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Medical Record Storage System Analysis On The Effectiveness Of Patient Services In Cikole Puskesmas In 2021

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Abstrak

This study aims to determine and analyze the medical record storage system on the effectiveness of patient care at the Cikole Public Health Center. The research method used is quantitative with inferential statistical analysis techniques. Data collection techniques by means of observation, interviews and questionnaires. Cikole Lembang Public Health Center is one of the first level health care facilities. Based on observations, the storage system used is a regional storage system in which each region starts from the first digit. There are 2 officers who work in the medical records section of the Cikole Public Health Center. With the storage system used, there are several shortcomings, namely the occurrence of misfiles and duplication. To find out whether there is an analysis of the medical record storage system on the effectiveness of the service, the author gives a questionnaire to the Cikole Public Health Center officers. The results of the questionnaire also show that the highest percentage level is found in item no.7, namely the decentralized storage system is in accordance with the target of 71%. Then the second is item no. 8, namely a decentralized storage system that allows the provision of medical record files on time by 61%. From the results of interviews with medical records officers, suggestions and input were given: (1). The storage system used was changed to centralization so that the alignment system was not duplicated; (2). The use of bindex as an additional tool to make storage neater and easier.

Keyword *: Filing; Service effectiveness; Misfile;*

Introduction

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. This understanding of health has shifted over time (Organization, 2003, pp. 1–8). To improve the degree of health or medical treatment, health service facilities must be provided.

The provision of health service facilities is the responsibility of the central government and local governments in this category are the Central General Hospital, Regional General Hospital, and Community Health Center as described (Undang – Undang 36, 2009).

Puskesmas as a first-level health service facility is also one of the frontlines in terms of health services that can help realize the highest degree of public health in its working area, this is because the puskesmas has two main functions, namely increasing first-level individual health efforts and public health (PERMENKES No. 75, 2015).

In this first-level health service, there is a system that manages data information, namely the Puskesmas Information System (SIMPUS). In order to improve the management of the implementation of the Puskesmas, it is necessary to support the Puskesmas Information System which can ensure the availability of information data in a fast, precise, current, sustainable and accountable manner (PERMENKES No. 31, 2019). Information that is available quickly and accurately will greatly assist the services provided to patients. One factor that is very helpful in the smooth process of service to patients is medical records.

Cikole Lembang Public Health Center is one of the first level health care facilities in Lembang. The Cikole Health Center every day before the pandemic could serve almost 100 people per day. However, during this pandemic, the Cikole Public Health Center only served 50 people per day. Because it is the closest health service to residents around Lembang, Cikole Public Health Center can accept up to 100 patients per day before the pandemic.

By accepting that many patients, the service must be fast and precise according to the applicable operational procedure system. Medical record officers as the foremost in this service must carry out their duties quickly and precisely in accordance with the operating system procedure. Because medical record officers are at the forefront of their services, the medical record file storage system is also a determinant and plays an important role in this service. This storage system assists officers in storing, searching, and providing medical record files for services. For this storage system, Cikole Public Health Center uses a regional storage system with each area starting from number one. For medical record files use the family folder format. And the alignment uses a straight numerical filling system (direct number storage system).

In one day, during a pandemic like this, the Cikole Community Health Center medical record officer only issues and re-stores 40 to 50 medical record files. The regional storage system actually has its advantages but also disadvantages.

The problem that the researchers found during observations was that by using a regional storage system and an alignment system that started again from the first digit of each region, medical records were prone to being duplicated and at the time of service it was sometimes a bit hampered because sometimes the files that were taken were wrong or misfiled because they were wrong in the process. the process of filing (filing) and does not mention the area and also takes time to retrieve if you are not familiar with this regional storage system. Below is the recording of medical record filing activities at the Cikole Public Health Center from June 14 to July 14:

Patient comes	1087
Medical record file retrieval	1062
Misfile	25
Archive	1087

Medical records are files that contain records and documents including patient identities, examination results, treatment that has been given, actions and other services that have been provided to patients (PERMENKES no. 269, 2008).

