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ANALYSIS OF COUNSELING IMPLEMENTATION BY PHARMACISTS IN COMMUNITY PHARMACIES

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ABSTRACT

This study aims to analyze the factors that influence the implementation of pharmacist counseling in community pharmacies in Malang Regency. This research method is an observational study, with a cross-sectional design. Data analysis shows a significant relationship (p <0.05) between each independent variable and the implementation of counseling. In conclusion, the availability of facilities and infrastructure has the strongest influence on the implementation of pharmacist counseling, followed by attitudes, knowledge, and policies.

Keywords: Pharmacist, Pharmacy, Counseling, Pharmaceutical Services

INTRODUCTION

The pharmacist profession has evolved into a patient-oriented practice (Showande & Laniyan, 2022). Community pharmacists in particular are in a unique position to provide drug information because they are in direct contact with patients and can easily build a relationship of trust with patients (Qadus et al., 2022). Pharmaceutical services refer to the principles of outcome-oriented pharmaceutical care, one of which is counseling (Gyllensten et al., 2022).

Counseling is the provision of oral drug information to patients or their families to provide instructions for proper drug use, advice on drug side effects, drug storage, and lifestyle modifications. Effective counseling must cover all parameters to make patients understand their illness, treatment, and necessary lifestyle modifications (Fajarini & Ludin, 2020).

In reality, the implementation of counseling by pharmacists has not been optimal due to several obstacles both internally and externally, such as lack of pharmacist knowledge, and policies in supporting inadequate pharmaceutical services (Hermansyah et al., 2021). One of the theories that can be used as a reference in research related to health behavior is Lawrence Green's theory. This theory states that there are two factors that influence individual health behavior. First, behavioral factors, and second, factors outside of behavior. There are three things that influence behavioral factors, namely predisposing factors, supporting factors, and driving factors (Green et al., 2022). Previous research in pharmacies in the Kupang area examined the implementation of counseling by comparing the suitability of its implementation with pharmaceutical service standards in pharmacies (Parera et al., 2021). In previous studies, the factors that influence the implementation of counseling were studied in general without delving deeper into the factors that influence its implementation, so that in this study, the factors that influence the implementation of counseling by pharmacists were studied in depth based on the pharmacist's perspective, especially through Lawrence Green's health behavior theory approach which has never been done before.

The results of the study are expected to be a reference in efforts to improve the quality, benefits and pharmaceutical services to be implemented in a multidisciplinary, coordinated manner and using an effective process.

RESEARCH METHOD

The research approach used is an observational approach with a cross-sectional design. The aim is to analyze the factors that influence the implementation of counseling in pharmacies in Malang Regency by pharmacists from the pharmacist's perspective. The population in the study were all pharmacists practicing in community pharmacies in Malang Regency. The sample in this study was the pharmacist in charge of the pharmacy or the assistant pharmacist with the inclusion criteria met, namely being willing to be a research respondent and having an active Pharmacist Practice License (SIPA). From a total population of 205 pharmacists, 30 pharmacists participated in the validity and reliability test of the questionnaire and 65 pharmacists were excluded so that the final number of pharmacists included in this study was 110 respondents.

The researcher used a purposive sampling technique in taking research samples, namely a technique for taking samples by previously determining various certain criteria. There are two research variables, namely the independent variable and the dependent variable. The independent variables are knowledge, attitudes, availability of facilities and infrastructure, and policies. While the dependent variable is the implementation of counseling by pharmacists. The questionnaire in this study was used to measure the level of knowledge, attitudes, availability of facilities and infrastructure, policies, and implementation of counseling by pharmacists consisting of 35 question items with 4 Likert scales including strongly disagree/never (1); disagree/rarely (2); agree/often (3); strongly agree/always (4). The values obtained were then classified into three categories, namely less, moderate, and good. Determination of qualifications is used for each variable. The interval value qualification is also called the class range and can be calculated with the highest score and the lowest score with the formula: This study was conducted in community pharmacies in Malang Regency. The research period started from November 2022 to February 2023.

