ANALYSIS OF CASEMIX UNIT LABOR NEEDS USING THE ABK-KES METHOD AT MITRA SEHAT HOSPITAL

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Abstract

Mitra Sehat Hospital in Situbondo won the general conference title for the first time in 2018. However, the number of case mix officers in this hospital is only six, and they face many tasks as the workload is disproportionate to their number. This study used the ABK-Kes methodology to determine the staffing needs of the Casemix department of Mitra Sehat Situbondo Hospital in 2023. The methodology used was a descriptive study with a qualitative approach. The population of this study consisted of six Case Mix officials with different educational backgrounds, namely, four with D4 RMIK education, one with a D2 degree in informatics, and one with a high school diploma. Data were collected by observation and interviews. From the results of calculations using the workload analysis (ABK-Kes) methodology, the need for the Casemix section is 10 PMIK. Meanwhile, Mitra Sehat Hospital has only six PMIKs, indicating the need to add four more staff to reduce the high workload and optimize staff working hours.

Keywords: Casemix Unit, Requirements, Workload

Introduction

RI Minister of Health Regulation No. 3 of 2020 regarding Hospitals, a health service institution that provides comprehensive individual health services that provide inpatient, outpatient and emergency services [1].

Human Resources (HR) play an important role in an organization, therefore human resource planning is needed to align the workload and the number of human resources they have [2]. Reliable and sophisticated equipment is meaningless without the performance of human resources. Human resources are a combination of a person's thinking ability and physical strength. Meanwhile, work performance is motivated by the desire to achieve self-satisfaction [3]. The aim of HRK needs planning is to make appropriate plans for the number, type and qualifications of HRK needs in line with organizational needs by using appropriate planning methods to achieve health development goals.

Development and supervision of the quality of Health Human Resources (SDMK), utilization of Health Human Resources (SDMK), training and education of HRK, and utilization of HRK, including improving welfare, must be based on the management of HRK as a whole [4]. One way to calculate labor requirements is to use Medical Workload Analysis (ABK-Kes).

The ABK Kes method is a method for calculating HR needs based on the workload carried out by each type of HRK at each health service facility (Fasyankes) in line with their main duties and functions [5]. Calculation of workload using the ABK Health method aims to plan the need for medical personnel at both administrative and service levels in accordance with the workload and obtain information on the number of employees needed which can account for the actual planning of employee needs in line with the organization's workload [6].

Based on a preliminary study conducted, at Mitra Sehat Hospital the casemix unit consists of 6 officers with an educational background of D4 RMIK totaling 4 officers, D2 informatics 1 officer, and high school graduate totaling 1 officer. Mitra Sehat Situbondo Hospital, in the case mix unit officers often work more than working hours (overtime) and also several officers from the registration department help do work that should only be done by casemix officers. This is due to a lack of labor, causing the workload in the casemix unit to increase. To support optimal health services, trained, competent and productive medical records personnel are needed so they can provide the best health services. If HRK is not met in line with needs, there could be a high workload, which could cause officers to experience higher levels of fatigue and work accidents, as well as disrupting patient services. As the tasks that must be carried out by medical personnel increase, it is important to realize that some employees may juggle several roles without adequate research regarding workload. The lack of a clear job description can cause an increase in the workload felt by medical record officers. Because it is not yet clear whether the available staff is sufficient to fulfill all the tasks carried out, it is important to evaluate staff needs in the medical records unit in line with the existing workload. This aims to reduce the possibility of excessive tasks accumulating [7].

The quality of service provided by competent employees has a major influence on the quality of service provided by the medical records department. Because service quality is related to workload, the workload required to achieve high quality service is proportional to the number of personnel. Workload is the amount of work that needs to be carried out by a position or organizational unit, which is the product of standard time and workload [8].

Based on the existing problems, the author is interested in raising and studying the title "Analysis of the need for health workers based on workload using the ABK-Kes method in the Casemix unit". The aim of this research is to see the number of working staff needed in the Casemix unit based on the ABK Kes method in 2023 at Mitra Sehat Situbondo Hospital.

