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Analysis of Medical Records Unit Employee Workload During the COVID-19 Pandemic at Mitra Masyarakat Hospital, Mimika, Indonesia

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ABSTRACT

The workload of medical record unit staff at a hospital can vary depending on the size and type of hospital, the number of patients, and the internal policies implemented. Medical record unit employees are responsible for collecting, managing, and storing patient medical records. During the COVID-19 pandemic, the workload of employees in the medical records unit greatly increased because there was a surge in patients due to the pandemic. An increase in the number of patients occurred in all hospitals in Indonesia, including Mitra Masyarakat Hospital, Mimika. This study aimed to describe the workload profile of employees in the medical records unit at Mitra Masyarakat Hospital during the COVID-19 pandemic. This research is descriptive observational research. The location of this research is Mitra Masyarakat Hospital, Mimika, Indonesia. The research was conducted from March to August 2021. Data sources were obtained from interviewing informants, observing and measuring workload in the medical record unit before and during the pandemic. The variables measured in this study were available working time, workload standards, supporting task standards, and supporting task factors, as well as the need for human resources in the Mitra Masyarakat Hospital work unit. The results of the study show that the available working time for medical record unit personnel for each section is 1300 hours/year or 78,000 minutes/year. The need for health human resources for the medical record unit is as many as 20 people. There are 9 medical record officers currently owned by RSMM. Thus it can be concluded the number of employees is less when compared to the workload in the medical record unit at Mitra Masyarakat Hospital.

1. Introduction

Employee workload refers to the amount of work or tasks expected or given to an employee during a certain period of time, usually in one week or one month.¹ Workload includes various types of tasks, responsibilities, projects, or obligations that must be completed by an employee within the scope of work.² Employee workload can vary depending on the type of job, position level, industry, and company policy.³ Reasonable and suitable workloads can help organizations achieve their goals with high efficiency and productivity.^{4,5} However, excessive or poorly managed workload can cause stress and decrease employee performance. Several factors that can affect employee workload include the number of tasks and

responsibilities that must be completed, time limits or deadlines for completing work, the level of difficulty and complexity of tasks that must be faced, the availability of resources such as time, manpower, and equipment as well as work priorities and the level of urgency of these tasks.^{3,6}

The workload of medical record unit staff at a hospital can vary depending on the size and type of hospital, the number of patients, and the internal policies implemented.⁷ Medical record unit employees are responsible for collecting, managing, and storing patient medical records. They must ensure that complete, accurate, and up-to-date medical records are available to patients who need them. The medical record unit must verify the identity of the patient and

ensure that the information entered in the medical record matches the actual medical data. This is important to prevent errors and other problems related to medical data. Medical record unit employees must also follow the policies and standards set by the hospital or health institution regarding the collection, storage, and management of medical records. With the various obligations and responsibilities carried out by the medical record unit, it is very important for managers or supervisors to understand and manage the employee's workload wisely.⁸⁻¹⁰

During the COVID-19 pandemic, the workload of employees in the medical records unit greatly increased because there was a surge in patients due to the pandemic.^{7,8} An increase in the number of patients occurred in all hospitals in Indonesia, including the Mitra Masyarakat Hospital. Mitra Masyarakat Hospital is a type c private hospital located between the cities of Timika and Kuala Kencana. This study aimed to describe the workload profile of employees in the medical records unit at Mitra Masyarakat Hospital during the COVID-19 pandemic.

2. Methods

This research is descriptive observational research. The location of this research is Mitra Masyarakat Hospital, Mimika, Indonesia. The research was conducted from March to August 2021. The research population was employees at the medical records unit at Mitra Masyarakat Hospital. Data sources were obtained from interviewing informants, observing and measuring workload in the medical record unit before and during the pandemic. The variables measured in this study were available working time, workload standards, supporting task standards, and supporting task factors, as well as the need for human resources in the Mitra Masyarakat Hospital work unit.

3. Results and Discussion

Profile of Mitra Masyarakat Hospital Mimika

Mitra Masyarakat Hospital (RSMM) is one of the hospitals managed by PT Freeport Indonesia's

partnership funds as the main donor. The owner, formerly known as the Irian Jaya Community Development Institute (LPMI), then changed to the Amungme and Kamoro Community Development Institute (LPMAK) and underwent another name change to YPMAK (Amungme and Kamoro Community Development Foundation). The management of RSMM is the Timika Caritas Papua Foundation (YCTP), a foundation under the auspices of the Timika Diocese Catholic Church. The aim of establishing a hospital is to provide health services to the Mimika people and, in particular, the people of the seven tribes (two main tribes and five kinship tribes) two main tribes namely Amungme and Kamoro, and five kinship tribes namely Damal, Dani, Nduga, Moni, and Ekari/Mee.

Calculation of available working time (AWT)

Based on the results of the study, available working time for RSMM medical record personnel for each section in the medical record unit in 1 year is 1260 hours/year, which is rounded up to 1300 hours/year or 78,000 minutes per year (Table 1). Based on government regulations, working hours for government agencies is 37.5 hours/week, for 5 working days or 6 working days as stipulated so that available working time (AWT) is 1,200 hours/year or 72,000 minutes/year.^{11,12} Based on the results of research and observations, the working hours of activities at the RSMM medical record unit have exceeded the available working time provisions set by the Indonesian government.

