

Description of Incompleteness of Prescription Writing at Surabaya Islamic Hospital A. Yani

Riskylah A'yun Faradinna, Budhi Setianto

Public Health Science Study Program, Faculty of Health, Universitas Nahdlatul Ulama Surabaya, Indonesia

riskylahayun036.km18@student.unusa.ac.id, budhisetianto@unusa.ac.id

Article Information

Submitted: 08 February 2023

Accepted: 10 February 2023

Online Publish: 20 February 2023

Abstract

Introduction: Medication error is an event that harms patients due to incorrect use of drugs during the treatment of health workers. Medication error can lead to increased mortality or mortality, increased duration of hospitalization, and increased cost of treatment. **Objective:** This study aims to provide an overview of efforts to reduce the incompleteness of prescription writing at Surabaya Islamic Hospital A. Yani in each of its parts, namely inscription, invocation, precriptio, subcriptio, and pro. **Method:** The type of research used is qualitative case studies and secondary data analysis of patient safety incompleteness of prescription filling at Surabaya A. Yani Islamic Hospital. Data collection by observation and interview. **Result and Discussion:** The results showed that efforts to reduce the incompleteness of prescriptions carried out by Surabaya A. Yani Islamic Hospital using the E-prescription system. It is hoped that the existence of E-prescription can reduce the occurrence of human error and make it easier for doctors and pharmacists to provide services. **Conclusion:** The conclusion of this study is that the doctor's identity and the date of writing the prescription in the inscription section, the dose of the drug in the precriptio section, the doctor's paraphrase in the subcriptio section and the patient's weight in the pro section. E-prescriptions are used as an upgrade system to replace manual prescriptions. Evaluation and socialization are carried out as an effort to reduce the number of incompleteness of writing recipes. **Keywords:** Incompleteness of Recipes; E-Recipe; Medication Error;

Introduction

The Decree of the Minister of Health of the Republic of Indonesia Number 1027 / MENKES / SK / IX / 2004 states that *medication error* is an event that harms patients due to the use of drugs during the treatment of health workers which can actually be prevented. Medication errors can occur in any treatment process, both in the prescribing process, *transcribing*, preparation and delivery of drugs (*dispensing*), and in the process of using drugs (*administering*). Errors in *prescribing* and administering are the two most frequent causes of treatment errors. Prescribing errors are generally divided into decision-making errors and prescription writing errors (Calligaris L, 2009).

Medication errors can occur in hospitals, health centers, clinics, and pharmacies. *Medication error* can significantly affect patient safety and treatment costs and result in harm to patients and their families. *Medication error* can lead to increased mortality or mortality, increased duration of hospitalization, and increased cost of treatment (Cheragi, 2013). *Medication error* is also a source of morbidity or morbidity (Walsh, 2017). *Medication error* not only has a bad impact on patients but also for attending physicians, nurses and institutions (White, 2011).

The incidence of medication error in Indonesia has not been recorded accurately and systematically, but the incidence of *medication error* is very often found in various health service institutions in Indonesia. The incidence rate due to errors in the demand for prescription drugs also varies, which is between 0.03-16.9%. In one of the studies, it was stated that there were 11% of *medication errors* in hospitals related to errors when handing over drugs to patients in the form of incorrect doses or drugs. Although the incidence of *medication error* is relatively large, it rarely ends until a fatal injury occurs on the part of the patient (Dwiprahasto, 2006).

Prescribing errors in terms of writing prescriptions include recipes that cannot be read, writing abbreviations that are ambiguous or have dual meanings, lack of writing important information such as prescribing date, dosage, route, frequency of drug administration (Bobb A, 2004). Based on the report of the PMKP unit of Surabaya Islamic Hospital A. Yani, the type of medication error that is still ranked highest in the most frequent incidents is the incompleteness of writing prescriptions.

Table 1
Categories at Surabaya A. Yani Islamic Hospital from 2019 to 2021

Categories of Incidents	2019	2020	2021	Total
Incompleteness of writing recipes	747	126	78	951
Duplication of therapy	77	56	98	231
Identity mismatch in recipes	41	26	28	95
Total	865	208	204	1277

Based on Table 1 of the Incident Category at Surabaya A. Yani Islamic Hospital in 2019 sampai 2021, it can be seen that there are three categories of incidents that occur the most are the incompleteness of prescription writing with the total incidence still being 951 incidents, duplication of therapy with 231 incidents, and identity discrepancies in the

prescription as many as 95 incidents. The problem of incompleteness of writing prescriptions is a form of *medication error*. There are many units that coordinate in the writing of prescriptions, but the problem of incompleteness of prescription writing refers to the pharmaceutical unit.

