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Pharmaceutical Services in Pharmacies and Customer Satisfaction: A Cross Sectional Study in the Banjarbaru Area.

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ABSTRACT

Pharmaceutical services activity at pharmacies should implement the Government standard. The aim of this study were to measure the quality of pharmaceutical services. The research design was a cross-sectional study using Government guidelines for pharmaceutical services in pharmacies. The participant of this research were 21 pharmacist and 42 pharmacist assistant at 21 pharmacies in the area of the North and South Banjarbaru in January to March 2015. The instrument was originally developed to measure pharmaceutical services quality focused on clinical pharmacy services, inventory control, administrative, facilities and infrastructure, and evaluation of services quality. The result showed that only 19,05% of pharmacies were included on good category of the pharmaceutical services. Focused on the services, 76,19% of pharmacies were good on clinical pharmacist services; 100% were good in inventory control; 57,14% were moderate on administrative; 57,14% were moderate category for facilities and infrastructure; and 42,86% moderate for evaluation quality services. These shows that pharmaceutical services at pharmacies in North and South Banjarbaru areas have not implemented the Government standard yet.

Keywords : Pharmaceutical Services, Banjarbaru, Pharmacies.

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INTRODUCTION

Pharmacists's responsibility have expanded significantly over the years, from primarily dispensing and compounding of medications to include more patient-care roles [1]. A professional pharmacy service is defined as an action or set of actions undertaken in or organised by a pharmacy, delivered by a pharmacist or other health practitioner, who applies their specialised health knowledge personally or via an intermediary, with a patient/client, population or other health professional, to optimise the process of care, with the aim to improve health outcomes and the value of healthcare [2]. Pharmaceutical services is a form of direct services and responsibility of pharmacist to improve the patient's quality of life [3]. This set of actions includes the research, development and production of medicines and health supplies, for their selection as well as the programming, procurement, distribution, dispensation, quality guarantee of products and services, and the follow-up and evaluation of usage.

Pharmaceutical services activity at pharmacies should implement the Government standard [4]. Several studies reported only 47,63% of pharmacist in Medan [5], and 56,16% of pharmacist in Yogyakarta [6] did pharmaceutical services according Government standard. More than 90% of swamedication services in Jakarta did by pharmacist assistant [7]. Only 50% of customer pharmacist known who is pharmacist [8]. The aim of this study were to measure the quality of pharmaceutical services in The Banjarbaru area. The data will be use to evaluate and increase the pharmacist's level of responsibility to patient.

EXPERIMENTAL

Research Design

The research design was a cross-sectional study using Government guidelines for pharmaceutical services in pharmacies.

Location and Time of Research

The research did at 21 pharmacies in the area of the North and South Banjarbaru in January to March 2015.

Participant

The participant of this research were 21 pharmacist and 42 pharmacist assistant at 21 pharmacies in the area of the North and South Banjarbaru

Instrument

The instrument was originally developed to measure pharmaceutical services quality focused on clinical pharmacy services, inventory control, administrative, facilities and infrastructure, and evaluation of services quality.

Validity and Reliability Questionnaire

The validity of questionnaire were analyzed using Statistical Package for Social Sciences (SPSS) version 21. Sample size for validation is 2:1 or 10:1 from total responden [9]. The questionnaire was valid if the significant number more than 0,05 [10]. The questionnaire reliability was confirmed by the Cronbach's alpha coefficient as more than or equal to 0,6 [11]

The question were develop based on Government guideline for pharmaceutical services included 54 item in five focused as clinical pharmacy services (32 items), inventory control (3 items), administrative (7 items), facilities and infrastructure (2 items) and evaluation of services quality (10 items). Validation and reliability of questionnaire was done by 10 pharmacist and 20 pharmacist assistant that provided pharmaceutical services. Its validity had confirmed ($P < 0,05$) and its reliability was calculated by Cronbach's alpha method ($\geq 0,6$).

Data Analysis

To evaluated the quality of pharmaceutical services on 21 pharmacies, we analysis into 3 level of categories. The score above 80% indicated the good quality of pharmaceutical services, 61-80% indicated of moderate quality and the score below 60% indicated the poor quality.

The scoring method for each focused was undertaken based on a 3-point scale (good, moderate, and poor) see table 1.

Table 1. The Scoring Method for Each Focused.

	Poor	Moderate	Good
Clinical pharmacy services	0 – 21,33	21,34 – 42,66	42,67 – 64
Inventory control	0 – 2	3 – 4	5 – 6
Administrative	0 – 4,67	4,68 – 9,34	9,35 – 14
Facilities and infrastructure	0 – 1,33	1,34 – 2,66	2,67 – 4
Evaluation of service quality	0 – 6,67	6,68 – 13,34	13,35 – 20

RESULT AND DISCUSSION

The Quality Level of Pharmaceutical Services at 21 Pharmacies in The Banjarbaru Area

Based on Government guideline for pharmaceutical services at pharmacies, pharmaceutical services quality focused on clinical pharmacy services, inventory control, administrative, facilities and infrastructure, and evaluation of services quality. The result showed the quality level of pharmaceutical services at 21 pharmacies in The Banjarbaru area see on figure 1.

