

Assessing Patient Satisfaction and Sociodemographic Determinants in Outpatient Pharmaceutical Care

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Abstract: Patient satisfaction is an important indicator of pharmaceutical service quality, reflecting the interaction between healthcare providers and patients. The shift from drug-oriented to patient-oriented care requires healthcare professionals to improve service quality to meet patient needs and expectations. This study aimed to evaluate patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital and its relationship with sociodemographic characteristics, including gender, age, education, occupation, and payment type. This study used a descriptive quantitative method with a cross-sectional approach using the Larson questionnaire as the research instrument. Data were analyzed using the Chi-square and Spearman tests. The study involved 391 patients who met the inclusion criteria at the Outpatient Pharmacy of Semen Padang Hospital. Most respondents were female (67.3%), adults (81.1%), had a high school education (37.1%), were unemployed (65.7%), and used BPJS insurance (82.1%). Overall, patient satisfaction with pharmaceutical services was categorized as “satisfied” with a mean score of 3.87. The Friendly Explanation dimension showed a higher score (3.95) than the Managing Therapy dimension (3.77). Gender, age, and occupation did not affect patient satisfaction ($p > 0.05$), while education and payment type affected patient satisfaction ($p < 0.05$). Overall, patients at the Outpatient Pharmacy of Semen Padang Hospital were satisfied with the pharmaceutical services provided, indicating good service quality and positive patient perceptions toward pharmaceutical care.

Keywords: Outpatient Pharmacy, Patient Satisfaction, Pharmacy Services, Sociodemographic Characteristics

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1. INTRODUCTION

The paradigm of pharmaceutical services has shifted from drug-oriented to patient-oriented care, requiring pharmaceutical personnel to improve service quality in terms of knowledge, skills, and communication to achieve patient satisfaction (Wahyuni and Syamsudin, 2021). Pharmaceutical services in hospitals include not only medication dispensing but also clinical pharmacy services such as drug information, counseling, and consultation to support rational and effective therapy (Nugraha et al., 2023; Rusli, 2016). Patient satisfaction is an important indicator of healthcare quality because it reflects patients' perceptions of the services provided and can be used to evaluate the quality of pharmaceutical services in hospitals (Bertawati, 2013; Supardi et al., 2020). Several factors may influence patient satisfaction, including age, education, occupation, and payment type (Supardi et al., 2020). However, pharmaceutical services in many hospitals in Indonesia still face challenges such as limited counseling services, long waiting times, and inadequate pharmaceutical personnel, which may affect patient satisfaction (Nurbaiti et al., 2020). Previous studies have reported varying levels of patient satisfaction with pharmaceutical services, ranging from moderate to high satisfaction, while dissatisfaction was commonly related to long waiting times and limited consultation services (Juwita et al., 2019; Kaunang et al., 2020; Nigussie and Edessa, 2018; Rizkiia, 2023; Soeiro et al., 2017).

This study used the Larson questionnaire, which has been widely used to assess patient satisfaction with pharmaceutical services in hospital settings (Juwita et al., 2019, 2023). Semen Padang Hospital is one of the major Class C hospitals in Padang City with increasing outpatient visits, particularly among BPJS patients (Burhan, 2018; Ramadhan et al., 2019). However, no previous study has specifically evaluated patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital. Therefore, this study aimed to evaluate the level of patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital and analyze its relationship with sociodemographic characteristics, including gender, age, education, occupation, and payment type. The findings of this study are expected to provide useful information for improving the quality of pharmaceutical services at the hospital.

2. MATERIAL AND METHODS

2.1 Study Design and Setting

This was a descriptive quantitative non-experimental study with a cross-sectional approach conducted prospectively using questionnaires. Data were collected from October to December 2024 from patients receiving medications at the Outpatient Pharmacy of Semen Padang Hospital. The sample size was determined using the Slovin formula $n = \frac{N}{N.(d)^2 + 1}$.

Where:

n = sample size

N = population size

d = margin of error/precision used at 5% (sig = 0.05)

2.2 Participants

The study population included all adult outpatients in the pharmacy who received medication during the study period. Participants were selected using a random sampling method based on predefined eligibility inclusion criteria: (i) patients aged ≥ 18 years; (ii) Patients who can communicate, read, and write well; and (iii) willing to participate, as evidenced by signing an informed consent form and being able to complete the self-administered questionnaire. For the exclusion criteria: outpatients who did not receive medication on the same day they filled their prescription. A total of 391 patients were included in the final analysis.