The incidence of incomplete writing of prescriptions at Surabaya Islamic Hospital A. Yani is the category of incidents that occur the most, although it continues to experience a decrease in the incidence rate every year. Previous studies only conducted studies of what percentage of prescription completeness.

Method

This research uses a qualitative research model. The purpose of qualitative research is to obtain a complete picture of a thing according to the human view studied. This research was conducted in December 2021 at Surabaya A. Yani Islamic Hospital. The number of informants is 3 people. The data collection techniques of this study are observation and interviews.

Results and Discussion

Result

Informant Overview

Table 2

Details of the characteristics of the informant

Code	Information
I ₁	aged 30-39 years, pharmacist professional education, working as the head of the pharmacy unit, and having worked for more than 10 years
I ₂	aged 20-29 years, pharmacist professional education, working as a companion pharmacist, and telah working for less than 6 years
I ₃	Aged 20-29, S1 education, working as a companion pharmacist, and having worked for less than 6 years

Overview of the Incompleteness of Writing Recipes in the *Inscriptio* Section

Inscriptio is a doctor's identity that contains the doctor's name, address, telephone number and license to practice number (SIP), the date of writing the prescription. In the inscription section, there are still often incomplete writing prescriptions in outpatient installations, both on the identity of the doctor and the date of making the prescription. The following are the results of observations in the *inscriptio* section at the Surabaya A. Yani Islamic Hospital:

Table 3
Observations of the *Inscription Section*

No.	Requirements of permenkes RI Number 72 of 2016	Field Realization	
		Appropriate	Non-Compliant
1.	Doctor's name, SIP, doctor's address, and doctor's phone number	-	√
2.	Date of writing the recipe	-	√

Based on Table 3, the observation results of the 2 requirements of the Indonesian Minister of Health Number 72 of 2016 are all incompatible.

Overview of the Incompleteness of Recipe Writing in the *Invocation Section*

Invocation is the R / mark on the left of every recipe writing. The doctor's written request in the Latin abbreviation "R/ = recipe" means take it or give it. Serves as the opening word for communication between the prescribing physician and the pharmacist in the pharmacy. The following are the results of observations in the *invocation* section at Surabaya A. Yani Islamic Hospital:

Table 4
Observations of the *Invocation Section*

No.	Requirements of permenkes RI Number 72 of 2016	Field Realization	
		Appropriate	Non-Compliant
1.	Latin abbreviation " R/ = recipe"	√	-

Based on Table 4, it can be seen that the observation results from the requirements of the Minister of Health of the Republic of Indonesia Number 72 of 2016 are appropriate.

Overview of the Incompleteness of Recipe Writing in the *Prescription Section*

A prescription is part of a prescription that consists of the name of the desired drug, the dosage form of the drug, and the amount of the drug requested. In the prescription section, there is still an incompleteness of prescription writing on dose writing. The following are the results of observations in the *prescription* section at Surabaya A. Yani Islamic Hospital:

Table 5
Observation Results of the *Prescription Section*

No.	Requirements of permenkes RI Number 72 of 2016	Field Realization	
		Appropriate	Non-Compliant
1.	Drug name	√	-
2.	Dosage form	√	-
3.	Drug dosage	-	√

Based on Table 5, it can be seen that the observation results of the 2 requirements of the Minister of Health of the Republic of Indonesia Number 72 of 2016 there are 2 requirements that are already appropriate and 1 requirement that is not suitable.

Description of Incompleteness of Prescription Writing at Surabaya Islamic Hospital A. Yani

Incompleteness of writing the dosage of the drug still occurs on the part of the *prescription*

An overview of the incompleteness of recipe writing in the *Subscription* section

Subscription is the signature/paraphrase of the prescription author's doctor which acts as the legality and validity of the prescription. The following are the results of observations in the *subscription* section at Surabaya Islamic Hospital A. Yani:

Table 6*Subscription Section Observations*

No.	Requirements of permenkes RI Number 72 of 2016	Field Realization	
		Appropriate	Non-Compliant
1	Paraphrase doctor	-	√

Based on Table 6, it can be seen that the observation results of the requirements of the Minister of Health of the Republic of Indonesia Number 72 of 2016 are not appropriate. On manual prescriptions some doctors give signatures and some do not.

