

The Relationship Between Patient Characteristics and Satisfaction with Pharmaceutical Services at Gamping 2 Sleman Community Health Center

Afrizal Wahyu Darma Syahyeri¹, Stefani Nuri Alvita², Niken Larasati³

¹Department of Pharmacy, Jenderal Achmad Yani Yogyakarta University, Indonesia

²Department of Pharmacy, Jenderal Achmad Yani Yogyakarta University, Indonesia

³Department of Pharmacy, Jenderal Achmad Yani Yogyakarta University, Indonesia

Email: afrizalsyahyeri@gmail.com

ABSTRACT

Pharmacy services in community health centers are essential for directly interacting with patients and improving their quality of life related to medication use. Health centers must provide good services to achieve patient satisfaction. Factors like occupation, education, gender, and age may affect patient satisfaction levels. This study aims to explore the relationship between patient characteristics and satisfaction with pharmaceutical services at Gamping 2 Sleman Community Health Center. The study used a cross-sectional approach and analytical observational method to identify relationships between variables. Data collection involved purposive sampling based on specific criteria. For analysis, the researchers applied the Kruskal-Wallis test. Most patients at Gamping 2 Sleman Community Health Center were aged 17 to 25 years (31%), female (74%), with an equal number of employed and unemployed patients (50% each). Most had secondary education (senior/vocational high school) (45%). Patient satisfaction was rated very high across all dimensions, with the highest percentage in the assurance dimension (81.20%) and the lowest in the responsiveness dimension (79.10%). The Kruskal-Wallis test indicated a significant relationship between age and satisfaction level ($p = 0.023 < 0.05$). However, no relationship was found between gender, education, or occupation and satisfaction level. In conclusion, age was significantly linked to satisfaction level, while gender, education, and occupation were not.

Keywords: Community Health Center, Patient Characteristics, Pharmaceutical Services, Satisfaction

INTRODUCTION

Community health centers (puskesmas) are the main healthcare providers for individuals and communities, focusing on promoting and preventing health in their areas (Kemenkes RI, 2019). These centers aim to protect communities, the environment, and healthcare workers. They also work to improve patient safety and the quality of healthcare services (Putri *et al.*, 2023). Pharmacy services play a key role in community health center operations and directly interact with patients to improve their quality of life through proper drug use (Kemenkes RI, 2019).

However, studies show that the quality of healthcare services has not been fully optimized. A study found that pharmacy staff often lacked friendliness and attentiveness during patient interactions, which affected their empathy. Additionally, shortcomings were noted in physical aspects such as limited seating, poor waiting rooms, broken queue displays, and no prescription drop-boxes. Concerns about long waiting times and inefficiencies were common in terms of reliability. Patients also reported confusion about the instructions for medication use given by pharmacy staff (responsiveness dimension) (Hidayatullah *et al.*, 2023). Another study indicated that pharmacy staff often did not follow service standards, with waiting times sometimes exceeding 60 minutes. There were inadequate facilities in registration, waiting, and

pharmacy areas. Patients felt uncertain due to insufficient education and unclear expectations regarding their recovery (Rivany *et al.*, 2024).

Patient satisfaction reflects how patients view and evaluate the healthcare services they receive (Kemenkes RI, 2022). In today's competitive landscape, Community Health Centers need to provide high-quality services to ensure patient satisfaction (Satriandi & Azizah, 2024). If patients are dissatisfied, it may result in lower patient retention and negative word-of-mouth, which can harm the reputation and achievements of Community Health Centers (Maryono & Khairunnisak, 2024). Patient factors like occupation, education, gender, and age can affect satisfaction levels (Putri *et al.*, 2021).

Several studies have looked into these relationships. A study found significant links between patient satisfaction, education, and occupation (Suryaningsi *et al.*, 2024). Another study also provided strong evidence that education and occupation impact perceptions of healthcare quality (Rohayati, 2024). Some study reported a link between age and patient satisfaction. A study noted that 56% of patients rated healthcare service quality as poor, with 57% expressing dissatisfaction (Rahayu, 2022). So far, no similar study has been conducted at Gamping 2 Sleman Community Health Center. Therefore, this research aims to explore the relationship between patient characteristics and satisfaction levels regarding pharmaceutical services at this community health center.