Validation tests and reliability tests of the research questionnaire have been carried out on each variable of knowledge, attitudes, availability of facilities and infrastructure and implementation of counseling. The number of respondents who participated in the validity test was n = 30 and had a significance level ($\propto = 0.05$), with an r table value of 0.361. It is said to be valid if the calculated r correlation coefficient value obtained exceeds the r table value. The results are that all question items in the questionnaire are valid. In the reliability test, it is said to be reliable if the Cronbach alpha value is ≥ 0.6. The Cronbach alpha value for the knowledge variable is 0.847, 0.892 for the attitude variable, 0.806 for the availability of facilities and infrastructure, 0.685 for the policy variable, and 0.822 for the counseling implementation variable. A normality test was also carried out on the dependent and independent variables, the results of which were that all data were not normally distributed, namely $\propto<0.05$.

Furthermore, the Spearman Rank correlation test was carried out to see the analysis of the relationship between the independent and dependent variables. From the results of the Spearman Rank correlation test, it is known that all independent variables, namely knowledge, attitude, availability of facilities and infrastructure, and policies, show a significant relationship to the implementation of counseling by pharmacists with a p value <0.05 so that a relationship was found between the independent variables and the implementation of counseling by pharmacists.

RESEARCH RESULTS

Table. 1
Demographic Characteristics of Respondents

Characteristics	Category	n (%)
Age (years) (WHO, 2015)	20-29	32 (29,1)
	30-39	52 (47,3)
	40-49	14 (12,7)
	50-59	11 (10)
	60-69	1 (0.9)
Gender	Male	21 (19,1)
	Female	89 (80,9)
Position	APJ	103 (97,3)
	Aping	7 (2,7)
Last education	Pharmacist Profession	101 (91,8)
	Masters	9 (8,2)
	Doctoral	0 (0)
Practical Experience in Pharmacy	< 1 Year	6 (5,5)
	1-5 Year	51 (46,4)
	6-10 Year	26 (23,6)
	>10 Year	27 (24,5)
Practice Hours	During pharmacy hours	13 (11,8)
	Every day at certain times	60 (54,5)
	2-3x per week	25 (22,7)
	1x per week	10 (9,1)
	1x per month	2 (1,8)
Ownership Status of Practice Facilities	Privately Owned	37 (33,6)
	Owned by Other Parties	
	- BUMN	2 (1,8)
	- PT/Foundation	5 (4,5)
	- Individual	47 (42,7)
	- Collaborating with Other Parties	19 (17,3)
Professional Fee	< Rp 1.500.000,00	3 (2,7)
	Rp 1.500.000,00 – Rp 2.000.000,00	9 (8,2)
	Rp 2.000.001,00 – Rp 3.000.000,00	58 (52,7)
	Rp 3.000.001,00 – Rp 4.000.000,00	21 (19,1)
	Rp 4.000.001,00 – Rp 5.000.000,00	12 (10,9)
	>Rp 5.000.000,00	7 (6,4)

Based on table 1, it shows that the majority of respondents are aged 30-39 years and are dominated by women. Most respondents are Pharmacists in Charge of Pharmacies with the majority of their last education being a pharmacist. The majority of respondents have 1-5 years of experience practicing in pharmacies with practice hours every day at certain hours. The ownership status of the majority of practice facilities belongs to other parties, and the majority of respondents receive a professional fee of Rp. 2,000,001.00 to Rp. 3,000,000.00

Table. 2
Measurement
of Pharmacist Knowledge

Category	n (%)
Less	0 (0)
Medium	16 (14,5)
Good	94 (85,5)

Based on table 2 it shows that the majority of pharmacists' counseling knowledge is in the good category, namely 85.5%.

Table. 3
Measurement
of Pharmacist Attitudes

Category	n (%)
Less	0 (0)
Medium	20 (18,2)
Good	90 (81,8)

Based on table 3, the results show that the majority of pharmacists have attitudes in the good category of 81.8%.

Table. 4
Measurement of Availability
of Infrastructure Facilities

Category	n (%)
Less	48 (43,6)
Medium	42 (38,2)
Good	20 (18,2)

Based on table 4, it shows that the majority of the availability of supporting counseling facilities at the respondents' practice locations is in the insufficient category at 43.6%.

Table. 5
Policy Measurement

Category	n (%)
Less	38 (34,5)
Medium	55 (50)

Based on table 5, the results show that the majority of counseling policies at the respondents' practice locations fall into the moderate category, namely 50%.

Table 6.
Measurement
of Counseling Implementation

Category	n (%)
Less	3 (2,7)
Medium	54 (49,1)
Good	53 (48,2)

Based on table 6, it shows that the majority of counseling implementation by pharmacists falls into the moderate category, namely 49.1%.