Independent variables: (i) sociodemographic characteristics (gender, age, education, occupation, and patient payment type); Dependent variable: patient satisfaction with pharmaceutical services.

2.3 Research Instrument

The study used the Larson questionnaire (Larson et al., 2002), which had previously been translated into Indonesian and evaluated by two experts, then validated and tested for reliability by Dedy Almasdy (2015), demonstrating valid results ($r > 0.632$) and high reliability with a Cronbach's alpha value of 0.97 (Almasdy et al., 2015). The instrument was re-evaluated for validity and reliability using 30 respondents. The results showed valid outcomes for each dimension ($r > 0.3610$) and high reliability with a Cronbach's alpha value of 0.942, indicating that the questionnaire was valid and reliable for consistent measurement. Questionnaire responses were assessed using a 5-point Likert scale consisting of not satisfied (1), somewhat dissatisfied (2), somewhat satisfied (3), satisfied (4), and very satisfied (5). The level of patient satisfaction was determined based on the mean score of respondents' answers. The satisfaction interval was calculated from the difference between the highest and lowest scores ($5-1 = 4$) divided by the number of score categories (5), resulting in an interval range of 0.8, as presented in Table 1 (Larson et al., 2002). During data collection, the questionnaires were distributed directly to patients and completed under the supervision of the researcher.

Table 1: Interpretation of satisfaction level scores

No	Range	Value
1	1 – 1.8	Not satisfied
2	> 1.8 – 2.6	Somewhat dissatisfied
3	> 2.6 – 3.4	Somewhat satisfied
4	> 3.4 – 4.2	Satisfied
5	> 4.2 – 5	Very satisfied

2.4 Data Analysis

All data were input into a Microsoft Excel form for analysis. Data analysis was performed using IBM SPSS Statistics version 26. The relationship between age, education, and patient satisfaction was analyzed using Spearman’s rank correlation test because the data were measured on an ordinal scale. Meanwhile, the relationships between gender, occupation, payment type, and patient satisfaction were analyzed using the Chi-square test because the variables were categorical. A significance value of $p < 0.05$ indicated a significant relationship between variables, while $p > 0.05$ indicated no significant relationship.

2.5 Ethical Approval

Ethical approval for this study was obtained from the Ethics Committee of the Faculty of Pharmacy, Universitas Andalas, under approval No. 114/UN16.10.D.KEPK-FF/2024.

3. RESULTS AND DISCUSSION

3.1 Sociodemographic Characteristics of Patients

Table 2: Sociodemographic Characteristics of Patients

Respondent Data	Category	Number (n = 391)	Percentage (%)
Gender	Male	128	32.7
	Female	263	67.3
Age (years)	Adults (18-64)	317	81.1
	Elderly (≥ 65)	74	18.9
Education	Elementary School	31	7.9
	Junior High School	41	10.5
	High School	145	37.1
Employment	Diploma	43	11.0
	Bachelor’s	131	33.5
	Employed	134	34.3
Payment type	Not working	257	65.7
	BPJS	321	82.1
Payment type	Insurance	53	13.6
	General	17	4.3

Data on the sociodemographic characteristics of respondents in this study are presented in Table 2. The characteristics included gender, age, education level, occupation, and payment type. The results showed that most respondents were female (67.3%), adults aged 18–64 years (81.1%), had a high school education (37.1%), were unemployed (65.7%), and used BPJS as the payment method (82.1%). These findings are consistent with several previous studies reporting that female patients and adults were more dominant in utilizing healthcare services and pharmaceutical care ((Juwita et al., 2019; Lumbangaol and Nadjib, 2023; Muharni et al., 2023). Higher educational levels were associated with better understanding and perception of health information, while occupational status and payment type may influence patients’ access to and utilization of healthcare services (Nangaro et al., 2019; Yuswantina et al., 2020).

