# Level of Pharmacist Knowledge on Writing Integrated Patient Progress Notes in One of the Government Hospital in the City of Bukittinggi, West Sumatra, Indonesia

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Abstract:- Knowledge about writing integrated patient progress notes is needed to produce useful clinical information for patient therapy. The knowledge is about what needs to be done and considered as well as how to write and what methods are appropriate for pharmacists to write in CPPT. Pharmacists are one of the patient care professionals related to monitoring drug use who will collaborate with other PPAs. The pharmacist's work document will be recorded in CPPT in an integrated manner with other PPAs. This document is one of the assessment indicators in the Hospital accreditation process. The results of several studies convey that generally the writing of CPPT by pharmacists is not written correctly and some are written completely. This study aims to assess the level of knowledge of pharmacists on the writing of CPPT according to the Technical literature of Pharmaceutical Service Standards in Hospitals issued by the Ministry of Health in 2019. This study used prospective analytic research methods with data collection sourced from questionnaires filled out by pharmacists on duty in the Inpatient Room. The questionnaire sampling technique used purposive sampling. The results showed that of the 20 questionnaire statements made were declared valid because they showed r count greater than r table and the questionnaire was said to be reliable because the Cronbach Alpha value was greater than and equal to 0.6, so the questionnaire could be declared reliable. The level of knowledge of pharmacists on duty in the Inpatient Room towards writing Integrated Patient Progress Notes (CPPT) in one of the Bukittinggi Government Hospitals in West Sumatra is on average in the fair category because it still has a percentage value  $\leq 75\%$ , namely 67.5%

Keywords:- Science; Questionnaire; Integrated Patient Progress Notes; PPAs (Professional Care Giver).

#### I. INTRODUCTION

Knowledge is a state where a person knows something well obtained through experience and training or education. Another definition of knowledge is any knowledge that is useful for the task to be performed [1].

The concept of Clinical Pharmacy emerged from a variety of factors, including the development of the subdiscipline of Hospital Pharmacy since the 1920s, the growth of Clinical Pharmacology since the 1940s. The historical expansion of pharmacy's role to include instruction on appropriate patient medication use was a logical extension of the pharmacist's role as a drug maker. In addition, clinical pharmacy practice bridges the gap between professional and lay understanding of drug action [2].

Several elements of the accreditation assessment of hospitals require the implementation of continuity of care and documentation of integrated patient therapy progress assessment between Professional Providers (PPAs). The care plan describes the care and treatment/action to be provided to a patient. Collaborative monitoring of drug therapy is conducted to optimize a patient's drug therapy, involving both the treating professional (PPA) and the patient. Monitoring includes the expected effects and side effects of medications. Monitoring of drug therapy is documented in the Integrated Patient Progress Note (CPPT) in the Medical Record [3].

Writing patient therapy documents needs to be organized effectively and with a well-developed train of thought. The written composition of pharmaceutical documentation requires an appropriate introduction, relevant information, clear rationale, and conclusion. There are several methods of writing CPPT including SOIP, which was later changed to SOAP known as (Subjective, Objective, Analysis, Plan, HOAP (replacing Subjective and Objective with History and Observations), SOAPIER (used by nursing: adding Implementation, Evaluation, Revision), DAR (used by nursing: Data, Action, Response), FARM (Findings, Assessment, Resolution, Monitoring), WDT (Pharmacist's Workup Of Drug Therapy), PMDRP (Pharmacist's Management of Drug- Related Problems), or the American Society of Health-System Pharmacist's PCP (Pharmacist's Care Plan) [4].

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During fieldwork, instruction and assessment of SOAP note writing is provided, as clinical documentation is a fundamental patient care skill. Standardization of patient care processes and documentation of pharmacist services in the medical record are important to understand. Evaluation tools to evaluate SOAP notes (such as rubrics or checklists) include recommended components to document comprehensive medication management findings. However, there have been no published evaluations of how SOAP notes are assessed in education [4,5].

Several studies on CPPT writing have been conducted at DR. M. Djamil Hospital in Padang where there were 32 CPPTs (78.12%) written completely and none were written correctly [6]. The results of another study showed that there were 35 CPPTs (74.29%) written completely and none were written correctly [7]. Another study of 367 CPPTs obtained data 74% written completely [8]. From the results of the field practice data, the researcher wants to assess the level of knowledge of pharmacists on the writing of Integrated Patient Progress Notes (CPPT) carried out at one of the Bukittinggi Government Hospitals in West Sumatra which refers to the SOAP framework in the literature "Technical Guidelines for Pharmaceutical Service Standards in Hospitals" issued by the Ministry of Health in 2019 [9].

# II. RESEARCH METHODS

## A. Research Design and Data Collection

This study uses analytic descriptive methods with data collection sourced from questionnaires filled out by pharmacists on duty in the Inpatient Room. The questionnaire sampling technique used purposive sampling. The research will be conducted in the inpatient room of one of the Government Hospitals in Bukittinggi, West Sumatra. This research was conducted for 2 months (October 2022 to November 2022).

A valid questionnaire for measuring the level of pharmacist knowledge of writing Integrated Patient Progress Notes (CPPT) is not yet available from previous researchers. For this reason, it is necessary to first make a list of statements that describe the above. This study used a closed questionnaire where the answers were predetermined, requiring three responses, namely "TRUE", "FALSE" and "HESITATE".