Overview of the Incompleteness of Recipe Writing in the *Pro* Section

Pro is a part of a prescription that contains the patient's identity consisting of the patient's name, age and patient weight. The following are the results of observations in the *pro* section at Surabaya Islamic Hospital A. Yani:

Table 7*Pro Part Observations*

No.	Requirements of permenkes RI Number 72 of 2016	Field Realization	
		Appropriate	Non-Compliant
1	Patient name	√	-
2	Age of the patient	√	-
3	Patient weight	-	√

Based on Table 7, it can be seen that the observation results from the requirements of the Minister of Health of the Republic of Indonesia Number 72 of 2016 are not appropriate. The incompleteness of writing recipes on the *pro* part has been very rare after the introduction of E-prescriptions. Because the patient's identity has been completely inputted. However, for some polys who are still unable to use E-prescription, the patient's weight is still often not completed.

Discussion**An Overview of the Incompleteness of Writing Recipes in the *Inscription* Section at Surabaya Islamic Hospital A. Yani**

The problem of incomplete prescription writing that still occurs at Surabaya A. Yani Islamic Hospital is the absence of a doctor's identity or the date of writing the prescription. The identity of the doctor must be listed clearly and completely. This is very necessary if

there are unclear or dubious things in the prescription, so that the pharmacist can immediately confirm with the doctor concerned. The inclusion of the prescription date is also required, the date the prescription was made is used to determine whether the prescription is still suitable for use or the patient is advised to return to the doctor. Some countries set a maximum limit of three months a prescription can be served, others a six-month one (De Vries, 1994). The writing of the doctor's identity and the date of writing the prescription is used to avoid misuse of the prescription, patient safety and facilitate services for the patient.

The improvement effort that is currently being carried out is to apply E-prescription instead of manual prescription. With the E-prescription, it is hoped that it can make it easier for doctors to write prescriptions and can reduce the occurrence of *human error* when writing prescriptions, so that the incidence of incomplete prescription writing can decrease. In addition, every prescription that comes in is also screened as an effort to detect incompleteness in the writing of prescriptions and unclear doctor's writings. Incomplete prescriptions will be collected and reported to the PMKP unit as incidents. Evaluation and socialization are also carried out as a follow-up to efforts to reduce the incompleteness of writing recipes.

The results of this research are in line with the results of a review of previous studies that in the *inscription* section there is no writing of the doctor's name and the date of writing the prescription at the Outpatient Polyclinic of the Mayjend HM Ryacudu Kotabumi Hospital (Rasmi Zakiah Oktarlina, 2017). The writing of the doctor's name, and the date of writing the prescription are very important in the writing of the prescription. The importance of writing the doctor's name, and the date of writing the prescription is because when there is an error in prescribing drugs, pharmacists, pharmacy managers or pharmacies can directly contact the doctor concerned to conduct a re-examination (Susanti, 2013).

An Overview of the Incompleteness of Writing Recipes in the *Invocation* Section at Surabaya Islamic Hospital A. Yani

Bis based on the provisions of Surabaya Islamic Hospital A. Yani through Standard Operating Procedures related to prescribing, **SPO. Farm. X. 34. 03. 2019. Thing. 01** on prescribing/requesting drugs and treatment instructions, is a process carried out in requesting needs related to drugs or medical devices carried out by doctors to the pharmacy unit written on the prescription sheet. The prescription administration requirement, namely the R / mark for each drug / preparation included in the *invocation* section is always written. There is no incidence of incompleteness of recipe writing in the *invocation* section because the R / mark is included in the format of the recipe sheet. The doctor does not need to rewrite the R sign because it is already listed on the manual prescription sheet or E-prescription.

The results of this research are in line with the results of a review from previous studies that the *medication error* in the *invocatio* section was 0%. The assessed component is the writing of the R / = resipe sign on the left side of the recipe which has

the meaning of take or give. The recipe at RSD Maj. Gen. HM Ryacudu Kotabumi has included the writing of R / (Rasmi Zakiah Oktarlina, 2017). That way the doctor will not make a mistake in writing the R/ sign. The R/ sign is a sign of communication between the prescribing physician and the pharmacist at the pharmacy. It can be said that in the observed samples all prescriptions have an R/ mark as an opening tool for communication of doctors and pharmacists.

An Overview of the Incompleteness of Writing Recipes in the *Prescription* Section at Surabaya Islamic Hospital A. Yani

The *problem with medication errors* that still occur in the *prescription* section is the dosage of the drug. An improper amount of medication can hinder the process of administering the drug to the patient. The wrong dose given to the patient can result in under dose or over dose in the patient.

