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**Research Article** 

# Mapping of Community Pharmacy Practices in Padangsidimpuan City

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#### ABSTRACT

**Objective:** to find out the conditions of practice and mapping related to the category of community pharmacy practices in Padangsidimpuan City.

**Methods:** The study was conducted by distributing assessment rubrics directly to 30 pharmacists in charge of pharmacies in the city of Padangsidimpuan. Data is the identity and choice of respondents for 2 or 3 descriptions of the level of compliance with each three-point scale; 0, 2 and 4 for each element. The level of fulfillment of standards consists of 7 categories based on cumulative points, and based on the average of points from each of the 5 standard aspects, including; professionalism, managerial, dispensing, pharmaceutical care, and public health services, depicted in spider web diagrams. This research was conducted in August - October 2019.

**Results:** Mapping the results of the pharmacy practice category to 30 community pharmacy practices in Padangsidimpuan, among others: 8 pharmacies received excellent categories, 5 pharmacies of good categories, 3 pharmacies of adequate categories, 3 pharmacies of poor categories, 5 pharmacies of substandard categories, 5 pharmacies of the category not feasible, 1 category pharmacy is not very feasible.

**Conclusion:** The average level of compliance with pharmacy practice standards in the city of Padangsidimpuan is included in the sub-standard category. Based on the average standard aspect points, professionalism has less categories, managerial has enough categories, dispensing enough categories, and pharmaceutical care is lacking categories and public health services have sub-standard categories.

Keywords: Mapping, Community Pharmacy, Practice Category

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#### INTRODUCTION

ommunity Pharmacy is an area of pharmaceutical practice where drugs and other health products are sold or provided directly to the community in retail, either by prescription or without a prescription <sup>1</sup>. In Indonesia, known as a Pharmacy, is defined as a pharmaceutical service facility where pharmacists practice pharmacists <sup>2</sup>.

Science and technology in the field of pharmacy has led to a shift in service orientation in the pharmaceutical world from drugs to patients which refers to the philosophy of pharmaceutical care. As a result of the shifting orientation of the service, Pharmacists are required to increase their competence in terms of skills, knowledge and behavior to be able to realize direct interaction with patients. With the predetermined standards, it is expected that the public can receive better quality health services. Pharmacists are one of the health workers who deal directly with patients, but the fact is often found that pharmacists are not in their practice <sup>3,6,7</sup>.

#### **METHOD**

#### **Research Design**

Research conducted in the form of non-experimental research, is cross-sectional descriptive. Respondents in this study were Pharmacists in Padangsidimpuan City. Data collection was carried out by direct observation at the pharmacy by distributing assessment rubrics that will be filled out by respondents. The assessment rubric was adopted from previous studies based on 5 standard aspects consisting of 40 elements <sup>4</sup>. The assessment rubric contains 2 or 3 levels of performance descriptions related to the 5 aspects of standard practice <sup>5</sup>. The data obtained were then analyzed statistically with the Mann-Whitney

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Test and the Kruksal test Wallis Test uses Statistical **Parameter Analysis** 

After the data is entered into the practice category determination model, the results obtained are grouped into 7 categories with the appropriate range: Very Good if points  $\geq 150$ , Good if points  $\geq 130$  to <150, Enough if points  $\geq 110$  to <130, Less if points  $\geq 80$  to <110, Below Standard if points  $\geq 60$  to <80, Not eligible if points  $\geq 41$  to <60, and Very inappropriate if points <40  $^4$ .

Program Service Service (SPSS) version 23.

#### RESULTS AND DISCUSSION

#### **Characteristics of Respondents**

Respondents in this study consisted of 30 pharmacists in charge of pharmacies in Padangsidimpuan City. Characteristics of respondents are seen in **Table 1**.

Table 1: Characteristics of Respondents

Gender	Amount	%
Male	6	20
Women	24	80
The Presence or Absence of other Work besides APA	Amount	%
There is	12	40
There is no	18	60
Other Types of Work besides APA	Amount	%
Health Office /BPOM /Hospital	8	26,67
Pharmacy College	3	10
Etc	1	3,33
There is no	18	60
Experience as APA	Amount	%
≤5 years	17	56,67
>5 years	13	43,33
Pharmacy Ownership	Amount	%
The Pharmacist's	9	30
Belongs to the Financier	21	70
No data		
Frequency of Attendance at the Pharmacy	Amount	%
1-3 times a month	16	53,33
1 time a week	0	0
2-3 time a week	4	13,33
Every day, at certain hours	4	13,33
As long as the pharmacy is open	6	20

### Level of Compliance with Pharmaceutical Practice Standards

The category of level of fulfillment of pharmaceutical practice standards is determined based on the cumulative

points of the results of the assessment of 40 standard elements which are divided into 5 aspects of the standard. **Table 2** below is the average category of pharmacy practice compliance standards of 30 pharmacies in Padangsidimpuan City based on standard aspects.

Table 2: Average Category of Fulfillment of Standards of Pharmaceutical Practices from 30 Pharmacies in Padangsidimpuan City Based on Standard Aspects

Standard Aspects		Average Point	Category	
1.	Professionalism	2,67	Less	
2.	Managerial	2,97	Enough	
3.	Dispensing	2,44	Less	
4.	Pharmaceutical Care	2,46	Less	
5.	Public Health Care	1,93	below standard	

**Figure 1** is a diagram of the standard compliance levels shown in Table 2 in the form of a spider web diagram, where the red line represents the points of assessment results and the blue line represents the level of compliance with pharmaceutical practice standards in the ideal category. Through this diagram it can be seen easily that as long as the red line has not coincided with the blue line, the level of compliance with pharmaceutical practice standards has not yet reached the ideal category.