MATERIALS AND METHODS

Study Design

This research used an analytical observational study with a cross-sectional design to explore relationships between variables in a population. Sampling was done with a non-probability purposive sampling technique. The study took place at Gamping 2 Sleman Community Health Center in July 2024.

Population and Sample

The study population included all patients who received pharmacy services at Gamping 2 Sleman Community Health Center. The sample consisted of patients who (1) received pharmacy services at least once, (2) were aged 17 to 65 years, and (3) provided informed consent. Exclusion criteria included incomplete questionnaires, cognitive impairment, and inability to communicate verbally. Using Slovin's formula, the sample size was set at 100 patients.

Data Analysis

Patient characteristics that were analyzed included education, occupation, gender, and age. Satisfaction levels were assessed across five dimensions: tangible, assurance, reliability, empathy, and responsiveness. Data were analyzed descriptively to obtain frequencies and percentages. The Kruskal-Wallis test was conducted using IBM SPSS version 25.

Ethical Considerations

We followed the WHO ethical and safety recommendations for medical research. The purpose of the study was explained to the patients and participation was completely voluntary. The study was approved by the Research Ethics Commission of Jenderal Achmad Yani Yogyakarta University (Skep/401/KEP/VII/2024).

RESULTS AND DISCUSSION

A total of 100 patients met the inclusion and exclusion criteria. The majority of patients were female (74%), aged 17–25 years (31%), with equal proportions of employed and unemployed patients (50%), and most had secondary education (45%).

Table 1. Patient Characteristics at Gamping 2 Sleman Community Health Center (n = 100)

Characteristic	Parameter	Number of Patients (n=100)	Percentage (%)
Gender	Male	26	26
	Female	74	74
Age	17-25	31	31
	26-35	21	21
	36-45	19	19
	46-55	16	16
	56-65	13	13
Occupation	Employed	50	50
	Unemployes	50	50
Education	Elementary School	9	9
	Junior High School	12	12
	Senior High School	45	45
	Diploma/Bachelor's Degree	34	34

The results of patient characteristics showed that most patients were female, at 74.0%. This finding matches the study which reported a higher percentage of females at 77.9%, compared to males at 22.1% (Andana, 2023). Similarly, another study found that most respondents were female, at 80.0%, while males made up 20.0% (Ibrahim & Kassaming, 2023). Women are more likely to use primary healthcare services than men. This trend is linked to women having more time to access healthcare facilities than men (Stiyawan & Ainy, 2023).

The majority of patients in this study were aged 17 to 25 years, at 31.0%. This is consistent with the study, which reported that half of the respondents were aged 18 to 25 years (Amalia *et al.*, 2022). Likewise, a study found that among 52 patients, the largest group was in the 18 to 25 age range, at 28.8% (Sabil *et al.*, 2022). The productive age group is important in human development, marked by peak activity levels. This high level of activity can lead to health issues (Marlita *et al.*, 2022).

In this study, the number of employed and unemployed patients was equal, at 50.0%. A study reported that most were unemployed or housewives (Sesrianty *et al.*, 2019). In contrast, another study found that most respondents were private employees, at 30% (Putri *et al.*, 2023). Employed individuals are generally more proactive in seeking healthcare services compared to those who are unemployed. On the other hand, people without steady jobs, such as housewives, tend to depend more on available healthcare facilities (Tunnizha *et al.*, 2023).

Most patients in this study had secondary education, specifically senior or vocational high school, at 45.0%. This finding corresponds with another study, who reported that most respondents had completed high school, at 48.45% (Andana, 2023). Similarly, another study found that 58.5% of respondents had secondary education (Mardiana, 2022). Educational level affects individuals' decisions regarding healthcare services (Arifin *et al.*, 2019). People with higher education often have better knowledge and understanding than those with lower educational levels. However, in today's information technology era, knowledge can also be gained outside of formal education (Stiyawan & Ainy, 2023).

Satisfaction levels across dimensions were consistently categorized as very satisfied. Assurance achieved the highest satisfaction (81.20%), while responsiveness had the lowest (79.10%).

