

DETERMINANTS OF DELAYS IN OUTPATIENT MEDICAL RECORDS PROVISION AT THE BESUKI GENERAL HOSPITAL, SITUBONDO, INDONESIA

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Abstract. Delays in outpatient medical records provision from registration until the files are distributed to the polyclinic at the Besuki General Hospital, Situbondo had increased from 15% in January 2022 to 17% and 23% in February and March 2022, respectively. These problems have an impact on patient waiting time and the service process at the outpatient polyclinic. The study aimed to analyze the determinants of delays in outpatient medical records provision at the Besuki General Hospital. Qualitative research was applied by observation, in-depth interview, and documentation. The informants were 2 registration officers, 2 filing officers, and 1 supervisor of the Medical Record Unit. The determinants of delays in the outpatient medical records provision were inability of officers in providing medical records, unavailability of standard operating procedure (SOP) on medical records provision, the lack of shelves and computers, the absence of the outguide, and insufficient budget.

Keywords: delay, medical records, outpatient

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INTRODUCTION

Hospital is a health service provider carrying complete health services for patients, *ie* outpatient, inpatient, and emergency services.

The ideal hospitals are one of the basic needs of patients who come to get health services (Aliefia *et al*, 2020). The Besuki General Hospital is one of the hospitals located in Situbondo Regency, managed by the government. As the increasing of community's need in health facilities, hospitals continue to develop the quality of their services, one of which by improve the service quality in medical record unit.

It is clear that the waiting time of outpatient medical record should be ≤ 10 minutes, starting from patient's registration to the medical record availability in the polyclinic (Ministry of Health, 2008). Waiting time is one of service quality's indicators and that main factor causing patient's dissatisfaction in the health care's facilities. The faster medical record's provision in the polyclinic, the faster medical treatments received by the patients and vice versa. The preliminary study which conducted at the Besuki General Hospital by in-depth interview and observation showed the delays in providing outpatient medical record (>10 minutes) (Ministry of Health, 2008).

The delays of medical records provision from January to March 2022 at the Besuki General Hospital were presented in Table 1. It is clear

Table 1
Number of delays of outpatient medical records provision at the Besuki General Hospital, 2022

Month observed	Delay ≤ 10 minutes <i>n</i> (%)	Delay >10 minutes <i>n</i> (%)
January 2022 (N = 642)	545 (85)	97 (15)
February 2022 (N = 479)	396 (83)	81 (17)
March 2022 (N = 574)	442 (77)	132 (23)

that the percentages of delay escalating from 15% to 23%. It is contrary to Ministry of Health (2008) which stated that the standard in providing outpatient medical record was ≤ 10 minutes until the files available at the polyclinic.

It was known that the internal cause of medical record delays was educational background of staff which had not met the minimum standard of the Diploma in Medical Record. A number of staff members only graduated from Senior High School. Moreover, another cause of that delays was the unavailability of standard operational procedure (SOP). As for the outpatient medical record delays, causes were insufficient numbers of shelves to store medical record, and the medical record outguide were not used optimally. Oktavia *et al*, (2018) suggested that medical record outguide is one of important facilities which controlling and tracking the medical record utilization.

If the delay in medical records provision is not resolved, it can impact on the length of patient's waiting time in getting medical treatment. As the consequence, so many queues of patients occurred at the polyclinic. Furthermore, the service quality can be dropped and results in patient's dissatisfaction. The faster the medical records available in the polyclinic, the faster the medical treatments received by the patients and vice versa (Supriadi and Rosania, 2019).

Based on the delay problems, we aimed to analyze the determinants of delays in outpatient medical records provision at the Besuki General Hospital following the performance theory approach by Timpe (1992). The causes of such delays were categorized as internal factors (skill, effort, attitude, and behavior of officer), and the external factors (behavior of workmate/boss/subordinate, resource, and budget).

MATERIALS AND METHODS

This research was a qualitative study. Data collection was done by observation, in-depth interview, and documentation. There were 5 respondents involved including the Head of Medical Record Unit, 2 Registration Officers, and 2 Filing Officers. Data validity test was carried out by technique triangulation and source triangulation. The source triangulation was conducted by comparing the results of in-depth interview with 2 registration officers; 2 filing officers and Head of Medical Records. Meanwhile, the technique triangulation was carried out by comparing the results of in-depth interview, observation and documentation.