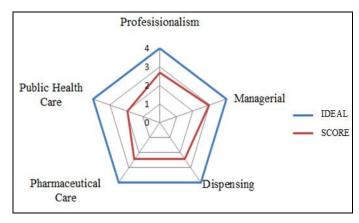


Figure 1: Average Diagram of Compliance with Pharmaceutical Standards from 30 Pharmacy in Padangsidimpuan City

## Mapping the results of the Community Pharmacy Practice Category

In **Table 3** you can see consecutive Pharmacy Characteristics Data, Attendance and Reward Levels,

Coaching Stages and Cumulative Points of Assessment Results, Categories and Accreditation, Spider Web Diagrams, and Coaching Strategies.

Table 3: Extracting the Results of the Pharmaceutical Practice Categories to 30 Community Pharmacy Practices in Padangsidimpuan City

No	Number of Pharmacy/ Owner/ Turnover	Level of Attendance and Rewards	Cumulative Stages and Points	Categories and Accreditations	Spider Web Diagram	Follow-up/ Coaching Strategy
1	8 Pharmacy/ 3 pharmacies that are self-owned, 3 pharmacies that are owned by investors, 1 pharmacy that is owned by BUMN/ 12,75M (level 4)	Attendance Level 3 Rewards Level 3	Continued 154	Very good A	Professionalism  4 3,95 3,95 3,85 3,85 3,85 3,75 Care  Pharmaceutical  Pharmaceutical  Care  Dispensing	Improved Practice Standards
2	5 Pharmacy / 4 Self-Owned Pharmacy, 1 Investor-Owned Pharmacy / 8M (Level 4)	Attendance Level 4 Rewards Level 2	Continued 142	Very good And Device the second secon	Profesisionalism  4 3-5 2.5 Publick Health Care 1.5 0.5 0 Dispensing	Provide a complementary pharmacist
3	3 pharmacies / 1 pharmacy which is self-owned, 2 pharmacies belonging to investors / 3M (Level 2)	Attendance Level 0 Rewards Level 1	Continued 123	Enough B	Professionalism  4  3-5  2-5  Publick Health Care  Pharmaceutical  Care  Dispensing	Performance Quality Improvement

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4	2 Pharmacy /	Attendance	Among	Less		Increased
'	3 Pharmacy-	Level 0			Profesisionalism	Pharmacist
	Owned Investors /	Rewards Level 1	86,67	С	3.5	Involvement
	3.8M (level 3)	Rewalds Level 1			25	
	3.8W (level 3)				Publick Health Care  1.5  Manageria	
					Pharmaceutical	
					Care Dispensing	
5	5 Pharmacy / 5	Attendance	Early	Below Standard		Warning
	Pharmacy-Owned	Level 0	-		Profesisionalism	waming
	Investors/ 4.5M (Level 3)	Rewards Level 2	69,2	Not Accredited	3.6	
	(Level 3)	Rewards Level 2			Publick Health 2.5	
					Publick Health 1.5 Manageria Care 0.5	
					0.5	
					Pharmaceutical	
					Care Dispensing	
6	5 Pharmacy / 5	Attendance	Early	Not Feasible	Profesisionalism	Warning
	Pharmacy-Owned Investors/ 5M	Level 0	52	Not Accredited	36	
	(Level 3)	Rewards Level 2			3 3 2.5	
				al of Pha	Date of Hards	
			INI		Publick Health Care  1.5  Managerial 0.5	
			30urn			
			130			
			18			
			'is	T	Pharmaceutical Dispensing	
			4	K.	Care	
7	1 Pharmacy / 1	Attendance	Early	Very Unworthy	Profesisionalism	Warning
	Pharmacy-Owned Investors/ 3.5M	Level 0	32	Not Accredited	3.6	
	(Level 3)	Rewards Level 2	100		3 25	
			100		Publick Health 1.5	
			TC/s		Care	
				and Devi	0.5	
					Dt	
					Pharmaceutical Dispensing	

#### Relationship between Level of Fulfillment of Pharmaceutical Practice Standards with Respondent Characteristics

The relationship between the level of compliance with pharmaceutical practice standards with the characteristics of respondents was statistically analyzed with the Mann-Whitney Test and the KruksalWallis Test with a significance value limit of p <0.05.

Based on the results of statistical analysis with the Mann-Whitney Test it is known that the sex and pharmacist practice experience shows no significant relationship (p>0.05), where gender and practical experience do not affect the level of fulfillment of pharmaceutical practice standards. Statistical analysis with the Mann-Whitney Test for the presence or absence of other occupations, pharmacy ownership, and statistical analysis with the Kruksal Wallis Test for other types of work variables, the presence of Pharmacists, the amount of Pharmacists'

monthly rewards, pharmacy turnover shows a significant relationship (p < 0.05) to the level of compliance with pharmaceutical practice standards. This is likely due to the absence of other jobs, the rewards obtained are adequate, respondents have more opportunities to attend and more actively do pharmacy practices better.

#### CONCLUSION

Based on the conclusion of this research, the level of fulfillment of pharmaceutical practice standards, in the implementation of pharmaceutical practices in pharmacies in Padangsidimpuan, is categorized as sub-standard (Average cumulative points of 75.96). The situation and condition of the implementation of pharmacy practices concerning the 5 aspects of standards must still be improved and improved through systematic and gradual and more professional guidance and supervision by all levels of the Ministry of Health, especially the

Padangsidimpuan City Health Office in collaboration with the Professional Organization of IAI PC TABAGSEL.

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