Table 2. Percentage of Patient Satisfaction in Each Dimension

No	Dimension	Average Satisfaction Score (%)	Category
1	Tangible	80,56	Very Satisfied
2	Assurance	81,20	Very Satisfied
3	Reliability	79,25	Very Satisfied
4	Empathy	80,20	Very Satisfied
5	Responsiveness	79,10	Very Satisfied

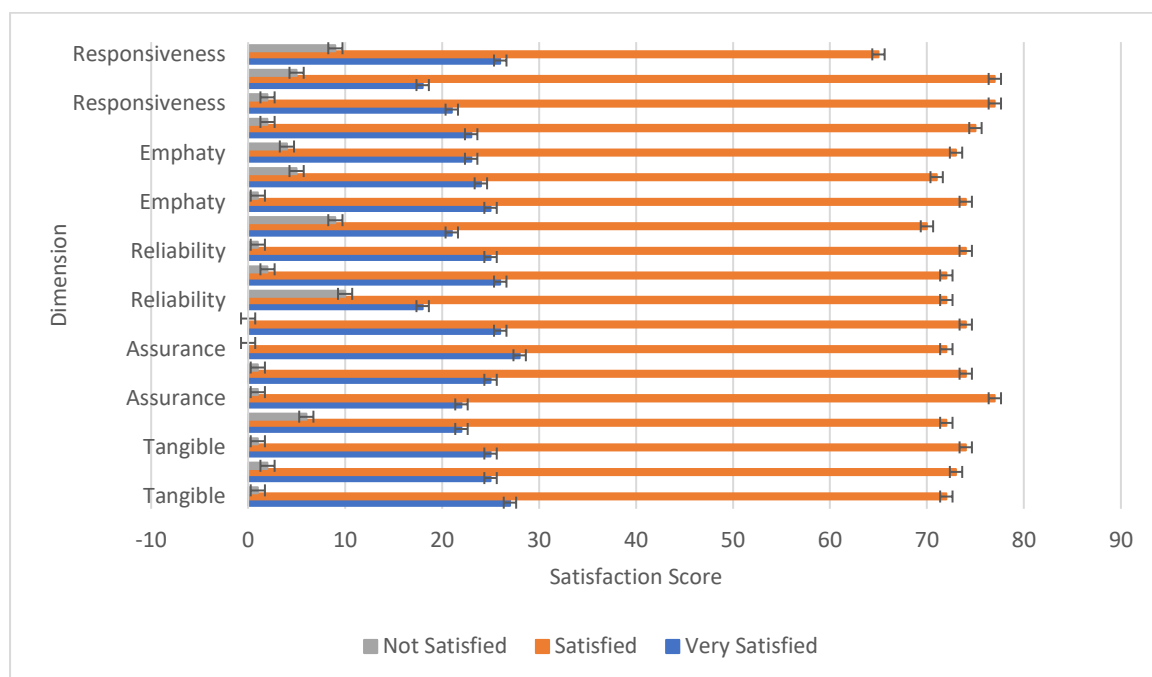


Figure 1. The frequency distribution of patient satisfaction levels

Figure 1 shows the level of satisfaction in the tangible dimension indicated that the highest percentage of patients, 74.0%, reported being satisfied with the statement about the “clean and comfortable dispensing area.” The waiting area is crucial for patients as they wait for their turn to receive services. It must offer comfort to prevent negative experiences. For example, the layout of the waiting area should ensure clean air, good lighting, and comfortable seating (Pandanwangi, 2020). Regarding the statement about the “use of identification badges,” 72 patients, or 72%, expressed satisfaction. However, this statement also had the highest dissatisfaction rate at 6%. Using complete identification badges creates a positive impression of the quality of services offered (Manurung *et al.*, 2022).

The level of satisfaction in the assurance dimension indicated that the highest percentage of patients, 77.0%, were satisfied with the statement about “providing a sense of safety and comfort.” The highest dissatisfaction rate, 1.0%, was found in the statements regarding “providing a sense of safety and comfort” and “providing medication information.” The assurance dimension measures the ability to convince and build trust with patients regarding the services provided. Efforts to ensure reliable services give patients a sense of

security. This fosters trust and increases their satisfaction with the Community Health Center, encouraging them to return to the same facility (Christanto *et al.*, 2024).

The level of satisfaction in the reliability dimension indicated that the highest percentage of patients, 74.0%, were satisfied with the statement regarding “providing medication information that is easy to understand.” The highest dissatisfaction rate, 10.0%, was related to the statement about “waiting time for medication services.” Additionally, 9 patients, or 9%, expressed dissatisfaction with the statement about “medication use education.” This aspect is often viewed as the most critical by patients. Reliability in healthcare services means delivering promised services accurately and appropriately, making them trustworthy, especially by delivering services correctly according to applicable regulations without errors. Providing healthcare services accurately and on time is a key reason patients return for follow-up visits (Fajriah *et al.*, 2023).

