Jurnal Ilmiah Ibnu Sina, 11(2), Oktober 2026, 458-470
p-ISSN: 2502-647X; e-ISSN: 2503-1902

PATIENT SATISFACTION WITH ANALGESIC SELF-MEDICATION SERVICES IN COMMUNITY PHARMACIES: AN EVALUATION BASED ON THE RESPONDING TO SYMPTOMS FRAMEWORK

Engga Sari Yohenda[1]*, Hanni Prihhastuti Puspitasari[2], Abdul Rahem[2]
[1]Master Program in Pharmaceutical Sciences, Faculty of Pharmacy, Universitas Airlangga, Surabaya, Indonesia
[2]Department of Pharmacy Practice, Faculty of Pharmacy, Universitas Airlangga, Surabaya, Indonesia

*Email: enggayohenda@gmail.com

Artikel diterima: 2026-06-19; Disetujui: 2026-07-16
DOI: https://doi.org/10.36387/jiis.v11i2.3054

ABSTRACT

Self-medication is widely practiced, include for pain management. However, pharmacy services are often not optimal and need evaluated from the patient's perspective. This study aimed to determine patients' experiences and satisfaction with analgesic self-medication services based on the responding to symptoms and analyze their relationships and differences. This cross-sectional observational study involved 384 patients who had received pain self-medication services at community pharmacies in Trenggalek Regency. Data were collected through online and offline questionnaires using snowball and convenience sampling, and respectively analysed descriptively using Pearson correlation and Chi-square tests. Most respondents (>90%) were satisfied to very satisfied with the services. However, only 62.5% were satisfied when asked to repeat information to ensure understanding. The question "who will use the medication" was most frequently asked (n=179;46.6%), while information on "how to use the medication" was most frequently provided (n=279;72.7%). There was a statistical significant relationship between the experience of receiving questions and satisfaction (p=0.03), the combined experience of receiving questions and information and satisfaction (p=0.006), and between the type of drug request and service experience (p<0.001). No significant relationship was found between receiving information and satisfaction (p=0.95). Satisfaction differed by request type (p=0.034), with symptom-based patients reporting higher satisfaction. In conclusion, patient satisfaction is influenced by information-gathering experience and the type of drug request.

Keywords: *Patient, Satisfaction, Self-Medication Service, Analgesic, Responding To Symptoms, Community Pharmacy*

INTRODUCTION

Self-medication is the practice of managing health complaints without prior consultation with a physician (WHO, 2022). It commonly involves the use of non-prescription medicines, including over-the-counter (OTC) medicines,

restricted OTC medicines, pharmacist-only medicines, and herbal products. (Jabbar *et al*., 2017;Yani, 2021). Self-medication is considered a practical, cost-effective, and convenient approach for managing minor health conditions (Zulkarni *et al*., 2019;Amalia *et al*., 2021).

Pain is one of the most common conditions managed through self-medication, including in Trenggalek Regency (Pemkab, 2023). The high prevalence of pain-related complaints underscores the important role of community pharmacies in providing self-medication services.

According to the *Responding to Symptoms* framework, self-medication services involve patient assessment through information gathering, appropriate therapy selection, and the provision of medication counseling (Azzopardi, 2000). Therefore, the quality of self-medication services depends not only on the appropriateness of the medication recommended but also on the quality of the patient–pharmacist interaction throughout the consultation process.

Despite established practice standards, a gap remains between the recommended and actual implementation of self-medication services in community pharmacies. This gap is largely attributed to inadequate patient information gathering, limited counseling time, and the need to enhance the competencies of pharmacy personnel (Amarullah *et al*., 2023). These shortcomings may contribute to lower patient satisfaction, leading some individuals to rely on their own previous experiences when practicing self-medication rather than seeking professional advice (Nazaryan *et al*., 2024)

In Trenggalek Regency, previous studies on patient satisfaction in community healthcare settings have primarily focused on prescription dispensing services and evaluated satisfaction using conventional satisfaction dimensions (Bramantyo *et al*., 2019;Yohenda, 2020). Unlike these studies, which assessed patient satisfaction at a general level, the *Responding to Symptoms* framework enables the evaluation of satisfaction across each

stage of the self-medication service process. Consequently, this approach not only measures overall patient satisfaction but also identifies the specific service stages that contribute to patient satisfaction based on patients' experiences during analgesic self-medication consultations.