Table. 7
Correlation Test of Knowledge, Attitude, Availability of Facilities and Infrastructure, and Policies on the Implementation of Counseling by Pharmacists

		Knowledge	Attitude	Availability of Facilities and Infrastructure	Policy	Implementation of Counseling
Knowledge	Correlation Coefficient	1	.712**	.309**	.158	.350**
	Sig. (2-tailed)		.000	.001	.099	.000
	N	110	110	110	110	110
Attitude	Correlation Coefficient	.712**	1	.282**	.127	.379**
	Sig. (2-tailed)	.000		.003	.185	.000
	N	110	110	110	110	110
Availability of Facilities and Infrastructure	Correlation Coefficient	.309**	.282**	1	.636**	.408**
	Sig. (2-tailed)	.001	.003		.000	.000
	N	110	110	110	110	110
Policy	Correlation Coefficient	.158	.127	.636**	1	.218*
	Sig. (2-tailed)	.099	.185	.000		.022
	N	110	110	110	110	110

Based on table 7, the results show that knowledge, attitudes, availability of facilities and infrastructure and policies influence the implementation of counseling by pharmacists.

DISCUSSION

The characteristics of the research respondents include age, gender, position, last education, experience practicing in a pharmacy, hours of practice, ownership status of practice facilities, and professional fees (table 1). In this study, male and female respondents had the same opportunity to become respondents because the researcher did not differentiate respondents based on their gender. Based on the respondent characteristics data, it can be seen that women dominate the profile of pharmacists who practice in community pharmacies in Malang Regency. This is in line with data from the American Association of Colleges of Pharmacy (AACP) which shows that the number of female pharmacists increased from 14% in 1965 to 63% in 2020 (Bakken et al., 2022).

In terms of respondent education level, the majority had a professional education as a pharmacist, and the rest were masters. The changing role of pharmacists in a health system that focuses on patient orientation increases the importance of pharmacists' readiness in lifelong learning (a life long learner) who must continuously fulfill the obligation of continuing professional development (Cerbin-Koczorowska et al., 2022). It is hoped that the higher academic qualifications will further improve pharmacists' competence in pharmaceutical services (Selifani et al., 2022). The results show that the majority of pharmacist respondents have 1-5 years of practical experience in pharmacies. Practical experience is useful for improving thinking skills and improving performance (Ilham, 2022). Most pharmacist respondents practice every day at certain hours, but not a few respondents have not met the provisions for practice hours. The presence of pharmacists, especially in community pharmacies, is still low and has been a problem until now, the presence of pharmacists to practice in pharmacies is not only related to drug problems, but pharmacists are also required to interact directly with patients (Arimbawa et al., 2021). The lack of pharmacist presence in pharmacies results in a lack of drug information services in the form of information, communication, and drug education, which is detrimental to the community because there is no guarantee of the safety of the drugs given (Nurhaini et al., 2020). The ownership status of the practice facilities shows that the majority of respondents practice in practice facilities owned by other parties. It can be seen that the majority of pharmacist respondents receive a professional fee of IDR 2,000,001.00 - IDR 3,000,000.00. Knowledge is a cognitive domain that influences a person's actions, so that acceptance of a behavior will be more consistent if it is based on knowledge, good knowledge will form a positive attitude (Pakpahan et al., 2021).

The results show that most respondents gave a positive attitude, these results are possible from the results of good counseling knowledge as observed among respondents in this study. Attitude is a response that appears before an action, the individual is aware of the stimulus given, then the subject's attitude begins to emerge until finally a positive attitude is formed to try to carry out according to the stimulus (Pakpahan et al., 2021).

The majority of the availability of supporting counseling facilities at the respondents' practice locations is in the inadequate category, this is because there are no demonstration tools in the form of pill boxes and inhalers in the majority of respondents' practice facilities. In addition, the availability of counseling support areas and counseling documentation forms is not always available. Research by Wibowo et al (2020) shows that providing counseling with aids reduces the level of errors in using drugs, in addition, patients will get additional information so that the information received can be remembered easily and more effectively. The availability of supporting counseling areas can make patients free to consult about therapy, privacy can be maintained so that the therapy provided is maximized (Septianingrum et al., 2020). The availability of facilities is a supporting factor that facilitates a behavior, so that a behavior will be difficult to realize if it is not supported by the availability of facilities (Pakpahan et al., 2021).