Prescription screening is the first thing to do after the prescription arrives at the pharmacy unit. This is one of the efforts to detect the incompleteness of writing prescriptions. Incomplete prescriptions will be confirmed to the doctor who wrote down the prescriptions. In addition, pharmacists also agreed to doctors that any prescription that is not clearly stated in the dosage will be given the lowest dose of the drug. It aims to maintain the smooth process of drug service to patients. Upon completion, incomplete prescriptions will be collected and reported to the PMKP unit as incidents. Evaluation and socialization are also carried out as a follow-up to efforts to reduce the incompleteness of writing recipes. The improvement effort that is currently being carried out is to apply E-prescription instead of manual prescription.

The results of this research are in line with the results of previous research reviews that the medication error in the *prescription* section is in the form of an unclear drug name of 0%, no concentration / dosage of the preparation 53.1%, no dosage form 26%, no dose of administration (amount) 0%, and no unit dose 56.2% (Rasmi Zakiah Oktarlina, 2017). The occurrence of errors on the part of the prescriptio is very dangerous for the patient. No concentration of the drug, dosage form of the drug, the number of administrations, as well as the unit of dose will affect the therapeutic or treatment needs of the patient. So that it can result in not achieving treatment goals and can even harm the patient's condition caused by dose insufficiency or overdose (Susanti, 2013).

An Overview of the Incompleteness of Recipe Writing in the *Subscription* Section at Surabaya Islamic Hospital A. Yani

The inclusion of paraphrases is a problem that still often occurs in the *subscription* section. The inclusion of doctors' paraphrases is important in writing prescriptions because it serves as the legality, validity of prescriptions, authenticity of prescriptions, and can be held accountable in the event of misuse of prescriptions. Incoming prescriptions are also screened as an effort to detect incomplete writing of prescriptions. Incomplete prescriptions will be collected and reported to the PMKP unit as incidents. Evaluation and socialization are also carried out as a follow-up to efforts to reduce the

incompleteness of writing recipes. Evaluation and socialization will be carried out as a follow-up to the report of incompleteness of writing prescriptions. The improvement efforts currently carried out by Surabaya A. Yani Islamic Hospital are by applying E-recipes instead of manual recipes.

The results of the previous research also showed that the *medication error* in the subcriptio section still has incomplete writing in the doctor's paraphrase section (Riski, 2020). The doctor's paraphrase is also one of the aspects that need to be included in the writing of the prescription to avoid abuse and to ensure the authenticity of the prescription that the doctor in question correctly made the prescription.

An Overview of the Incompleteness of Writing Recipes in the *Pro* Section at Surabaya Islamic Hospital A. Yani

The problem of incompleteness of writing prescriptions that still occurs in the *pro* section is the writing of the child's name and age. The patient's identity in the prescription is useful to avoid mixing drugs with other patients during the pharmacy service process. In addition, the identity of the patient is also used in terms of the calculation of the dosage of the drug and dosage forms. After screening, the incomplete prescription will be confirmed to the doctor concerned by the pharmacist on duty on the spot and the pharmacist will remind the poly doctor to write the prescription completely. Furthermore, incomplete prescriptions will be collected and reported to the PMKP unit as incidents to determine how follow-ups are carried out in an effort to reduce the incompleteness of prescription writing.

The improvement effort that is currently being carried out is to apply E-prescription instead of manual prescription. With the E-prescription, it is hoped that it can make it easier for doctors to write prescriptions and can reduce the occurrence of *human error* when writing prescriptions, so that the incidence of incomplete prescription writing can decrease. But there are still some polys that do not yet support the use of E-prescriptions, so they still use manual recipes. In poly that has not used E-prescription, the incidence of incompleteness of prescription writing still occurs frequently so that pharmacies cannot double-check the dose of the drug on the prescription.

Previous research has shown that medication errors in the *pro* section indicate that there are some prescriptions that are not listed as patient weight (Tiansi Veren Maalangen, 2019). Weight loss is one of the important aspects needed in the calculation of the dosage, especially the dosage of the child. For pediatric patients, it shows the need for concrete actions to reduce the incidence so that it can be avoided things that are detrimental to pediatric patients, therefore pharmaceuticals have a strategic role in the way prescription screening is carried out (Maria Mamarimbing, 2010).