Calculation of time for main and supporting activities of the medical record unit

The main activities of the medical record unit consist of patient registration, preparation of files, assignment of disease codes according to ICD-X, document storage, and reporting. The time norms for each main activity of the medical record unit are presented in Table 2. A description of the time for supporting activities for medical record unit employees is presented in Table 3.

Table 1. Calculation of working time available at the RSMM medical record unit.

Code	Component	Information	Formula	Total	Unit
A	B	C	D	E	F
A	Working day	6 working days/week	52 weeks	312	Day/year
B	Official leave			15	Day/year
C	National holiday			23	Day/year
D	Take training			2	Day/year
E	Absent (sick)			3	Day/year
F	Working time per week	7 hours/day	6 days	37,5	Hours/week
G	Effective working hours		70% x 37.5 hours	26,25	Hours/week
WT	Working time	6 working days/weeks	26,25/6	4375	Day/year
AWT	Available working time (days)		312-(15+23+2+3)	269	Day/year
	Available working time (hours)		312-(15+23+2+3) x 4375	1260	Hours/year
Available working time (AWT) /in hours				1300	Hours/year
Available working time (AWT) /in minutes				78000	Minutes/year

Table 2. Description of the main activities of the RSMM medical record unit.

Medical record unit	Main task	Time norms
Outpatient registration	Registration of outpatients, input of patient data into the hospital system, and creation of medical identity cards.	14 minutes
Registration of inpatients and emergencies	Registration of inpatients, registration, patient information, and education.	18 minutes
Preparation of medical record files	File retrieval, completeness check, and reassembly of medical record files.	10 minutes
Disease coding according to ICD-X	Outpatient, inpatient, and emergency room coding.	12 minutes
Document storage	File preparation, return, and delivery of medical record files.	7 minutes
Reporting	Data input for outpatient, inpatient, and emergency patients.	6 minutes

Table 3. Supporting task time norms.

Description of supporting duties	Time norm	Unit
Take training	360	minutes/month
Join the meeting	180	minutes/week
Attend seminars	360	minutes/year

Determination of RSMM medical record unit standards workload

Based on the calculation results, the available working time for medical record unit personnel for each section is 1300 hours/year or 78,000

minutes/year. Calculation of the standard workload is done by formulating the available working time divided by the time norm. Table 4 presents the results of calculating the workload standard for the RSMM medical record unit.

Table 4. RSMM medical record unit workload standards.

No	Task type	Workload components (activities)	Time norm	Working time is available (minute)	Workload unit
1	Main tasks	Outpatient	14 minutes/patient	78000	5571
		Hospitalization/ER	18 minutes/patient	78000	4333
		Assembling	10 minutes/medical record	78000	7800
		Coding	12 minutes/medical record	78000	6500
		Filing	7 minutes/medical record	78000	11.142
		Reporting	6 minutes/medical record	78000	13.000

Determination of supporting task standards (STP) and supporting task factors (FTP)

After calculating the standard workload, supporting task standards and supporting task factors

can be calculated. Table 5 shows the calculation of standard supporting tasks (STP) and supporting task factors (FTP) from each part of the RSMM medical record unit.

Table 5. Calculation of supporting task standards (STP) and supporting task factors (FTP).

No	Task type	Workload components	Time norm	Activity time	AWT	FTP %
1	Supporting tasks	Take training	360 minutes/month	4320	78.000	6
		Join the meeting	180 minutes/week	9360	78.000	12
		Attend seminars	360 minutes/year	360	78.000	0,5
Supporting task factor (FTP) in %						18,5
Support task standard (STP)=1/(1-FTP/100)						0,815

Calculation of the need for health human resources in the RSMM medical record unit

Calculating the HR needs of the medical record unit requires available working time (AWT), standards workload (SW), and supporting task standards (STP).

Then use 1-year achievement data, namely from the number of patient visits. Based on the achievement data for the year 2021, the total number of patient visits was 28,287 people, consisting of 19,198 outpatients and 9089 inpatients.

Table 6. The number of health human resource needs.

Task type	Activity	Achievements (1 year)	Standard workload	Health HR needs
1	2	3	4	5(3)/(4)
Main tasks	Outpatient	28.287	5571	5,07
	Hospitalization/ER	28.287	4333	6,52
	Assembling	28.287	7800	3,62
	Coding	28.287	6500	4,35
	Filling	28.287	11.142	2,53
	Reporting	28.287	13.000	2,17
The number of basic task personnel needs				24,26
Supporting tasks	Supporting task standards			0,815
Total health HR needs = Total required staff x standard of supporting tasks)				19,77
Rounding off				20

Based on Table 6, the need for health human resources for the medical record unit is 20 people. There are 9 medical record officers currently owned by RSMM. Thus it can be concluded the number of medical record employees at RSMM is still lacking when compared to the workload. An increase in workload that is not accompanied by an increase in manpower and capacity will have significant negative impacts and consequences on individuals and teams.¹³⁻¹⁵ Employees will experience stress, decreased work quality, burnout, and high absenteeism. Likewise, the quality of service at the hospital will have an effect, such as patient service slowing down, the length of the patient data integration process at the hospital, and the decline in the quality of medical record services.¹⁶ Several studies have presented the relationship between the workload of health workers and services in health facilities.^{17,18} The workload of health workers has a significant effect on the quality of service and patient safety.

4. Conclusion

The number of employees is less when compared to the workload in the medical records unit at Mitra Masyarakat Hospital, Mimika, Indonesia. An increase in workload that is not accompanied by an increase in manpower and capacity will have significant negative impacts and consequences for individuals and work units.

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