The policies referred to in this study are the availability of Standard Operating Procedures for implementing counseling and the availability of incentives for implementing counseling. Efforts to encourage increased implementation of pharmaceutical services include setting service fees including counseling (Harlianti & Novitasari, 2020). Counseling by community pharmacists has been shown to improve clinical outcomes for patients (Suprobo & Fadillah, 2020). The existence of service/incentives can increase pharmacists' motivation in conducting counseling (Harlianti & Novitasari, 2020). Standard Operating Procedures are needed as motivation for

pharmacists in implementing pharmaceutical services consistently, so that the reinforcing factor, namely the existence of a policy, is very important so that a behavior is continuously carried out (Pakpahan et al., 2021).

The majority of counseling implementation by pharmacists falls into the moderate category because its implementation is not carried out consistently. In accordance with the theory put forward by Green, the realization of knowledge and attitudes is called behavior, behavior is an individual's response to stimuli in real form (Green et al., 2022). Knowledge and attitudes related to counseling in the majority of respondents in this study are categorized as good, but an attitude is not necessarily manifested in behavior. Supporting factors are needed in the form of the availability of facilities so that it becomes a real behavior. The availability of supporting facilities for counseling in this study is categorized as lacking. The availability of facilities that must be considered in providing counseling in pharmacies is the counseling room or place, counseling aids, and documentation forms (Anggreni, 2021).

In addition, reinforcing factors are needed in the form of incentives and Standard Operating Procedures so that counseling is carried out consistently. This study has the advantage of revealing new phenomena related to factors that influence the implementation of counseling by pharmacists, especially in community pharmacies through the approach of Lawrence Green's health behavior theory. The limitation of this study is that it does not involve patients as research respondents so that the analysis of factors that influence the implementation of counseling can only be reviewed from the perspective of the service provider, namely the pharmacist.

CONCLUSION

The relationship between the availability of facilities and infrastructure is a variable that has the strongest influence on the implementation of counseling by pharmacists. Knowledge, attitudes, and policies are also factors that influence the implementation of counseling by pharmacists in pharmacies in Malang Regency.

SUGGESTIONS

Further research can be conducted using the patient's perspective to explore more deeply the factors that influence the implementation of counseling by pharmacists in pharmacies.

REFERENCE

Anggreni, N. P. R. (2021). Pelaksanaan Konseling Obat oleh Apoteker di Apotek Kabupaten Badung. *Indonesian Journal of Legal and Forensic Sciences (IJLFS)*, *11*(1), 10. https://doi.org/10.24843/IJLFS.2021.v11.i01.p02

Arimbawa, P. E., Dewi, D. A. P. S., & Hita, I. P. G. A. P. (2021). Kehadiran Apoteker dan Implementasi Good Pharmacy Practice (GPP) di Apotek Kota Denpasar. *Window of Health: Jurnal Kesehatan*, *4*(1), 57–64. https://doi.org/10.33096/woh.v4i1.686

Bakken, B. K., Oudeh, R., Gaither, C. A., Arya, V., Doucette, W. R., Witry, M. J., Kreling, D. H., Mott, D. A., & Schommer, J. C. (2022). Leadership Aspiration: An Intersectional Analysis of Racial and Gender Equity In Pharmacy. *Journal of the American Pharmacists Association*, *63*(1), 80–89. https://doi.org/10.1016/j.japh.2022.08.014

Cerbin-Koczorowska, M., Przymuszała, P., Fabianowska, S., Gałązka, N., & Zielińska-Tomczak, Ł. (2022). Learning Theory-Driven Tips for Designing Effective Learning Solutions for the Continuous Education of Community Pharmacists to Enhance Patient-Centered Care-A Qualitative Study. *Healthcare (Basel, Switzerland)*, *10*(7), 1167. https://doi.org/10.3390/healthcare10071167

Fajarini, H., & Ludin, A. (2020). Evaluasi Pelaksanaan Konseling di Apotek Etika Farma Brebes berdasarkan PERMENKES RI Nomor 73 Tahun 2016. *Jurnal Sains dan Kesehatan*, *2*(4), 418–421. https://doi.org/10.25026/jsk.v2i4.207

Green, L., Gielen, A. C., Ottoson, J. M., Peterson, D. V., & Kreuter, M. W. (2022). *Health Program Planning, Implementation, and Evaluation: Creating Behavioral, Environmental, and Policy Change*. Johns Hopkins University Press. https://doi.org/https://doi.org/10.1353/book.100161