The research was conducted from November 2022 to January 2023 at the Besuki General Hospital.

This study had been reviewed and approved by Ethical Committee of Politeknik Negeri Jember with the certificate number of 017/PL17.4/PG/2023.

RESULTS

The results revealed that the time required by officers to provide outpatient medical records at Besuki General Hospital did not meet the Ministry of Health standard of ≤ 10 minutes (Ministry of Health, 2008). The following is the analysis results related to determinant of delays in providing outpatient medical record at the Besuki General Hospital based on internal and external factors.

Determinant of delays in providing outpatient medical record at the Besuki General Hospital based on internal factors

The internal factors were analyzed by the ability, effort, attitude and behavior of medical record officers.

Ability of medical record officers

The ability of medical record officers was viewed by their qualifications becomes part of their competences. Information obtained from the interview and documentation explicated that educational background of medical record officers met the standard (get Diploma of Medical Record/Health Information Management). As consequence, the officers were capable of providing outpatient medical record from registration service to the polyclinic on time. But, one of officers only graduated from Senior High School, therefore, she did not meet the educational background standard. Educational background of the medical record officers at the Besuki General Hospital is shown in Table 2.

Table 2

Number of delays of outpatient medical records provision at the Besuki General Hospital, 2022

No.	Work position	Educational background
1.	Registration Officer 1	Senior High School
2.	Registration Officer 2	Diploma IV of Medical Record
3.	Filing Officer 1	Diploma IV of Health Information Management
4.	Filing Officer 2	Diploma III of Medical Record
5.	Head of the Medical Record Unit	Diploma III of Medical Record

Effort of medical record officers in achieving the goal of providing medical records on time

In this study, the effort variables were rated based on compatibility of work implementation with SOP for filing, distributing, and searching for medical record.

Officers have made some efforts to reduce delays in providing medical records. However, there was only one SOP of registration available and no SOP in providing medical record at the Besuki General Hospital.

The result was supported by observation which revealed that there was no SOP in medical record provision at the Besuki General Hospital. Moreover, many officers did not know there was a time limit for providing medical record. This was in line with interview results conducted with registration officers and filing officers regarding the standard of waiting time for providing medical record:

"I don't know the time limit of waiting time for medical record provision, the only thing I know is we should prepare it as soon as possible." (Registration Officer 1)

"What is the standard for medical record provision? I think soon as possible, if you provide medical record." (Filing Officer 1)

Attitude on providing medical records

In this study, attitude reflects how the officer responds to their responsibility in fulfilling procedure to provide medical record on time at the outpatient polyclinic of the Besuki General Hospital. Interviews with registration officers and filing officers yielded the following information:

"We do the best to complete patient registration." (The 1st registration officer)

“The main thing is that I do my best to comply with the standard registration time. So, the provision of medical record is not too late.”
(Registration Officer 2)

“I try to keep the service to meet the time standard. Nevertheless, sometimes it takes a bit longer time to find the medical records.” (Filing Officer 1)

“As long as we look for it fast, we must quickly provide the medical records. But sometimes the medical records are hard to find. As consequence, sometimes it's late.” (Filing Officer 2)

The interview results showed that the attitude of the registration officers was good. They did their responsibility well and did not take a long time in registering patients. Additionally, the filing officers also showed the attitude that they carried out their duties well, but sometimes the searching process of medical record took a bit longer time, so it takes a long time to find medical records. The Head of the Medical Record Unit already realized that delays in providing outpatient medical records could adversely affect the quality service for patients.

Behavior to complete the job assigned

The observation revealed that the officers were disciplined because all of them did not violate existing regulations and came to work according to the schedule. The five officers could be said as being responsible at their works since they did their job correctly according to their main duties (Fig 1). Additionally, the officers trying to fulfill the tasks completely as soon as possible. So, it was expected that the delays in providing medical record could be decreased. However, even though the officers had good behavior in carrying out their duties, the delays of outpatient medical record still happening.