Method

In this research, the ABK-Kes method is used to calculate health human resource (HR) needs based on the volume of work carried out by SDMK in each health facility with reference to their main tasks and functions. This method helps determine the number of personnel needed to meet health service needs efficiently and effectively in line with the tasks that need to be carried out.

The method used in this research is a descriptive method with a qualitative approach. This approach allows researchers to study data in depth using observations, interviews, and document analysis to explain phenomena and explore meaning from the data collected.

Results

    a. Determine health service facilities and types of health human resources (HRK)

In this research, Mitra Sehat Situbondo Hospital is the health facility that is the place of research, and the type of SDMK that is the object of research is the Mitra Sehat Situbondo Hospital Case Mix unit.

Table 1 List of Case Mix Unit Officers at Mitra Sehat Situbondo Hospital

No.	Name	education	Position
1.	Malikal bulgis, S. ST	D4 medical records and health information	Inpatient coding
2.	Anisah fajrian ali, S. ST	D4 medical records and health information	Inpatient coding
3.	Inas anisah, S. ST	D4 medical records and health information	Outpatient coding
4.	Eka fiktri suciati ningsih, STr.Kes	D4 medical records and health information	Completeness of inpatient claims
5.	Sasdli idani	D2 Informatics	Completeness of inpatient claims
6.	Diana apriliyanti	Senior high school	Completeness of outpatient claims

Based on Table 1, in the Mitra Sehat Situbondo Hospital case mix unit, there are 2 staff who serve as inpatient coders, 1 staff member as an outpatient coder, 2 staff who complete inpatient claims, and 1 staff who complete outpatient claims. Their educational backgrounds are also different: 4 people have a D4 RMIK degree, 1 person has a D2 Informatics degree, and 1 person is a high school graduate. Based on the results of interviews with staff, Mitra Sehat Hospital has training for the case mix section which is held for two days a year.

    b. Set available working time (WKT)

Available Working Time (WKT) is the amount of time an SDMK uses to carry out tasks and activities during a year. In calculating WKT, the following elements must be considered: number of working days per year, permits, sick leave, holidays, training and education, annual leave and the number of hours worked by each category of workforce each day.

Is known:

number of working days (1 year)	= 52 weeks/year = 312 days/year
Number of working days at Mitra Sehat Hospital (1 weeks)	= 6 days
Employee Leave	= 12 days/year
National Holidays	= 17 days/year
Attending training	= 2 days/year
Absence (sickness, etc.)	= 5 days/year
Total working time (1 weeks)	= 37.5 hours
Effective working hours (JKE)	= 75%
Available working time (1 year)	= 1,200 hours/year=72,000 min/year

Discussion:

Working days: 52 x 6	= 312 days
Effective working hours: 75% x 37.5	= 28.12
Working time (1 day): 28.12:6	= 4,686
Available working hours (days):	312- (12+17+5)

Available working time (hours):

$$= 312 - 34 = 278$$
$$312 - (12+17+5) \times 4{,}686$$
$$= 312 - 34 \times 4.686$$
$$= 278 \times 4.686$$
$$= 1.302$$

From the results of calculating the available working time (hours) 1,302 can be rounded up in hours to 1,200 hours ⟶ 72.000 minute.

According to PAN-RB Ministerial Regulation Number 26 of 2011 concerning Guidelines for Calculating the Appropriate Need for Civil Servants for Regions, Effective Working Hours (JKE) are set at 1200 hours per year or the equivalent of 72,000 minutes per year, both in a five-day and six-day work system. days [9].

From the results of interviews and respondents' answers at Mitra Sehat Hospital, the available working time is sufficient, but because there are only 6 officers, the work that should be completed within that time often cannot be completed on time.

c. Establish workload components and time norms

The research results show that the workload components have been determined by describing the work carried out by PMIK in accordance with their respective main tasks.