3.2 Patient Satisfaction with Pharmaceutical Services

Table 3: Summary of the Frequency Distribution of Patient Responses (n = 391)

No	Statement	Frequency (%)					Average Score
		Not satisfied (1)	Somewhat dissatisfied (2)	Somewhat satisfied (3)	Satisfied (4)	Very satisfied (5)	
Friendly explanation of dimensions							3.95
1	The pharmacy's appearance is attractive and functional	0 (0.0)	0 (0.0)	65 (16.6)	261 (66.8)	65 (16.6)	4.01
2	Pharmacy staff answer your questions in easy-to-understand language	0 (0.0)	0 (0.0)	40 (10.2)	272 (69.6)	79 (20.2)	4.11
3	The pharmacy staff communicates smoothly with you	0 (0.0)	7 (1.8)	47 (12.0)	267 (68.3)	70 (17.9)	4.03
4	Pharmacy staff are able to provide explanations regarding issues related to your medication	1 (0.3)	4 (1.0)	37 (9.5)	277 (70.8)	72 (18.4)	4.07
5	Prescription services are provided quickly: compounded ≤ 60 minutes, non-compounded ≤ 30 minutes	22 (5.6)	87 (22.3)	104 (26.6)	149 (38.1)	29 (7.4)	3.20
6	Pharmacy staff provide pharmaceutical services quickly and accurately	9 (2.3)	30 (7.7)	79 (20.2)	228 (58.3)	45 (11.5)	3.70
7	The pharmacy staff provides clear information regarding the medication you receive and its use	0 (0.0)	1 (0.3)	44 (11.3)	267 (68.3)	79 (20.2)	4.09
8	The pharmacist provides instructions on how to use the medication you received	0 (0.0)	0 (0.0)	44 (11.3)	269 (68.8)	78 (19.9)	4.10
9	The pharmaceutical services provided by pharmacies as a whole have been optimal	0 (0.0)	8 (2.0)	57 (14.6)	262 (67.0)	64 (16.4)	3.99
10	The pharmacy staff provided a satisfactory answer to your question	0 (0.0)	6 (1.5)	51 (13.0)	261 (66.8)	73 (18.7)	4.04
11	Pharmacy staff are friendly and polite in performing their duties	0 (0.0)	3 (0.8)	43 (11.0)	253 (64.7)	92 (23.5)	4.12
Managing Therapy Dimension							3.77
12	Pharmacy staff show concern for your health	3 (0.8)	12 (3.1)	84 (21.5)	240 (61.4)	52 (13.3)	3.84
13	Pharmacy staff explain the proper way to store medication	5 (1.3)	41 (10.5)	77 (19.7)	221 (56.5)	47 (12.0)	3.68
14	Pharmacy staff actively participate in finding solutions to your medication-related issues	1 (0.3)	18 (4.6)	80 (20.5)	244 (62.3)	48 (12.3)	3.83
15	The pharmacist provides information on how often and for how long the medication should be taken	0 (0.0)	0 (0.0)	39 (10.0)	265 (67.8)	87 (22.3)	4.13
16	Pharmacy staff provide advice on maintaining and improving your health	6 (1.5)	44 (11.3)	90 (23.0)	208 (53.2)	43 (11.0)	3.62
17	Pharmacy staff maintain the confidentiality of the personal information you provide	0 (0.0)	3 (0.8)	72 (18.4)	248 (63.4)	68 (17.4)	3.98
18	The pharmacist explains what to avoid while taking your medication	4 (1.0)	38 (9.7)	77 (19.7)	223 (57.0)	49 (12.5)	3.71
19	The pharmacist explained the possible side effects of the medication	6 (1.5)	46 (11.8)	96 (24.6)	205 (52.4)	38 (9.7)	3.58
20	Pharmacy staff provide consultation time for you	10 (2.6)	44 (11.3)	89 (22.8)	209 (53.5)	39 (10.0)	3.58
Overall average patient satisfaction							3.87

Likert scale satisfaction : 1 = not satisfied, 2 = somewhat dissatisfied, 3 = somewhat satisfied, 4 = satisfied, 5 = very satisfied

Based on Table 3, the highest level of patient dissatisfaction in the Friendly Explanation dimension was related to prescription waiting time, particularly for compounded prescriptions ≤ 60 minutes and non-compounded prescriptions ≤ 30 minutes. Long waiting times may negatively affect patient satisfaction, as patients generally expect prompt pharmaceutical services. Meanwhile, the highest level of patient satisfaction in this dimension was found in the statement regarding the friendliness and politeness of pharmacy staff in providing services. Patients reported high satisfaction because pharmacy staff greeted them warmly and delivered information politely. Medication information services play an important role in ensuring rational, effective, and safe therapy, requiring pharmacists to possess adequate knowledge, skills, and competence to meet patient needs and increase patient trust (Sinala, 2017; Yulianto et al., 2017). Overall, patient satisfaction in the Friendly Explanation dimension was categorized as "satisfied," with an average score of 3.95, which falls within the range of 3.4–4.2.