The level of satisfaction in the empathy dimension indicated that the highest percentage of patients, 75.0%, were satisfied with the statement about “friendly and polite attitude.” The highest dissatisfaction rate, 5.0%, was in the statement about “listening to patients’ complaints.” The average satisfaction score for this dimension was 80.20%, placing it in the very satisfied category. This result aligns with study which reported that 84.90% of patients felt very satisfied in the empathy dimension (Andana, 2023). High expectations in this area arise because empathy reflects pharmaceutical services that offer special attention to each patient, consider the complaints of patients and their families, and deliver services to all patients regardless of their social status—factors that contribute to patients’ comfort (Sesrianty *et al.*, 2019).

The level of satisfaction in the responsiveness dimension indicated that the highest percentage of patients, 77.0%, were satisfied with the statements about “being responsive in providing services” and the “ability to solve problems.” The highest dissatisfaction rate, 9.0%, was linked to the statement about “providing services quickly.” Offering solutions to the problems faced by patients is a key factor in their satisfaction with healthcare services (Fauziah & Nugraha, 2024).

The Kruskal-Wallis test indicated a significant relationship between age and satisfaction level ($p = 0.023 < 0.05$). No significant relationships were observed for gender, occupation, or education. These findings suggest that patient age influences satisfaction with pharmaceutical services, whereas gender, occupation, and education do not.

Table 3. Relationship Between Patient Characteristics and Patient Satisfaction

Characteristic	Parameter	Asymp. Sig	Interpretation
Gender	Male	0.444	No relationship
	Female		
Age	17-25	*0.023	Significant relationship
	26-35		
	36-45		
	46-55		
	56-65		
Occupation	Employed	0,312	No relationship
	Unemployed		
Education	Elementary School	0,117	No relationship
	Junior High School		
	Senior High School		

Characteristic	Parameter	Asymp. Sig	Interpretation
	Diploma/ Bachelor's Degree		

This study found a significant link between age and patient satisfaction levels. This may be explained by the fact that half of our participants were middle-aged or older. These older patients tend to be more vulnerable and have greater expectations for care related to their medications, as they typically have more chronic conditions than younger individuals. A previous study also reported that elderly patients felt their expectations for pharmacy services were unmet, particularly regarding discussions about other medications and unresolved medication issues from previous visits (van Rensburg *et al.*, 2017). We believe these unmet expectations may contribute to lower satisfaction with pharmacy services among older patients.

These findings align with study who reported that patient satisfaction with services was influenced by occupation ($p < 0.05$) (Efriani *et al.*, 2022). Similarly, another study found a probability value of 0.000 ($p < 0.05$), indicating a strong correlation between occupation and patient satisfaction (Muhammad *et al.*, 2020). Regarding education, this study matches with another study who reported a significance value of 0.475, which is greater than 0.05 (Pamungkas *et al.*, 2022). In contrast, a study found a significant relationship between education and patient satisfaction (Hakim & Suryawati, 2019).

CONCLUSION

There is a significant relationship between age and patient satisfaction with pharmaceutical services at Gamping 2 Sleman Community Health Center ($p = 0.023 < 0.05$). No significant relationships were found between gender, education, or occupation and patient satisfaction.

ACKNOWLEDGMENTS

The authors express gratitude to Gamping 2 Sleman Community Health Center for permitting this study to be conducted, and to Universitas Jenderal Achmad Yani Yogyakarta for continuous support in completing this research.

AUTHOR'S DECLARATION

Authors' contributions and responsibilities

Write the contribution of each author here, or mark the following column.

The authors made substantial contributions to the conception and design of the study

The authors took responsibility for data analysis, interpretation and discussion of results