Fig 1 - Officers' activities in registration and filing room

Determinant of delays in providing outpatient medical record at the Besuki General Hospital based on external factors

Behavior of co-worker/boss/subordinate

The interview revealed that there were coordination, direction, motivation, and cooperation among officers at the Besuki General Hospital. The Head of the Medical Record Unit also gave the praise to the officers when they did the great job. The followings are interview results from the informants.

“Sometimes we just get the compliments. If we ask, the leader will tell us how to fulfill the job.” (Filing Officer 1)

“Giving praise, if the medical record prepared on time. However, we will be reprimanded if the delays in medical record provision happened.” (Filing Officer 2)

Resources

Based on the results of the study, it showed that the medical record shelves at the Besuki General Hospital were not enough. So, the other medical records were stored in the boxes (Fig 2). Furthermore, the computer procurement and medical record outguide utilization were not optimal. The followings are interview results from the informants.

“Maybe it is due to the lack of shelves, the other medical records are still stored in boxes like that on the floor.” (Filing Officer 1)

“We need additional shelves because there are still a lot of scattered medical records.” (Filing Officer 2)



Fig 2 - Medical records were stored in the boxes and scattered

“In my opinion, the shelves are not enough. Apart from that, there is no outguide either.” (Head of the Medical Record Unit)

The number of computers available certainly encourage the service process at medical record unit. It was found that medical record unit had enough computers but the computers did not work properly. This was supported by the results of the interviews as follows:

“There is a computer here, but how about it, if I say it is enough, but its quality is not good.” (Filing Officer 2)

“The computers are available, but many officers complain that there are not enough of them.” (Head of the Medical Record Unit)

Apart from computers, a facility which supports the provision of medical records is a medical record outguide. The results of interviews with the registration and filing officers present that they did not use medical record outguide in controlling and tracking the medical record utilization.

It was clearly that there was no outguide used by officers as instructions for exiting outpatient medical record at the Besuki General Hospital.

Budget

The result illustrates that budget was one of causing factors of delays in the outpatient medical record provision. It was because the budget for medical record management had not been fully fulfilled at the Besuki General Hospital, even though the budget funds play an important role in achieving good service.

Every year, the Medical Record Unit at the Besuki General Hospital submits a budget plan to support medical record services. In the year 2022, there were 72 tools or materials which had been submitted to the procurement unit, *ie* shelves, computers and outpatient registration book. However, the medical record outguide was not included in the lists. The number of shelves used to store medical records were not enough. As consequence, many medical records were hard to find.

The lack of computers also led to ineffective services at the Medical Record Unit. Computers are very helpful to assist officers in operating hospital information management system (HIMS) and generating monthly or annual reports. The computers and shelves had been written in the budget plan, but they were not approved by procurement unit.

The result illustrates that a budget plan had been sent to the procurement unit, but many tools and materials were not provided by procurement unit.

DISCUSSION

The results illustrate that one of medical record officers did not graduate with the Diploma III of Medical Record and did not meet the qualification standard set by Ministry of Health (Ministry of Health, 2007). A timely medical records provision can be supported by officers' competence. An officer in the medical record unit should have educational background at least Diploma III of Medical Record (Ministry of Health, 2007). The medical record provision can be fulfilled by officers who have good competencies in accordance with their respective fields (Karlina *et al*, 2016). However, the discrepancy of one of officers' educational background did not cause delays in the provision of outpatient medical records, since the other officers had the appropriate educational background.

Officers have made some efforts to reduce delays in providing medical records. However, the filing and registration officers did not know the time limit of medical records provision at the outpatient polyclinic. As consequence, the officers felt they did not have a target in completing their onus. This can be seen from the information provided by officers that the effort is one of the determining factors for delays in providing outpatient medical records. The results of this study are consistent with the findings of Aprilia *et al* (2020) and Aliefia *et al* (2020). The delays of medical records provision to the outpatient polyclinic were due to the absence of SOP instructions. So, the officers did not have a standard in providing outpatient medical record.