Table 2 Determining Workload Components and Time Norms

No.	Main tasks	Time Norms
1	Inpatient coding	5 Minute
2	Outpatient coding	3 Minute
3	Completeness of inpatient claims	5 Minute
4	Completeness of outpatient claims	3 Minute
	Total	16 Minute

Based on the results of interviews and respondent responses, the amount of energy and standard time used by case mix to complete each task is adjusted to the work speed of each individual. From the interview results, it can be estimated that the inpatient coder time is 5 minutes, the outpatient coder time is 3 minutes, the inpatient claim time is 5 minutes, and the outpatient claim time is 3 minutes. Therefore, based on existing time and time standards, the total time used by all members (6 casemix officers) to complete each task is 16 minutes.

d. Calculating Standard Workload Standards

Standard Work Load (SBK) is the volume of work quantity for 1 year for each type of HRK. Workload standards for a main activity are prepared based on the time required to carry out each activity (norm time or average time) as well as the available working time that has been determined [10].

$$Workload\ standards\ = \frac{72.000}{16} = 4.500$$

So, according to ABK-Kes, the workload calculation for the Mitra Sehat Case Mix Hospital is 4,500 minutes.

e. Calculating Supporting Task Standards

Supporting Task Factor (FTP) is the percentage of time used to carry out each activity in a certain time unit (per semester, per month, per week or per day) [10].

Supporting tasks are tasks to carry out activities that are directly or indirectly related to the main functions and tasks carried out by SDMK [11].

$$FTP = \frac{16}{72.000} X \ 100\% = 0,2\%$$

$$STP = \frac{1}{1 - \frac{0,02\%}{100}} = 1$$

So, from the calculation results the standard number of supporting tasks at Mitra Sehat Hospital is 1.

f. Calculating HRK Needs

From the calculation results, it can be seen that the human resource requirements in the casemix unit are:

$$SBK = 4.500 \ mnt$$
$$STP = 1$$

$$Health \ human \ resource \ needs = \frac{Achievements \ (1 \ year)}{Workload \ standards} x \ STP$$

$$Health \ human \ resource \ needs = \frac{46.924}{4.500} x \ 1 = 10$$

So, based on HRK calculations, the number of workers needed in the Mitra Sehat Situbondo Hospital case mix unit is 10 officers. However, the officers in the casemix unit at Mitra Sehat Situbondo Hospital have not yet reached the target for human resource needs, so the number of officers is still reduced by 4 people to reach 10 officers.

Discussion

Based on research results, workload standards using the ABK-Kes method can be explained as follows:

a. Method

The research uses the ABK-Kes (Health Workload Analysis) method to calculate HRK needs based on work volume. Qualitative descriptive methods are used to understand and explain related phenomena.

b. Results

Based on ABK-Kes calculations, the standard workload (SBK) for the Casemix unit is calculated at 4,500 minutes. Using this standard, the HRK requirement in the unit is estimated to be around 10 officers. Currently, the number of Casemix officers is only 6 people, far below the calculated need, which should reach 10 officers.

c. Suggestions

Management must consider adding additional workforce in accordance with the results of the ABK-Kes analysis to reduce the risk of excessive workload and improve health services.

By paying attention to the results of the discussion, it is hoped that Mitra Sehat Situbondo Hospital can improve the efficiency and effectiveness of Casemix services in accordance with established standards.

Conclusion

From the analysis carried out, it was found that the Standard Work Load requirement for Case Mix at Mitra Sehat Situbondo Hospital is 4,500 minutes per year. By considering the available working time (WKT) and the established time norms, it is calculated that the number of Standard Supporting Tasks (STP) is 1. This shows that the supporting task factor does not significantly influence HRK needs.

Furthermore, based on the quantity of work achieved in one year, the HRM requirement for the Case Mix Unit at Mitra Sehat Situbondo Hospital is 10 Health Information Medical Officers (PMIK). However, currently Mitra Sehat Hospital has 6 PMIK officers involved in coding activities and settling inpatient and outpatient claims. Therefore, it is necessary to add 4 more PMIK officers so that HRK needs are in accordance with established standards.