Therefore, this study aimed to evaluate patients' experiences and satisfaction with analgesic self-medication services provided by community pharmacies based on the *Responding to Symptoms* framework and to examine the associations and differences between patients' service experiences and satisfaction.

METHOD

An analytical observational study with a cross-sectional design was conducted in community pharmacies across Trenggalek Regency, Indonesia, from July to October 2025.

Data were were collecter using paper-based questionnaires assessing patients' experiences and satisfaction with analgesic self-medication services. Participants were recruited through snowball and convenience sampling. For the online survey, the questionnaire link was distributed via Google Forms through WhatsApp groups, whereas the paper-based questionnaires were administered directly to members of the community.

Before completing the questionnaire, respondents were screened to confirm that they had received analgesic self-medication services from a community pharmacy within the preceding seven days. Only respondents who met this eligibility criterion were allowed to proceed with the survey. The questionnaire was developed by the researchers based on the *Responding to Symptoms* framework (Azzopardi, 2000) It subsequently underwent face and content validity testing involving 30 patients and was revised according to the feedback received. Reliability testing was then performed, with all questionnaire items demonstrating acceptable validity. The instrument showed excellent internal consistency, with a Cronbach's alpha coefficient of 0.978.

Eligible participants were adults aged ≥18 years who had

received analgesic self-medication services from a community pharmacy in Trenggalek Regency within the preceding seven days and provided informed consent to participate. The minimum sample size was calculated using the sample proportion formula proposed by Lemeshow, 1997. Assuming a 95% confidence level, an estimated population proportion of 50%, and a 5% margin of error, the required minimum sample size was 384 respondents.

Descriptive statistics were used to summarize respondents' characteristics, as well as their experiences and satisfaction with analgesic self-medication services. Pearson's correlation analysis was performed to examine the associations between study variables, while the Chi-square test was used to compare patient satisfaction across different groups.

This study was approved by the Research Ethics Committee of the Faculty of Pharmacy, Universitas Airlangga (Approval No. 32/LE/2025).

RESULTS AND DISCUSSION

Respondents Characteristics

A total of 384 respondents participated in the study, comprising 126 respondents who completed the paper-based questionnaire and 258 who completed the online questionnaire (Table 1). The majority of respondents were female, with a median age of 30 years (range: 18–67 years). Most respondents had attained a higher education qualification, and students constituted the largest occupational group.

The predominance of respondents with higher education and student status may be partly explained by the sampling strategy. Specifically, the online questionnaire was initially distributed using snowball sampling through a university lecturer in Trenggalek, who subsequently shared the survey with students. In addition to the influence of the sampling method, these findings are consistent with previous studies reporting that university students are more likely to practice self-medication, including for pain management, owing to greater access to health information

and higher levels of health literacy(Barseghyan *et al*., 2023;Alomoush *et al*., 2024).

Patient's Experience Of Receiving Analgesic Self-Medicatin Services

Of the 384 respondents, 212 (55.2%) requested medication by describing their symptoms, whereas 172 (44.8%) requested medication by mentioning or presenting the name of a specific product (Table 2). The question most frequently asked by pharmacy personnel was "Who will be taking the medication?", while the information mostcommonly provided concerned the instructions for medication use.

According to the WWHAM approach (Who, What symptoms, How long, Action taken, and Medication used) (Azzopardi, 2000), patient assessment in the present study primarily focused on identifying the intended medicine user and the duration of symptoms, whereas other key aspects were explored less frequently. This finding may be attributed to several factors, including limited human resources, time constraints during service provision, inadequate counseling facilities, and inconsistent implementation of standard operating procedures, as previously reported by Brata et al. (2016). Furthermore, patients requesting medication based on symptoms tended to be more cooperative and willing to provide relevant information than those requesting a specific product.