Before the questionnaire was used for data collection in the study, it was first tested for validity and reliability. This test was conducted on 30 respondents who were not among the research respondents, but had the same characteristics as the research respondents. Respondents filled out the questionnaire on the Google Form link that had been given. Data were collected using valid and reliable questionnaires (pretest and posttest) to determine the level of knowledge of pharmacists assigned to the Inpatient Room on filling out the Integrated Patient Progress Note (CPPT) using the SOAP method. The questionnaire was completed using a questionnaire sheet which was filled in by checking the column provided for the statement that was answered 'TRUE' or 'FALSE' or "HESITATE".

# B. Data Analysis

#### Test the validity and reliability of the questionnaire How to test the validity and reliability of the questionnaire is as follows (Sutriawan, 2021)[10].

• Validity Test

The validity test was carried out using SPSS (Statistical package for the Social Sciences) software by calculating the correlation value. The instrument is said to be valid if the correlation value or t count> t table.

Reliability Test

The reliability test is carried out by calculating the Cronbach Alpha value. If the Cronbach Alpha value  $\geq 0.6$  then the questionnaire can be declared reliable.

# > Questionnaire on inpatient pharmacists

After the questionnaire data is collected, a check is carried out whether the questionnaire that has been filled in by the respondent has been filled in correctly. The questionnaire response was given Scor "1" for statements answered with "Correct' and Scor "0" for statements answered "Wrong" or "Hesitate ". To analyze the data from the questionnaire, descriptive analysis techniques were used. The data were processed in the form of percentages to determine the level of knowledge of pharmacists on duty in the Inpatient Room.

According to Arikunto (2008)[11], scoring the level of knowledge using the formula:

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P = \frac{F \times 100\%}{n}
Description:
P = Percentage valueF = Correct answern = Number of questions
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According to Budiman and Riyanto (2013), in categorizing the level of knowledge, it can be grouped into two groups for the respondents studied, namely health workers:

- The level of knowledge is categorized as good if the value is > 75%.
- The level of knowledge is categorized as Fair if the value is  $\leq 75\%$  [12].

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# III. RESEARCH RESULTS

A. Validity and reliability test of the Pharmacist Knowledge Level Questionnaire

## ➢ Questionnaire Validation Test

The results of the validation test of 20 questionnaire statements were processed using SPSS and the results of r count > r table so that they were declared valid.

# > Reliable Test

The results of the reliability test of 20 questionnaire questions using SPSS can be seen in the column (Cronbach's Alpha if Item Deleted) the value is  $\geq 0.6$  so that the questionnaire that has been made is declared reliable [13].

B. The results of the questionnaire "Pharmacist's Knowledge Level of Writing with the SOAP Method (Subjective, Objective, Assessment, Plan) in CPPT (Integrated Patient Progress Notes)

| Pharmacist   | Number of<br>correct<br>answers | Percentage<br>value (%) | Knowledge<br>Level<br>Category |
|--------------|---------------------------------|-------------------------|--------------------------------|
| Pharmacist 1 | 13                              | 65                      | Fair                           |
| Pharmacist 2 | 14                              | 70                      | Fair                           |
|              | Total                           | 135                     |                                |
|              | Average                         | 67,5                    | Fair                           |

Table 1: Results of the Pharmacist Knowledge Level

 Questionnaire on CPPT Writing

From the data in Table 1. it can be seen that the average level of knowledge of pharmacists in one of the Government Hospitals in Bukittinggi city, West Sumatra with an average value of 67.5% (Fair).

# IV. DISCUSSION

CPPT writing by pharmacists has been running with a manual system and is in the process of an electronic system. The pharmacist in charge of the Ranap section is a fresh graduate pharmacist and the pharmacist team does not yet have a certificate of training or a Clinical Pharmacy seminar. The knowledge obtained in filling the CPPT is the direction of the Head of the Pharmacy Installation and the provision of field practice experience while in the Pharmacist Lecture. This hospital also does not yet have a Master of Clinical Pharmacy Staff Pharmacist.

## A. Test the validity and reliability of the questionnaire

The questionnaire that has been made has met the requirements in the validity and reliability tests to be used as indicators to measure the level of pharmacist knowledge. The 20 statements have a t-count> t-table value (>0.239) indicating all statements are valid. and has an average Cronbach's Alpha value of 0.957 ( $\geq$ 0.6) indicating all 20 statements are reliable. The questionnaire statements were made based on the 2019 Ministry of Health literature and the results of researchers' observations in several hospitals related to things that often occur in the field in writing CPPT Pharmacists.

#### B. Pharmacist's knowledge level

The questionnaire is one way to measure the level of knowledge, so it is often used in research. The questionnaire filled in by the sample pharmacist was to see if the pharmacist's level of knowledge of writing CPPT was good.

The pharmacist's level of knowledge about writing CPPT can affect the writing pattern. The level of knowledge can be obtained from education, seminars, workshops and training. The learning culture in each hospital also greatly influences the experience of pharmacists writing CPPT. The origin of the institution where the pharmacist staff graduated from is also one of the contributors to the culture of writing CPPT in the hospital. The desire of pharmacists to continue to develop self-competence is very necessary in improving knowledge.

## V. CONCLUSION

The level of knowledge of pharmacists on duty in the Inpatient Room towards writing Integrated Patient Progress Notes (CPPT) in one of the Government Hospitals in Bukittinggi, West Sumatra, is on average in the Fair category because it still has a percentage value  $\leq 75\%$ , namely 67.5%.

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