Based on Table 3, the highest level of patient dissatisfaction in the Managing Therapy dimension was related to the limited availability of consultation time provided by pharmacy staff, as many patients felt they had never received counseling at the pharmacy. According to Ministry of Health Regulation No. 73 of 2016, pharmacies are required to provide counseling facilities and medication counseling services to support appropriate drug use. However, not all outpatients require comprehensive pharmacist counseling, as counseling is generally prioritized for patients with specific clinical needs. In addition, the high patient volume in outpatient settings may limit the time available for counseling, leading pharmacists to focus on providing essential medication information during dispensing. Therefore, patients' perception of not receiving counseling does not necessarily indicate poor service quality but may reflect workflow and time management considerations. In contrast, the highest level of patient satisfaction in this dimension was associated with information regarding medication frequency and duration of use, as pharmacy staff consistently explained medication instructions clearly during dispensing. Clear and understandable drug information is important to support patient understanding and improve treatment outcomes (Prabandari, 2017). Overall, patient satisfaction in the Managing Therapy dimension was categorized as "satisfied," with an average score of 3.77, which falls within the range of 3.4–4.2.

Based on Table 3, the results indicate that the "Friendly explanation" dimension is more dominant than the "Managing therapy" dimension, with average patient ratings of 3.95 and 3.77, respectively. These findings align with studies conducted by Jaka (2019) and Juwita *et al.* (2023), which also showed that the "Friendly explanation" dimension outperforms the "Managing therapy" dimension.

The results showed that the overall patient satisfaction level was categorized as "satisfied," with an average score of 3.87, which falls within the satisfaction range of 3.4–4.2, as presented in Table 3. The highest levels of satisfaction were related to the clarity of medication information provided by pharmacy staff, including instructions on medication use, frequency, and duration of therapy. Patients were also satisfied with the friendliness and politeness of pharmacy staff, as well as their ability to provide clear and understandable explanations.

2.3 The Relationship Between Sociodemographic Characteristics and Patient Satisfaction

Table 4: Relationship Between Sociodemographic Factors and Patient Satisfaction (n = 391)

Sociodemographic Factors	Satisfaction	Dissatisfied	Somewhat dissatisfied	Somewhat satisfied	Satisfied	Very satisfied	Total	p-value
Gender								
Male		0	3	45	173	42	263	0.898 ^a
Female		0	2	22	87	17	128	
Age (years)								
Adults (18-64)		0	4	54	204	55	317	0.099 ^b
Elderly (≥65)		0	1	13	56	4	74	
Education								
Elementary School		0	0	2	21	8	31	0.005 ^{b*}
Junior High School		0	0	0	38	3	41	
High School		0	1	22	102	20	145	
Diploma		0	2	9	26	6	43	
Bachelor's		0	2	34	73	22	131	
Employment								
Employed		0	2	23	82	27	134	0.222 ^a
Not working		0	3	44	178	32	257	
Payment type								
BPJS		0	2	49	230	40	321	0.000 ^{a*}
Insurance		0	3	16	18	16	53	
General		0	0	2	12	3	17	

a: Analysed using Chi-square

b: Analysed using Spearman

In contrast, the highest levels of dissatisfaction were associated with prescription waiting time, explanations regarding potential side effects, and the limited duration of consultation services. This

may be influenced by the time required for prescription processing, which can reduce opportunities for pharmacists to provide more comprehensive counseling. In addition, pharmacists may not repeatedly explain medication side effects to patients who routinely receive the same medications, particularly when the medications have a low risk of side effects.

The relationship between gender and patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital was analyzed using the Chi-square test because the variables were categorical. As presented in Table 5, the analysis showed a significance value of $p=0.898$ ($p>0.05$), indicating no significant relationship between gender and patient satisfaction. These findings are consistent with previous studies by Muhammad et al. (2020), which reported that gender does not significantly influence patient satisfaction levels (Muhammad et al., 2020). This finding is also in line with the study conducted by Aryani et al (2015), suggesting that both male and female patients tend to perceive and respond to pharmaceutical services similarly (Aryani et al., 2015).

