;24(July):15.