One of the activities that greatly contribute to this field is the filing system (storage). Duties, roles and main functions of filing in the medical record unit include providing medical record files that will be used by patients for treatment, safeguarding the security and confidentiality of medical records, storing complete medical record files with the final digit storage method and adjusted to the serial number. , find documents or provide medical record documents for service purposes and other purposes, perform retention of medical record documents into active and inactive documents, assist in assessing the value of medical records, store enshrined medical records, propose destruction, assist in the implementation of medical record destruction , protect medical record documents from the danger of physical damage, sweep medical record documents that are misplaced (Shofari, 2002).

How to store medical record files is important in supporting the speed and smoothness of health services that will be provided to patients (Khairussari, 2018). In a preliminary study conducted by (Khairussari, 2018), the author found several problems such as difficulties in finding patient medical records, storing patient medical records that were not in the order of numbers and misfiles. This of course makes the patient's health service a little hampered. Then the researchers compared the way of storing medical record files at the Cikole Lembang Public Health Center. There are similarities found, namely the difficulty in finding medical record files.

Misfile is an error in the placement of medical record files, incorrectly storing medical record files, or not finding medical record files. If there are frequent misfiles in the filing system, it can affect the effectiveness of the service. If the activities on

this filing system are slow in service and not in accordance with SOPs, then service to patients will be hampered.

Effectiveness is a measure of the success or failure of an organization to achieve its goals. If an organization achieves its goals, then the organization has been running effectively. Indicators of effectiveness describe the range of effects and impacts (outcomes) of the program outputs in achieving program objectives. The greater the contribution of the resulting output to the achievement of the specified goals or objectives, the higher the effectiveness of an organization's work processes (Mardiasmo, 2017).

Service is the key to success in various business or service activities (Moenir, 2000). So in providing effective services, it can mean the achievement of service goals that have been set by the organization and the community is satisfied with the services obtained

Method

The research method used is quantitative. Quantitative methods are also called positivistic methods because they are based on the philosophy of positivism used to examine certain populations or samples (Sugiyono, 2018). This research variable is an attribute or nature or value of a person, object, or activity that has a certain variation set by the researcher to be studied and then draw conclusions (Sugiyono, 2018). The independent variable in this study is the effectiveness and the dependent variable in this study is the storage system.

Population and Sample

Population is a generalization area consisting of: objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then draw conclusions (Sugiyono, 2018).

The population in this study were officers on duty at the Cikole Public Health Center. While the sample is part of the number and characteristics possessed by the population. If the population is large, and the researcher is not able to study everything in the population, for example due to limited time, data, and energy, the researcher can use samples taken from that population (Sugiyono, 2018). The sample in this study was a medical record officer in charge of storing former medical records. Sampling technique is a sampling technique. To determine the sample to be used in the study, there are various sampling techniques used (Sugiyono, 2018).

In this study, the authors use a simple random sampling technique because the sampling of members of the population is done randomly without regard to the existing strata in the population. The place of research was carried out at the Cikole Lembang Public Health Center. The duration of observation is 1 month

Result

This research was conducted for approximately 1 month starting from June 14-14 July. The results of this study were obtained from observations, interviews, and giving questionnaires to medical record officers on duty at the Cikole Public Health Center to determine whether the storage system used had an effect on the effectiveness of the service. There are 15 Cikole Community Health Center officers on duty. There are 2 medical records officers on duty at Cikole Public Health Center, 1 person is in the permanent medical record section and 1 person is also a nurse. The population of this study were officers who served at the Cikole Public Health Center. To determine the sample from this population, the Slovin formula is used, namely:

$$n = \frac{N}{1 + (N\ x\ d^2)}$$

Description : n = sample
N = population
d^2 = percision value

The population in this study is 15 and the desired error rate is 5%, the number of samples used is:

$$n = \frac{15}{1 + (15\ x\ 0{,}05^2)}$$

$$= 14, 45 = 14$$

So the sample used in this study was 14 Cikole Public Health Center officers.

Storage and alignment

System at Cikole Community Health Center Based on the results of observations and interviews conducted with medical record officers at the Cikole Public Health Center, that the storage system used is a regional storage system and each region starts from the first number. This system has been used for a long time for the reason that services are carried out faster and can adjust to the room where medical records are stored. By using a straight numerical filing system that makes it easier for officers to store. By using this regional storage system, based on the author's observations, there are several duplicate and misplaced medical record files.