The attitude of the registration and filling officers was good. They did their onus well and did not spend a long time in registering patient. Meanwhile, the searching process of medical record took a bit longer

time. The Head of the Medical Record Unit was looking for a solution to overcome this problem by recruiting more officers. It can be said that the attitude of the five respondents was good because they have tried to optimize the service quality by avoiding delays in outpatient medical record provision. The better the officers' attitude, the better the service quality in providing outpatient medical record. Sya'baniah *et al* (2019) suggested that a person's attitude can be judged when they say they like or dislike something. If an employee has a positive attitude, then he will try to work harder.

The medical record officers did not violate existing regulations and came to work according to the office hours. Nevertheless, the searching of outpatient medical record took a lot of time. The delays of medical record provision could be fixed by increasing the officers' awareness and obedience regarding to applicable policies (Pamungkas *et al*, 2015).

The behavior of co-worker/boss/subordinate is an act, behavior, carried out by colleagues in order to achieve certain goals. The existence of co-worker, boss, and subordinate can affect the performance of officers in providing medical. The interview revealed that there were coordination, direction, motivation, and cooperation among officers at the Besuki General Hospital. A person must have a constructive and positive relationship with colleagues in his/her workplace where coordination, direction, motivation, and cooperation are required to achieve good performance. The instruction which is given by the Head of the Medical Record Unit predispose the officers' performance. The results of this study are consistent with the findings of Jaffisa *et al* (2017) who found that a good leader gives instruction to his subordinates sincerely so that the same mistakes will not occurred. Angelina *et al* (2015) also stated that colleagues can give the different overviews related to appraisal process

and can be used as the comprehensive representation of the individual performance. The instruction given properly from the leader will become a requirement that affects performance.

In term of resources, shelves at the Besuki General Hospital were not enough. As consequence, a number of medical records were stored in the box. If the shelves are full, the medical record can be torn due to untidy storing. The results are consistent with the findings of Meiliani and Trisna (2022) who suggested that the overcapacity in storing medical records generated torn in the medical records. Andria and Sugiarti (2015) suggested that the delays in providing medical record were due to the lack of the shelves used to store medical records. The number of computers in medical record unit did not fulfill the needs. The computers can support the management of medical record data, *ie* supporting the medical decision, increasing the effectiveness in generating data and information, and increasing the efficiency of the utilization of resources and costs (Syahbaniar *et al*, 2021). Therefore, the medical record unit needs to provide new computers to manage the medical records, particularly in decreasing the number of delays. Additionally, it was noticed that there was no outguide to substitute the medical record thatb was removed from storage at the Besuki General Hospital. According to Ministry of Health (2006), medical records are allowed to be borrowed and taken from the medical record room as long as there is an outguide as a substitute. Outguide then acts as a control tool in tracking borrowed medical records (Wati and Nuraini, 2019). Furthermore, the absence of outguides results in the occurrence of misfiles, difficulties in finding medical records and delays in the medical record provision (Oktavia *et al*, 2018). Outguide makes it easier to find the whereabouts of medical records and retrieve when it needed (Adiningsih and Wijaya, 2021).

Moreover, budget is needed in the medical records management such as infrastructure procurement in outpatient medical record provision. A budget is a written plan regarding organization activities made quantitatively for a certain period of time (Wati and Nuraini, 2019). Generally, the budget is expressed in units of money or tools/ materials (Agusalim *et al*, 2013). The research conducted by Aprilia *et al* (2020) revealed that a lack of funds for procurement of facilities could lead to delays in providing medical record files.

In conclusion, the internal factors that cause delays in the provision of outpatient medical record at the Besuki General Hospital were inability of medical record officers, the absence of SOPs on medical record provision, and the indiscipline of officers in searching of medical records while the external factors were insufficient numbers of medical record shelves and computers, the absence of outguides and insufficient budget at the Medical Record Unit. To overcome these problems, the procurement unit needs to provide the shelves, computers and medical record outguides while the medical record unit should generate the SOP of outpatient medical record provision, and the Besuki General Hospital needs to implement punishment and reward based on performance appraisal in order to develop officers' discipline in carrying out their duties.

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CONFLICT OF INTEREST DISCLOSURE

The authors declare that there is no conflict of interest regarding this article.

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