The authors read and approved the final manuscript

Availability of data and materials

All data are available from the authors

Competing interests

The authors declare no competing interest

REFERENCES

- Amalia, R., Yusuf, M., & Rachmad. (2022). Kepuasan Masyarakat (IKM) terhadap Pelayanan Kesehatan selama Pandemi Covid-19. *Idea Nursing Journal*, XIII(3), 1–6.
- Andana, D. S. P. (2023). *Analisis Tingkat Kepuasan Pasien terhadap Pelayanan Kefarmasian oleh Apoteker di Puskesmas Mlati II Sleman*. Universitas Islam Indonesia.
- Arifin, S., Rahman, A., Muhyi, R., Octaviana Putri, A., & Hadianor, H. (2019). Hubungan Usia, Tingkat Pendidikan, Fasilitas Kesehatan dengan Kepuasan Pasien di Puskesmas Muara Laung. *Jurnal Publikasi Kesehatan Masyarakat Indonesia*, 6(2). <https://doi.org/10.20527/jpkmi.v6i2.7457>
- Christanto, Y. A., Farida, N., & Arso, S. P. (2024). Analisis Pengaruh Nilai Pelanggan terhadap Kepuasan Pasien di Rumah Sakit. *The Indonesian Journal of Health Promotion*, 7(2), 56–61.
- Efriani, L., Kemala dewi, L., & Marfuati, S. (2022). Hubungan Karakteristik Sosiodemografi terhadap Tingkat Kepuasan Pelayanan Kefarmasian di Apotek X Kabupaten Cirebon. *Borneo Journal of Pharmascientech*, 6(2), 94–98. <https://doi.org/10.51817/bjp.v6i2.441>
- Fajriah, I. N., Gita, S. N., & Ayu, A. R. (2023). Analisis Hubungan Mutu Pelayanan Kesehatan dengan Kepuasan Pasien di Fasilitas Pelayanan Kesehatan (Literatur Review). *Health Journal "Love That Renews"*, 11(2), 129–140.
- Fauziah, A., & Nugraha, H. (2024). Analisis Kualitas Pelayanan Farmasi di Lingkungan Rumah Sakit Muhammadiyah Bandung : Studi Kasus terhadap Kepuasan Pasien. *Jurnal Ekonomi USI*, 6(1).
- Hakim, F. A., & Suryawati, C. (2019). Analisis Hubungan Karakteristik Pasien Peserta BPJS dengan Tingkat Kepuasan Pasien Peserta BPJS terhadap Pelayanan Rawat Inap di Rumah Sakit Umum Darul Istiqomah Kendal. *Jurnal Manajemen Kesehatan Indonesia*, 7(3), 157–162. <https://doi.org/10.14710/jmki.7.3.2019.157-162>
- Hidayatullah, A. S., Dwimawanti, I. H., & Yuniningsih, T. (2023). Kualitas Pelayanan Kesehatan di Puskesmas Tlogosari Kulon Kecamatan Pedurungan. *Jurnal Kesehatan Ilmu Sosial Dan Ilmu Politik*, 1–10.
- Ibrahim, & Kassaming. (2023). Hubungan Karakteristik Pasien Terhadap Kepuasan Layanan Pasien Badan Penyelenggara Jaminan Sosial Kesehatan Rawat Jalan. *Jurnal Ilmiah Kesehatan Pencerah (JKP)*, 12(2), 298–304.
- Kemendes RI. (2019). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 43 tahun 2019 tentang Pusat Kesehatan Masyarakat*.
- Kemendes RI. (2022). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 30 Tahun 2022* (p. 879).
- Manurung, N. A., Nababan, D., & Rinawati, S. (2022). Analisis Hubungan Mutu Pelayanan Dengan Tingkat Kepuasan Pasien Di Instalasi Gawat Darurat. *Excellent Midwifery Journal*, 5(2), 53–66.
- Mardiana, N. (2022). Faktor-faktor Pemanfaatan Pelayanan Kesehatan di Puskesmas Parung selama masa Pandemi Covid-19 tahun 2021. *Jurnal Kesehatan Mahasiswa*, 5(1), 59–74.
- Marlita, M., Lestari, R. M., & Ningsih, F. (2022). Hubungan Gaya Hidup (Lifestyle) dengan Kejadian Hipertensi pada Usia Produktif. *Jurnal Surya Medika*, 8(2), 24–30. <https://doi.org/10.33084/jsm.v8i2.3850>
- Maryono, & Khairunnisak. (2024). Hubungan Kinerja Petugas Kesehatan dengan Tingkat Kepuasan Pasien di UPT Puskesmas Kaway XVI Kabupaten Aceh Barat. *SENTRI: Jurnal Riset Ilmiah*, 3(3), 17–34.
- Muhammad, D., Almasyhuri, A., & Setiani, L. A. (2020). Evaluasi Tingkat Kepuasan Pasien Terhadap Pelayanan Kefarmasian Di Rumah Sakit Sekarwangi Cibadak Kabupaten