Tabel 1. Respondents Characteristics

Characteristics	n (%)
Sex	
Male	156 (40.6)
Female	228 (59.4)
Age, median [min-max], years	**30 (18–67)**
Education	
Elementary School/Equivalent	**4 (1.0)**
Junior High School/Equivalent	**29 (7.6)**
Senior High School/Equivalent	**171 (44.5)**
Higher Education (Diploma/Bachelor's/Master's/Doctoral Degree)	**180 (46.9)**
Occupation	
Civil Servant	**76 (19.8)**
Military/Police	**4 (1.0)**
Homemaker	**56 (14.6)**
Self-employed	**73 (19.0)**
Private-sector Employee	**27 (7.0)**
Student	**113 (29.4)**
Others	**35 (9.1)**

Tabel 2 Respondents' Experience

Questions Asked by Pharmacy Personnel	Total n (%)	Symptom-based Request n (%)	Product-based Request n (%)	Information Provided by Pharmacy Personnel	Total n (%)	Symptom-based Request n (%)	Product-based Request n (%)
Who will be taking the medication?	179 (46.6)	115 (64.2)	64 (35.8)	Medication name	173 (45.1)	112 (64.7)	61 (35.3)
What symptoms are you experiencing?	115 (29.9)	76 (66.1)	39 (33.9)	Indication	56 (14.6)	34 (60.7)	22 (39.3)
How long have you been experiencing the pain?	117 (30.5)	89 (76.1)	28 (23.9)	Contraindications	31 (8.1)	20 (64.5)	11 (35.5)
What actions have you already taken?	34 (8.9)	24 (70.6)	10 (29.4)	Directions for use	279 (72.7)	160 (57.3)	119 (42.7)
What medications have you already used?	64 (16.7)	43 (67.2)	21 (32.8)	Dosage	136 (35.4)	82 (60.3)	54 (39.7)
Where is the pain located?	53 (13.8)	37 (69.8)	16 (30.2)	Frequency of administration	170 (44.3)	88 (51.8)	82 (48.2)
How severe is the pain? Are there any other accompanying symptoms?	95 (24.7)	72 (75.8)	23 (24.2)	Adverse effects	89 (23.2)	58 (65.2)	31 (34.8)
No questions asked	73 (19.0)	14 (19.2)	59 (80.8)	Non-pharmacological therapy	10 (2.6)	6 (60.0)	4 (40.0)

Note: Respondents were allowed to select more than one response. **N** = total number of respondents who reported receiving each question or information (384); **n** = number of respondents according to the type of medication request (symptom-based request, *n* = 212; product-based request, *n* = 172).

The Indonesian Ministry of Health Regulations (2016 dan 2019) tipulate that medication dispensing must be accompanied by adequate counseling, including information on the medication name, dosage, directions for use, indications, contraindications, and potential adverse effects. The present findings are consistent with those reported by Musyarofah et al. (2021), who found that medication counseling generally focused on directions for use and dosing frequency, whereas information regarding potential adverse effects was often omitted.

Patients Satisfaction on Analgetics Self-Medication

Respondents' satisfaction with analgesic self-medication services is presented in Table 3. Overall, most respondents reported being satisfied or very satisfied with both the patient assessment and medication counseling stages of the service. Nevertheless, dissatisfaction was observed in several aspects of service

delivery.

During the patient assessment stage, lower levels of satisfaction were observed regarding inquiries about actions previously taken to manage the condition and patients' medication history. These findings are consistent with previous studies reporting that patient assessment in community pharmacies remains largely limited to identifying the chief complaint, current medication use, and patient age. Such limitations have been attributed to inadequate knowledge among pharmacy personnel, as well as constraints related to staffing and consultation time (Rangka *et al*., 2025; Brata *et al*., 2016)

Furthermore, during the medication counseling stage, respondents expressed lower satisfaction with the completeness of the medication information provided. Musyarofah et al. (2021) similarly reported that medication counseling in community pharmacies often focuses on only a limited number of information components. However, providing more comprehensive medication information may enhance patients' understanding and positively influence their satisfaction with pharmacy services..

Association Between Patients' Experiences and Satisfaction with Analgesic Self-Medication Services

The results of the association and comparative analyses between patients' experiences and satisfaction are presented in Table 4. A statistically significant, although very weak, positive correlation was observed between patients' experiences of being asked relevant questions and their satisfaction with the patient assessment process. These findings are consistent with those reported by ,Muharni *et al*., (2022) dan Yang *et al*., (2016) who demonstrated that the ability of pharmacy personnel to ask appropriate questions in order to understand patients' conditions contributes to more appropriate therapy recommendations and higher patient satisfaction. As the number of relevant questions asked increases, patients are more likely to feel acknowledged, actively engaged, and involved in the consultation process.