This happens for several reasons, including the alignment system in the regional storage system starting from the first number and not seeing the storage area area.Sistem penyimpanan wilayah ini terbagi menjadi beberapa bagian berdasarkan wilayah kerja puskesmas Cikole.

It consists of Cikole Village, Cibogo Village, Wangunharja Village, and Cikidang Village. With an open shelf design that is used on the grounds of making it easier to retrieve and store medical record files. Because the population in the working area of the Cikole Public Health Center is not too many, the medical record files can be neatly arranged according to the area. However, based on interviews conducted with medical record officers, the storage system used by the Cikole Public Health Center does not fully facilitate the effectiveness of services because the storage

system used sometimes makes officers forget and sometimes take the wrong medical record file

There are not too many file storage and retrieval done during this pandemic because not too many patients come. The average patient who comes to get health services is not more than 50 people per day. Consists of general poly services, KIA poly, and laboratories. With the number of patients who are not too many, the services provided can be done quickly.

The effectiveness of services at the Cikole Public Health Center

The use of the regional storage system used by the Cikole Public Health Center has not fully affected the effectiveness of patient services. Because the medical record officer complained a little about the use of this storage system, but based on the goals of the puskesmas, the medical record officer could only provide input and continue to run the existing storage system. This regional storage system uses open shelves which are divided into 4 work area villages and one storage area for outside the work area with straight numerical filing alignment numbers.

The author then gave a questionnaire to the Cikole Public Health Center staff regarding the medical record storage system whether or not it had an effect on the effectiveness of the service. Based on the results of the questionnaire given to 14 medical record officers at the Cikole Public Health Center, the following scores were obtained from the questionnaire.

Tabel 1. questionnaire results

Total score for item 1 understanding of centralized storage system = 26
Total score for item 2 is right on target centralized storage system = 23
Total score for item 3 on time centralized storage system = 24
Total score for item 4 goal achievement of centralized storage system = 24
Total score for item 5 real change centralized storage system = 24
Total score for item 6 understanding decentralized storage system = 27
Total score for item 7 on target decentralized storage system = 40
Total score for item 8 on time decentralized storage system = 38
Total score for item 9 goal achievement of decentralized storage system = 30

Total score for item 10 real change decentralized storage system = 31

The number of ideal scores per item = 56

The number of ideal scores per item = 4 x 14 = 56 (if all answered strongly agree) the total score per item obtained from the study is presented in the table above. Based on the data above, the score results are then calculated in percentage form as follows :

1. (26:56) x 100% = 46%
2. (23:56) x 100% = 41%
3. (24:56) x 100% = 42%
4. (24:56) x 100% = 42%
5. (24:56) x 100% = 42%
6. (27:56) x 100% = 48%
7. (40:56) x 100% = 71%
8. (38:56) x 100% = 68%
9. (30:56) x 100% = 54%
10. (31:56) x 100% = 55%

Based on the results of the score per item above, the highest percentage level is found in item no. 7, namely that the decentralized storage system is in accordance with the target of 71%. This result is in accordance with the conditions in the field because the Cikole Public Health Center uses a decentralized storage system in the form of an area.

The officers assume that the storage system used today is in accordance with the existing service conditions. Then the second is item no. 8, namely a decentralized storage system that allows the provision of medical record files on time by 61%. This result is in accordance with the situation in the field where the medical record officer who works can provide and retrieve the available medical records fairly quickly, although the officers complain a little about the storage system in this area which is considered to be still inadequate. medical record file.

Of the 10 items given to 14 medical record officers, it can be seen that 5 items regarding the decentralized storage system are considered to have an effect on service effectiveness. Meanwhile, 5 items regarding the centralized storage system are considered to have no effect on service effectiveness.

To test the validity, reliability and hypothesis testing, the author uses the statistical SPSS application. And the following are the results of validity, reliability and hypothesis testing from SPSS statistics:

pearson value correlation item 1 total : .885
pearson value correlation item 2 total : .495
pearson value correlation item 3 total : .725
pearson value correlation item 4 total : .442
pearson value correlation item 5 total : .416
pearson value correlation item 6 total : .805
pearson value correlation item 7 total : .576
pearson value correlation item 8 total : .827
pearson value correlation item 9 total : .704
pearson value correlation item 10 total : .752

For the validity of the data, the author uses a method of comparing r count and r table by looking at the Pearson correlation at a significance of 0.05/5%. Based on the r table in sample 14, the r table is 0.532. After comparing r tables and r counts, the results found that 7 items were valid and 3 items were invalid.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.866	.859	10

Based on the results of the statistical reliability above, based on the standard Cronbach's alpha value, if > 0.7 it means that the reliability is sufficient. Cronbach's alpha value above is 0.86, which means it is greater than 0.7, which means that all items are reliable and all tests have strong values.