- Sukabumi. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi|JIITUJ*, 4(2), 174–186. <https://doi.org/10.22437/jiituj.v4i2.11606>
- Pamungkas, D. S. J., Wardani, R. S., & Rusmitasari, H. (2022). Hubungan Pendidikan dan Mutu Pelayanan dengan Kepuasan (Studi pada Pasien Rawat Jalan Puskesmas Poncol Kota Semarang. *Prosiding Seminar*, 1155–1163.
- Pandanwangi, D. R. A. (2020). *Analisis Ergonomi Lingkungan Fisik dan Anthropometri pada Ruang Tunggu dan Ruang Pemeriksaan Dokter Kandungan*.
- Putri, A. K., Fatimah, F. S., Dwinta, E., & Putri, I. R. R. (2023). Evaluasi Kepuasan Pasien di Unit Kefarmasian Puskesmas Kalasan. *Inpharmed*, 7269, 121–134.
- Putri, P., Afandi, A. T., & Aringgar, D. (2021). Explorasi Karakteristik dan Kepuasan Pasien di Rumah Sakit Jember. *Nursing Sciences Journal*, 5(1), 35. <https://doi.org/10.30737/nsj.v5i1.1835>
- Rahayu, I. (2022). *Hubungan Mutu Pelayanan Kesehatan dengan Kepuasan Pasien Rawat Jalan Peserta BPJS Kesehatan di Puskesmas Gamping 2 Sleman*. Universitas Kesehatan Wira Husada.
- Rivany, H. A. S., Nababan, D., Manurung, K., Ginting, D., & Sipayung, R. (2024). Analisis Ketidakpuasan Pasien Terhadap Pelayanan Di Rumah Sakit Putri Hijau Kesdam I/BB Medan Tahun 2020. *Prepotof: Jurnal Kesehatan Masyarakat*, 8(1), 60–69.
- Rohayati, E. (2024). Hubungan Karakteristik Klien dan Tingkat Kepuasan Klien terhadap Asuhan Keperawatan di Ruang Rawat Inap UPTD RSD Kelas B Kabupaten Subang. *Jurnal Kesehatan*, 10(10), 41–52.
- Sabil, F. A., Nani, S., Makassar, H., Perintis, J., Viii, K., & Makassar, K. (2022). *Hubungan Kualitas Pelayanan Kesehatan dengan Kepuasan Pasien*. 2, 280–287.
- Satriandi, A., & Azizah, S. Y. (2024). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pasien (Studi Pada Pasien Poli Gigi Puskesmas Cipanas Garut). *PRISMAKOM*, 22(1), 25–32.
- Sesrianty, V., Machmud, R., & Yeni, F. (2019). Analisa Kepuasan Pasien terhadap Mutu Pelayanan Keperawatan. *Jurnal Kesehatan Perintis*, 2.
- Stiyawan, Y., & Ainy, A. (2023). Pemanfaatan Layanan Kesehatan Peserta Jaminan Kesehatan Nasional di Kecamatan Jejawi. *Jurnal Manajemen Kesehatan Yayasan RS.Dr. Soetomo*, 9(1), 163. <https://doi.org/10.29241/jmk.v9i1.1427>
- Suryaningsi, D., Dulahu, W. Y., & Maru, A. F. A. (2024). Analisis Kepuasan Pasien Berdasarkan Pendidikan dan Pekerjaan di Puskemas Paleleh Kabupaten Buol. *Jurnal Keperawatan Sumba (JKS)*, 2(2), 70–78. <https://doi.org/10.31965/jks.v2i2.1417>
- Tunnizha, B. M., Haeruddin, Arman, Asrina, A., & Yusriani. (2023). Faktor-Faktor yang Berhubungan dengan Partisipasi Masyarakat dalam Pemanfaatan Layanan Promosi Kesehatan di Daerah Pegunungan Enrekang. *Journal of Muslim Community Health (JMCH)*, 4(3), 143–156.
- van Rensburg, A. J., Kotze, I., Lubbe, M. S., & Cockeran, M. (2017). An elderly, urban population: Their experiences and expectations of pharmaceutical services in community pharmacies. *Health SA Gesondheid*, 22(1), 241–251. Retrieved from <https://www.ajol.info/index.php/hsa/article/view/161487>