Furthermore, no significant association was found between patients' experiences of receiving medication information and their satisfaction with the medication counseling process, with the correlation strength being very weak. However, when patients' experiences of both being asked relevant questions and receiving medication information were analyzed collectively, a statistically significant, albeit very weak, association with overall patient satisfaction was observed. These findings are consistent with those reported by Veiga *et al*., (2021) dan Sutrisnawati *et al*., (2023) who demonstrated that patient satisfaction is influenced by the overall service experience rather than by a single component of the consultation.

The analysis also demonstrated a significant weak negative correlation between the method of requesting medication and patients' experiences of information gathering and information provision, indicating that patients requesting medications by product were less likely to receive comprehensive information gathering and information provision than those requesting medications based on symptoms.

This difference was reflected in patient satisfaction, as demonstrated by the Chi-square analysis ($\chi^2 = 4.480$, $p = 0.034$). Patients who requested medication based on their symptoms reported significantly higher satisfaction than those who requested a specific medication product. Similar findings have been reported by Gombos *et al*., (2025) dan Showande *et al*., (2022) found that symptom-based medication requests are more likely to be accompanied by comprehensive patient assessment and medication counseling than product-based requests, thereby contributing to higher levels of patient satisfaction. These findings suggest that the type of medication request represents an important initial factor influencing patients' experiences and satisfaction with self-medication services.

This study has several limitations. The use of convenience and snowball sampling, both non-probability sampling methods, may

have introduced selection bias and limits the generalizability of the findings to the broader population of patients receiving analgesic self-medication services in community pharmacies throughout Trenggalek Regency. Consequently, the results should be interpreted as representative only of the experiences and satisfaction of the respondents included in this study.

Tabel 3. Respondents Answer on Patient Satisfaction Questionnaire

Indicators and Statements	**n (%)**			
Patient Assessment	**Very Dissatisfied**	**Dissatisfied**	**Satisfied**	**Very Satisfied**
Pharmacy personnel asked:				
1. Who will be taking the medication?	1 (0.3)	7 (1.8)	208 (54.2)	168 (43.8)
2. What symptoms are you experiencing?	0 (0.0)	9 (2.3)	202 (52.6)	173 (45.1)
3. How long have you been experiencing the pain?	0 (0.0)	25 (6.5)	203 (52.9)	156 (40.6)
4. What actions have you already taken?	1 (0.3)	27 (7.0)	211 (54.9)	145 (37.8)
5. What medications have you already used?	1 (0.3)	33 (8.6)	209 (54.4)	141 (36.7)
6. Where is the pain located?	0 (0.0)	13 (3.4)	233 (60.7)	138 (35.9)
7. How severe is the pain, and are there any accompanying symptoms?	0 (0.0)	18 (4.7)	227 (59.1)	139 (36.2)
Medication Counseling				
Pharmacy personnel provided information on:				
8. Medication name	0 (0.0)	7 (1.8)	216 (56.3)	161 (41.9)
9. Indication	0 (0.0)	19 (4.9)	222 (57.8)	143 (37.2)
10. Contraindications	0 (0.0)	26 (6.8)	223 (58.1)	135 (35.2)
11. Directions for use	0 (0.0)	13 (3.4)	202 (52.6)	169 (44.0)
12. Dosage	0 (0.0)	13 (3.4)	217 (56.5)	154 (40.1)
13. Frequency of administration	0 (0.0)	16 (4.2)	215 (56.0)	153 (39.8)
14. Adverse effects	0 (0.0)	21 (5.5)	220 (57.3)	143 (37.2)
15. Non-pharmacological therapy	1 (0.3)	31 (8.1)	223 (58.1)	129 (33.6)
16. Confirmation of understanding by asking you to repeat the information provided	64 (16.7)	80 (20.8)	201 (52.3)	39 (10.2)

Tabel 4 Association and Comparative Analyses of Patients' Experiences and Satisfaction with Analgesic Self-Medication Services.