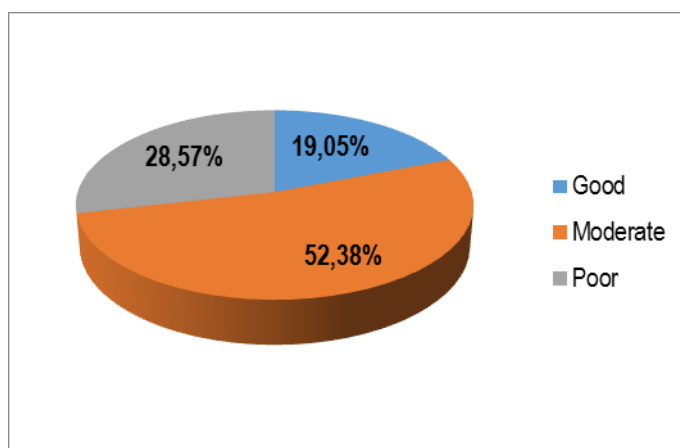


Figure 1. The Quality Level of Pharmaceutical Services at 21 Pharmacies in The Banjarbaru Area

Only 19,05% pharmacies provided pharmaceutical services according Government standard. Most pharmaceutical services is currently focused on drug dispensing. Only few pharmacist and pharmacist assistant provided the other component of pharmaceutical services such as counseling, home care, symptoms advice, follow-up, inventory control and evaluation of service quality. In the PEER study it was found that most pharmacist and pharmacist assistant liked providing pharmaceutical services as Government standard but had difficulties finding time for it. Some research showed that pharmaceutical services can contribute to improve clinical outcomes, preventable drug related problem and total cost of care [12]. The pharmacists association should make sure that pharmacist in their area implemented the Government standard for pharmaceutical services in pharmacies.

The Quality Level of Pharmaceutical Services in Five Focused (Clinical Pharmacy Services, Inventory Control, Administrative, Facility and Infrastructure, Evaluation of Service Quality) .The result showed the quality level of pharmaceutical services in five focused can see on table 2.

Table 2. The Quality Level of Pharmaceutical Services in Five Focused

No.	Focused	Frequency (N=21 pharmacies)	Prose ntase (%)	Level of Pharmaceutical Services Quality
		16	76,19	
1	Clinical Pharmacy Services	5	23,81	Good
		0	0	
		21	100	
2	Inventory Control	0	0	Good
		0	0	
		9	42,86	
3	Administrative	12	57,14	Moderate
		0	0	
		9	42,86	
4	Facility and Infrastructure	12	57,14	Moderate
		0	0	
		5	23,81	
5	Evaluation of Service Quality	9	42,86	Moderate
		7	33,33	

Pharmaceutical Services Focused on Clinical Pharmacy Services

According to Government guideline, clinical pharmacy services included screening prescription, drug dispensing, counseling, health education, symtoms advice, home care, and follow-up. The result (see table 2) showed 21 pharmacies provided good clinical pharmacy services eventhough not in all component. Most pharmacy did not provided home care (only 33,33% from 21 pharmacist) and follow-up (only 28,57% from 21 pharmacist). Home care and follow-up were critical step to prevent treatment failure or other drug related problem. It is more valuable than selling drug product [12].

Pharmaceutical Services Focused on Inventory Control

The inventory control activities included drug selection, purchasing, and storage of medicine. The result showed (see table 2) showed 21 pharmacies provided good inventory control. Drug selection based on pattern of the disease, drug purchases from official channel, and drug storage has aligned the provisions.

Pharmaceutical Services Focused on Administrative

Administrative is an activity related to maintaining information files (narcotics and psikotropics report, patient medication record and documentation of health education and counseling). The result showed (see table 2) showed 21 pharmacies provided moderate administrative. Only 52,38% from 21 pharmacies maintaining files about patient medication record and only 19,05% from 21 pharmacies had recorded of health education and counseling. Documentation can provided patient medication data for prevent drug related problem [13]

Pharmaceutical Services Focused on Facilities and Infrastructure

Facilities and infrastructure supported improved of pharmaceutical services. The result showed (see table 2) showed 21 pharmacies provided moderate facilities and infrastructure. Only 42,86% from 21 pharmacies had counseling room. Counseling services required for individual patient and not worth to known

by other. So, counseling must be done in private room. That the reason why pharmacies must had private room for counseling.

Pharmaceutical Services Focused on Evaluation of Service Quality

Analysis of service's quality was to evaluated all activities in pharmacies for further improvement of pharmacy services. The evaluation of service quality included document standard operating procedures (SOP), satisfaction survey, and suggestion box. The result showed (see table 2) showed 21 pharmacies provided moderate evaluation of services. Some pharmacies did not had SOP. Only 28,57% pharmacies did satisfaction survey and 19,05% pharmacies had suggestion box. Standard operating procedures only stored in the computer files and pharmacist did not do evaluation for their SOP. Several reasons pharmacies did not had SOP, first pharmacist did not know if the government requires every pharmacy had the SOP and second, activities in pharmacies was spontaneous activity so it did not need to be made into SOP [14].

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