The relationship between age and patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital was analyzed using Spearman's correlation test because the variables were measured on an ordinal scale. The analysis showed a correlation coefficient of -0.084 , indicating a weak inverse relationship; however, the significance value was $p=0.099$ ($p>0.05$), as presented in Table 4, indicating no significant relationship between age and patient satisfaction. These findings are consistent with previous studies by Hakim and Suryawati (2019) and Christasani and Satibi (2016), which also reported no significant association between age and patient satisfaction levels (Christasani and Satibi, 2016; Hakim and Suryawati, 2019). This suggests that both younger and older patients tend to perceive the pharmaceutical services provided similarly and generally feel satisfied with the services received.

The relationship between education level and patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital was analyzed using Spearman's correlation test because the variables were measured on an ordinal scale. The analysis showed a correlation coefficient of -0.143 with a significance value of $p=0.005$ ($p<0.05$), as presented in Table 5, indicating a significant inverse relationship between education level and patient satisfaction. This suggests that patients with higher educational levels tend to have lower satisfaction levels. These findings are consistent with previous studies by Hidayah et al (2019) and Hakim and Suryawati (2019), which reported that individuals with higher education tend to have greater expectations and be more critical of healthcare services received (Hakim and Suryawati, 2019; Hidayah et al., 2019). Higher educational levels may increase patients' understanding of healthcare services, leading to higher expectations regarding the quality of information and services provided by healthcare professionals (Aryani et al., 2015; Juwita et al., 2019; Montol et al., 2016).

The relationship between occupation and patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital was analyzed using the Chi-square test because the variables were categorical. The analysis showed a significance value of $p=0.222$ ($p>0.05$), as presented in Table 5, indicating no significant relationship between occupation and patient satisfaction. Although unemployed patients tended to report higher satisfaction levels, employment status was not significantly associated with satisfaction. These findings are consistent with previous studies by Suryati et al. (2017), Dakdakur et al. (2022), and Muhith et al. (2017), which also reported no significant relationship between occupation and perceptions of healthcare service quality (Dakdakur et al., 2022; Muhith et al., 2017; Suryati et al., 2017). This may be related to differences in expectations toward healthcare services between employed and unemployed patients.

The relationship between payment type and patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital was analyzed using the Chi-square test because the variables were categorical. The analysis showed a significance value of $p=0.000$ ($p<0.05$), as presented in Table 5, indicating a significant relationship between payment type and patient

satisfaction. These findings are consistent with Budiman et al. (2010), who reported differences in satisfaction levels between general patients and those using BPJS or private insurance (Budiman et al., 2010). Patients using BPJS tended to report higher satisfaction because they could access healthcare services through relatively affordable monthly contributions. In addition, ease of payment procedures may influence patient satisfaction with healthcare services. This suggests that payment type plays an important role in shaping patient perceptions of pharmaceutical services.

The statement related to waiting time obtained an average satisfaction score of 3.2 out of 5, indicating that patients were moderately satisfied with this aspect of pharmaceutical services. Nevertheless, long waiting times for medication pickup remained a source of dissatisfaction for some patients, particularly when prescription processing was perceived as slow. Similar findings were reported by Rizqi (2020), who stated that high patient volume may limit the ability of pharmacy staff to provide optimal services, resulting in longer waiting times and lower patient satisfaction (Rizqi, 2020). Waiting time is an important component of service quality, as delays may negatively affect patients' overall experiences and perceptions of pharmaceutical services. Therefore, improving the efficiency of prescription processing and medication dispensing may help enhance patient satisfaction and the overall quality of pharmaceutical services. Another factor associated with dissatisfaction was the limited availability of counseling services due to time constraints during dispensing, although the statement related to counseling services obtained an average satisfaction score of 3.58 out of 5, indicating a generally satisfactory level of patient satisfaction.

According to Natalia (2021), improving staffing capacity may help enhance service quality and reduce waiting times (Natalia, 2021). In addition, the provision of medication information through brochures, telephone-based services, or educational videos may support patient understanding and improve satisfaction with pharmaceutical services.

4. CONCLUSION

Patient satisfaction with pharmaceutical services at the Outpatient Pharmacy of Semen Padang Hospital was generally satisfactory. Effective communication and patient education emerged as key strengths of pharmaceutical services, whereas therapy management aspects require further improvement. These findings highlight the importance of improving prescription processing and counseling services to support patient-centered pharmaceutical care. The study provides evidence that may inform service quality improvement initiatives and future research on patient satisfaction in pharmaceutical settings.

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