Variables Analyzed	Statistical Analysis	Results	p-value	Interpretation
Association between patients' experience of being asked relevant questions and satisfaction with the patient assessment process	Pearson's correlation	$r = 0.152$	0.003	Very weak positive correlation
Association between patients' experience of receiving medication information and satisfaction with the medication counseling process	Pearson's correlation	$r = 0.085$	0.950	Very weak positive correlation (not statistically significant)
Association between patients' combined experience of being asked relevant questions and receiving medication information and overall satisfaction with the patient assessment and medication counseling processes	Pearson's correlation	$r = 0.140$	0.006	Very weak positive correlation
Association between the type of medication request and patients' experiences during the patient assessment and medication counseling processes	Pearson's correlation	$r = -0.263$	<0.001	Weak negative correlation
Difference in patient satisfaction according to the type of medication request	Chi-square test	$\chi^2 = 4.480$	0.034	Statistically significant difference

CONCLUSION

This study demonstrated that patients were generally satisfied with analgesic self-medication services provided by community pharmacies based on the *Responding to Symptoms* framework. Patient satisfaction was significantly associated with patients' service experiences and the type of medication request. Compared with product-based requests, symptom-based medication requests were associated with more comprehensive patient assessment and medication counseling, which may explain the higher levels of patient satisfaction observed in this group.

ACKNOWLEDGEMENT

The authors gratefully acknowledge all respondents for their valuable participation in this study

REFERENCES

Alomoush, A., Alkhawaldeh, A., Albashtawy, M., Hamaideh, S., Ta'an, W., Abdelkader, R., & Al-qudah, M. (2024). Self-medication and its associated factors among university students: a cross-sectional study. *Iranian Journal of Nursing and Midwifery Research*, *29*(2),268271.https://doi.org/10.4103/ijnmr.ijnmr_302_22

Amalia, R. N., Annisa, E., & Dainingrum, R. S. (2022). Perilaku

swamedikasi masyarakat Wonosobo selama pandemi COVID-19. *Majalah Farmaseutika*, *18*(3), 290–299. https://doi.org/doi.org/10.22146/farmaseutik.v18i3.66442

Amarullah, A., Ayu Puji Lestari, M., & Nisa, A. (2023). Pelayanan Swamedikasi Obat Wajib Apotek Pada Pasien di Apotek Wilayah Jombang dan Lamongan. *Prosiding Seminar Nasional Polkesta*, 14–21.

Azzopardi, L. M. (2000). *Validation Instrument for Community Pharmacy*. New York: Pharmaceutical Products.

Barseghyan, A., Nazaryan, L., & Simonyan, M. (2023). The Impact Of Age And Education On Self-Medication Of Common Cold And Cough – An Armenian Experience. *Farmacia*, *71*(3), 617–623. https://doi.org/10.31925/farmacia.2023.3.21

Bramantyo, R. Y., Susanto, D., & Mujiarto. (2019). Strategi pelayanan kesehatan untuk kepuasan pasien di UPT Puskesmas Pandean Kecamatan Dongko Kabupaten Trenggalek. *Jurnal Ilmu Sosial Dan Ilmu Administrasi Negara*, *3*(1), 34–49.https://ojs.unikkediri.ac.id/index.php/mediasosian/article/view/572/542

Brata, C., Fisher, C., Marjadi, B., Schneider, C. R., & Clifford, R. M. (2016). Factors influencing the current practice of self-medication consultations in Eastern Indonesian community pharmacies: A qualitative study. *BMC Health Services Research*, *16*(1),1–10. https://doi.org/10.1186/s12913-016-1425-3

Gombos, H. M. H., Krogstad, T., Bjørknes, M. R., Sletvold, H., Hagen, M. C., & Svensberg, K. (2025). A qualitative non-participant observational study of non-prescription counseling in community pharmacies. *Exploratory Research in Clinical and Social Pharmacy*, *18*. https://doi.org/10.1016/j.rcsop.2025.100611

Jabbar, A., Nurjanah, & Ifayah, M. (2017). Studi pelaksanaan swamedikasi beberapa apotek di kota Kendari. *Warta Farmasi*, *6*(1),28–36. https://doi.org/10.46356/wfarmasi.v6i1.69

Lemeshow, S. (1997). *Besar Sampel dalam Penelitian Kesehatan Edisi Kedua*. Gadjah Mada University Press.

Menteri Kesehatan Republik Indonesia. (2016). *Standar Pelayanan Kefarmasian Di Apotek*.