Gyllensten, H., Fuller, J. M., & Östbring, M. J. (2022). Commentary: How Person-Centred Is Pharmaceutical Care? *International Journal of Clinical Pharmacy*, *44*(1), 270–275. https://doi.org/10.1007/s11096-021-01332-0

Harlianti, M. S., & Novitasari, K. (2020). Kepuasan dan Kemauan Membayar (Willingness To Pay) Jasa Pelayanan Konseling Apoteker di Surakarta. *Jurnal Farmasi Sains dan Praktis*, *6*(1), 76–83. http://journal.ummgl.ac.id/index.php/pharmacy

Hermansyah, A., Sukorini, A. I., & Rahem, A. (2021). The Remuneration of The Community Pharmacist in The Developing World: The Case in Indonesia. *Pharmacy Education*, *21*(2), 36–41. https://doi.org/10.46542/pe.2021.212.3641

Ilham, M. (2022). Peran Pengalaman Kerja dalam Meningkatkan Kinerja Karyawan: Suatu Tinjauan Teoritis dan Empiris. *Jmm Unram - Master of Management Journal*, *11*(1), 13–20. https://doi.org/10.29303/jmm.v11i1.695

Nurhaini, R., Munasari, F., & Agustiningrum, R. (2020). Kesesuaian Pelayanan Informasi Obat (PIO) di Apotek Kecamatan Tulung Kabupaten Klaten. *CERATA Jurnal Ilmu Farmasi*, *11*(1), 15–20. https://doi.org/10.61902/cerata.v11i1.94

Pakpahan, M., Siregar, D., Susilawaty, A., Tasnim, Mustar, Ramdany, R., Manurung, E. I., Sianturi, E., Rebecca, M. G. T., Sitanggang, Y. F., & Maisyarah. (2021). *Promosi Kesehatan & Perilaku Kesehatan* (Ronal Watrianthos, Ed.). Medan: Yayasan Kita Menulis

Parera, M. M. W., Kristina, S. A., & Yasin, N. M. (2021). Implementasi Standar Pelayanan Kefarmasian di Apotek Kupang. *Journal of Management and Pharmacy Practice*, *11*(3), 185. https://doi.org/10.22146/jmpf.65738

Qadus, S., Naser, A. Y., Al-Rousan, R., & Daghash, A. (2022). Utilization of Drug Information Resources Among Community Pharmacists in Jordan: A Cross-Sectional Study. *Saudi Pharmaceutical Journal*, *30*(1), 1–7. https://doi.org/10.1016/j.jsps.2021.12.001

Selifani, N. F., Pratiwi, H., & Mustikaningtias, I. (2022). Analisis Tingkat Pengetahuan dan Sikap Apoteker terhadap Obat Generik di Wilayah Kabupaten Banyumas. *Journal of Pharmaceutical Science and Clinical Research*, *7*(2) 223–237. https://doi.org/10.20961/jpscr.v7i2.57939

Septianingrum, N. M. A. N., Yuliastuti, F., & Hapsari, W. S. (2020). The Level of Knowledge of the Pharmacy Staff at the Pharmacy Against the Implementation of PMK Number 9 of 2017. *Proceedings of the 1st Borobudur International Symposium on Humanities, Economics and Social Sciences (BIS-HESS 2019)* 9. https://doi.org/10.2991/assehr.k.200529.116

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), 1–14. https://doi.org/10.1186/s40545-022-00502-3

Suprobo, M. D., & Fadillah, N. (2020). Peran Konseling Apoteker terhadap Pengetahuan Penggunaan Obat dengan Sediaan Khusus di Ketanggungan-Brebes. *JIFFK*, *17*(1), 1693–7899. https://doi.org/http://dx.doi.org/10.31942/jiffk.v17i01.3504

Wibowo, M. I. N. A., Setiawan, D., Ikhwaniati, N. D., & Sukma, F. A. (2020). Pengaruh Konseling dan Alat Bantu Pengingat Pengobatan terhadap Kepatuhan Minum Obat dan Outcome Klinik Pasien Diabetes Melitus dan Hipertensi. *Jurnal Ilmu Kefarmasian Indonesia*, *18*(2), 169–176. http://dx.doi.org/10.35814/jifi.v18i2.761