References

[1]   Kemenkes RI, "Peraturan Menteri Kesehatan Nomor 30 Tahun 2019 tentang Klasifikasi dan Perizinan Rumah Sakit," no. 3, pp. 1–80, 2019.

[2]   N. Nazhifah, I. Alia Yustika, and M. Hidayati, "Analisis Kebutuhan SDM Petugas Rekam Medis dengan Menggunakan Metode Analisis Beban Kerja Kesehatan (ABK-Kes)," *Cerdika J. Ilm. Indones.*, vol. 1, no. 8, pp. 1021–1028, 2021, doi: 10.36418/cerdika.v1i8.169.

[3]   N. Fidianti, "Analisis Kinerja Dinas Kesehatan Kota Pekanbaru (Studi Kasus Penanggulangan Demam Berdarah Dengue Tahun 2011)," 2011.

[4]   I. K. Widyawati, R. D. Prisusanti, and F. R. Ikawati, "Perbandingan Perhitungan Kebutuhan Tenaga Kerja Rekam Medis Menggunakan Metode Wisn Dan Abk Kesehatan Rs Bhirawa Bhakti Malang," *Bali Heal. Publ. J.*, vol. 4, no. 1, pp. 1–13, 2022, doi: 10.47859/bhpj.v4i1.219.

[5]   PPSDM Kemenkes, "Buku Manual 1 Perencanaan Kebutuhan SDM Kesehatan Berdasarkan Metode Analisis Beban Kerja Kesehatan (ABK Kes)," *BPPSDM Kesehat. RI*, 2017.

[6]   A. C. Kristin, "Analisis Kebutuhan Tenaga Rekam Medis Berdasarkan Beban Kerja Dengan Metode Analisis Beban Kerja Kesehatan (Abk-Kes) Di Puskesmas Bareng Malang," *J. Heal. Care Media*, vol. 7, no. 2, pp. 62–71, 2023, [Online]. Available: http://stikeswch-malang.e-journal.id

[7]   E. Sujana, "Tinjauan Kebutuhan Tenaga Unit Rekam Medis Sesuai Beban Kerja Di Rsud Mampang Prapatan," *Pap. Knowl. . Towar. a Media Hist. Doc.*, vol. 3, no. 11, pp. 12–26, 2020.

[8]   T. Talib, "Analisis Beban Kerja Tenaga Filing Rekam Medis (Studi Kasus Rumah Sakit Ibu Dan Anak Bahagia Makassar)," *J. Manaj. Inf. Kesehat. Indones.*, vol. 6, no. 2, p. 123, 2018, doi: 10.33560/.v6i2.196.

[9]   K. P. A. N. dan R. N. 26 Birokrasi, "Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi tentang Pedoman Perhitungan Jumlah Kebutuhan Pegawai Negeri Sipil Untuk Daerah," *Angew. Chemie Int. Ed. 6(11), 951–952.*, vol. 1999, pp. 10–27, 2011, [Online]. Available: https://peraturan.bpk.go.id/Home/Details/132867/permen-pan-rb-no-26-tahun-2011

[10]   N. Cahyaningrum, I. Rahayu, F. Wulandari, A. Maulana, and C. P. Agus, "Kebutuhan Tenaga Kerja Unit Rekam Medis Berdasarkan," pp. 486–491, 2023.

[11] H. Priatmoko, Y. Yunengsih, and S. Setiatin, "Analisa Kebutuhan Tenaga Rekam Medis Berdasarkan Beban Kerja dengan Metode ABK-Kes di Bagian Case Mix Rumah Sakit X Palembang Tahun 2021," *J. Heal. Sains*, vol. 2, no. 8, pp. 1008–1013, 2021, doi: 10.46799/jhs.v2i8.249.