Menteri Kesehatan Republik Indonesia. (2019). *Petunjuk Teknis Standar Pelayanan Kefarmasian Di Apotek*.

Muharni, S., Zulnandita, P., Aryani, F., Utami, R., & Furi, M. (2022). Tingkat Kepuasan Masyarakat Terhadap Pelayanan Penggalian Informasi Swamedikasi Oleh Petugas Apotek Pada Masa Pandemi Covid-19. *Jurnal Ilmiah Manuntung*, *8*(2), 191–200. https://doi.org/10.51352/jim.v8i2.530

Musyarofah, Fajarini, H., Balfas, R. F., & Dence, E. (2021). Pengaruh implementasi pelayanan informasi obat terhadap tingkat kepuasan

pasien di apotek. *Journal of Pharmacy UMUS*, *2*(1),1–9. https://doi.org/10.46772/jophus.v2i02.422

Nazaryan, L., Barseghyan, A., Rayisyan, M., Beglaryan, M., & Simonyan, M. (2024). Evaluating consumer self-medication practices, pharmaceutical care services, and pharmacy selection: a quantitative study. *BMC Health Services Research*, *24*(1). https://doi.org/10.1186/s12913-023-10471-1

Pemerintah Kabupaten Trenggalek. (2023). *10 Penyakit Terbanyak 2023*.https://satudata.trenggalekkab.go.id/dataset/388/2022/10-besar-penyakit

Rangka, F. M., Sinurat, S., Andriyani, Jessica, N., & Munthe, S. N. (2025). Evaluasi pelayanan swamedikasi oleh tenaga teknis kefarmasian di Apotek X Kota Tangerang. *Jurnal Farmasi Indonesia*, *17*(1), 153–163. https://doi.org/10.35617/jfionline.17i1.204

Rutter, P. (2017). *Community Pharmacy: Symptoms, Diagnosis and Treatment 4th ed*.UK: Elsevier Inc.

Showande, S. J., & Laniyan, M. W. (2022). Patient medication counselling in community pharmacy: evaluation of the quality and content. *Journal of Pharmaceutical Policy and Practice*, *15*(1). https://doi.org/10.1186/s40545-022-00502-3

Sutrisnawati, N. K. A. B., Agustini, N. P. D., Mendra, N. N. Y., & Antari, N. P. U. (2023). Pengaruh Pemberian Informasi Obat terhadap Kepuasan Pasien serta Faktor Pengganggu yang Terlibat di Dalamnya. *Journal of Management and Pharmacy Practice*,*13*(4). https://doi.org/10.22146/jmpf.84766

Veiga, P., Cavaco, A. M., Lapão, L. V., & Guerreiro, M. P. (2021). Self-medication consultations in community pharmacy: An exploratory study on teams' performance, client-reported outcomes and satisfaction. *Pharmacy Practice*, *19*(1), 1–8. https://doi.org/10.18549/PharmPract.2021.1.2138

WHO. (2022). *WHO guideline on self-care interventions for health and well-being: 2022 revision*.

Yang, S., Kim, D., Choi, H. J., & Chang, M. J. (2016). A comparison of patients' and pharmacists' satisfaction with medication counseling provided by community pharmacies: A cross-sectional survey. *BMC Health Services Research*, *16*(1). https://doi.org/10.1186/s12913-016-1374-x

Yani, L. (2021). Pasien swamedikasi obat bebas dan obat bebas terbatas di toko obat pondok asem 57 Indramayu. *Jurnal Sosial Dan Sains*, *1*(10), 1218–1227. https://doi.org/10.36418/sosains.v1i10.231

Yohenda, E. S. (2020). *Analisis faktor-faktor yang mempengaruhi tingkat kepuasan pasien dalam pelayanan resep di apotek Kecamatan Dongko Kabupaten Trenggalek*. Malang: Universitas Brawijaya.

Zulkarni, R., Sanubari, R., & Sofia, F. (2019). Perilaku masyarakat dalam swamedikasi obat tradisional dan modern di Kelurahan Sapiran

Kecamatan Aurbirugo Tigo Baleh Kota Bukittinggi. *Jurnal Kesehatan*, *10*(1), 1–5. https://doi.org/10.35730/jk.v10i1.382