There are several factors that can cause *medication errors* in the prescribing phase such as the number of doctors on guard, the number of patients every day, the doctor's ignorance of writing prescriptions in accordance with the 2014 Minister of Health Regulation, or internal factors experienced by doctors. The cause of errors in writing prescriptions is work environment factors, namely disturbances and interruptions of the

patient's family; patient factors are patients who are uncooperative with their condition; health worker factors i.e. poor doctor writing, knowledge, and excessive workload (Bayang AT, 2012)

Conclusion

Incompleteness of prescription writing in the *inscription* section is still common in the identity of the doctor and the date of writing the prescription. Screening is carried out as an effort to detect the incompleteness of writing prescriptions. E-prescriptions are used as an *upgrade* system to replace manual prescriptions. Evaluation and socialization are carried out as an effort to reduce the number of incompleteness of writing recipes. The results obtained from the study on the *invocation* section showed that there was never an incompleteness of writing the recipe. This is because the R mark / has been formatted in the recipe sheet and E-recipe.

The results obtained from the study in the *prescriptio* section show that there is still an incompleteness of prescription writing in writing drug doses. The pharmacy and doctors agreed that if the prescription is not written, the lowest dose of the drug will be given. Screening is carried out as an effort to detect the incompleteness of writing prescriptions. E-prescription, evaluation and socialization are carried out as an effort to reduce the number of incompleteness of writing recipes. The results obtained from the study on the *subscriptio* section show that it is rare for incompleteness of prescription writing to occur. Screening is carried out as an effort to detect the incompleteness of writing prescriptions. E-prescription, evaluation and socialization are carried out as an effort to reduce the number of incompleteness of writing recipes.

The results obtained from the study in the *pro* section showed that there was still an incompleteness of prescription writing in the patient's weight. Screening is carried out as an effort to detect the incompleteness of writing prescriptions. E-prescription, evaluation and socialization are carried out as an effort to reduce the number of incompleteness of writing recipes.

Reference

- Bayang AT, e. a. (2012). Faktor Penyebab Medication Error di RSUD Anwar Makkatutu Kabupaten Banteeng. *Fakultas Kesehatan Masyarakat Universitas Hasanuddin*.
- Bobb A, d. (2004). *The Epidemiology of Prescribing Errors: The Potential Impact of Computerized Order Entry*. *Archives of Internal Medicine*.
- Calligaris L, d. (2009). *Errors and Omission in Hospital Prescriptions: A Survey of Prescription Writing in a Hospital*. *BMC Clinical Pharmacology*.
- Cheragi. (2013). *Types and Causes of Medication Errors from Nurse's Viewpoint*. *Iran J Nurs Midwifery Res*.
- De Vries, D. (1994). *Guide to Good Prescribing a Practical Manual*. *World Health Organization Action Programme on Essential Drug*.
- Dwiprahasto, I. (2006). Intervensi Pelatihan untuk Meminimalisir Risiko Medication Error di Pusat Pelayanan Kesehatan Primer. *Jurnal Berkala Ilmu Kedokteran 2006*. *Jurnal Berkala Ilmu Kedokteran*.
- Maria Mamarimbing, .. e. a. (2010). *Evaluasi Kelengkapan Administratif Resep dari Dokter Spesialis Anak pada Tiga Apotek*.
- Rasmi Zakiah Oktarlina, Z. W. (2017). Kejadian Medication Error pada Fase Prescribing di Poliklinik Pasien Rawat Jalan RSD Mayjend HM Ryacudu Kotabumi. *JK Unila*.
- Riski, N. F. (2020). Gambaran Skrining Kelengkapan Resep di Puskesmas Tegal Barat. *Poltek Tegal*.
- Susanti, I. (2013). Identifikasi medication error pada fase prescribing, transcribing dan dispensing di depo farmasi rawat inap penyakit dalam gedung teratai, instalasi farmasi RSUP Fatmawati Periode 2013. *UIN Syarif*.
- Tiansi Veren Maalangen, .. e. a. (2019). Identifikasi Medication Error pada Resep Pasien Poli Interna di Instalasi Farmasi Rumah Sakit Bhayangkara Tk. III Manado. *Pharmacon*.
- Walsh, E. K. & dkk. (2017). Economic Impact of Medication Error: A Systematic Review. *Pharmacoepidemiology and Drug Safety*.
- White, A. A. & dkk. (2011). After the Apology-Coping and Recovery after Errors. *Virtual Mentor. Am Med Assoc*.

Copyright holder:

Riskylah A'yun Faradinna, Budhi Setianto (2023)

First publication right:

KESANS: International Journal of Health and Science

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0
International License