Then to test the hypothesis here, the author uses a method by looking at the significance of the SPSS calculation results. Of the 10 question items given regarding the effect of the storage system on service effectiveness, 5 questions regarding the decentralized storage system effect on service effectiveness received the following significance values:

0.001	0.031	0.000	0.005	0.002

Then for the 5 questions regarding the centralized storage system affecting the effectiveness of the service, the significance value is as follows: :

0.000	0.072	0.003	0.114	0.139

With the two results of significance above, it can be concluded that the 5 question items regarding the decentralized storage system affect service effectiveness are correlated. Based on the significance value, if the significance value is <0.05 then it is correlated. However, if the significance value is > 0.05 then it is not correlated.

For the question items of the centralized storage system that affect service effectiveness, there are only 2 question items whose significance value is <0.05 out of 5 question items. It is concluded that the storage system affects the effectiveness of the service is highly correlated. And H1 whether the storage system affects the effectiveness of the service is acceptable.

Disscusion

1. Use of region storage system

The use of the regional storage system at the Cikole Public Health Center is actually considered capable of speeding up file retrieval and storage. However, because the alignment system that uses straight numerical filing makes medical record files often duplicate and missfiles occur. The medical record officer on duty at the Cikole Public Health Center has also suggested and provided input to the head of the Puskesmas related to the system used today, but there has been no definite answer to the suggestions and inputs given by the Cikole Health Center medical record officer.

2. Impact of using region storage system

The impact caused by the use of this regional storage system is quite significant according to the medical records officer on duty since the beginning of this storage system being used. According to the medical record officer who has worked there for a long time, the medical record file storage system at the Cikole Public Health Center was very chaotic and unclear. Files returned after completion of treatment services, sometimes no one returned, maybe 4-5 medical record files.

After the files are returned, sometimes there are some that cannot be stored in the storage rack because there are files that are duplicated and some are incomplete and when they are returned to the doctor to be completed, but because the doctor is busy and then forgets to complete the medical record file, the file is lost or forgets to save it. . However, with the use of a regional storage system, this area can be overcome, although it is not comprehensive. The problem with this regional storage system now is that it is duplicated and missfiled. The use of the alignment system also affects the risk.

3. Analysis of service effectiveness

The medical record officer on duty at the Cikole Public Health Center complained about this storage system because it was a bit of a hindrance in the process of patient care for treatment due to duplicate medical record files and missing medical record files. However, this storage system is mostly understood by the

officers on duty at the Cikole Public Health Center because it is easy to give names per region and the alignment starts from the first number.

However, because this storage system is prone to duplication and missfiles, medical record officers have to work twice so that duplicated medical record files and missfiles can be completed as soon as possible..

Conclusion

After observations, interviews, and questionnaires were conducted to the officers on duty at the Cikole Public Health Center, that the regional storage system used to store medical record files at the Cikole Public Health Center is currently considered quite influential based on the results of the questionnaire given to the officers on duty at the Cikole Public Health Center. For the validity of the data, the author uses a method of comparing r arithmetic and r tables by looking at the Pearson correlation at a significance of 0.05/5%. Based on the r table in sample 14, the r table is 0.532. After comparing r tables and r results, it was found that 7 items were valid and 3 items were invalid. For reliability, it is based on the standard Cronbach's alpha value, that is, if > 0.7 it means that the reliability is sufficient. Cronbach's alpha value above is 0.86 which means > 0.7 which means all items are reliable and all tests have strong values.

To test the hypothesis, the author uses a method by comparing the significance value of the results with a comparison if the significance value is <0.05 then it is correlated and if the significance value is >0.05 then it is not correlated. And the results show that of the 10 question items and 7 valid question items, it shows that the significance value is <0.05, which means that it is correlated. And the hypothesis H1 whether the storage system has an effect on service effectiveness is acceptable.

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