ANALYSIS OF MORBIDITY DATA MANAGEMENT OF 10 MAJOR DISEASES IN OUTPATIENT PATIENTS AT HOSPITAL X

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Abstract

Implementing a reporting flow is important for hospitals, because it functions as a management guide and policy to anticipate unexpected situations. Having a flow will make it easier for officers to carry out their work and implementing the flow will encourage officers to be more disciplined and responsible in their work. The aim of this study was to determine the difficulties experienced in managing, collecting data and input reporting the morbidity of the top 10 diseases in outpatients. Qualitative descriptive research. The subjects were the head of medical records, 2 medical records officers and 2 reporting officers. As a result, reporting is carried out by the responsible reporting officer, data collection is in accordance with standard operational procedures, data processing is computerized by the assigned reporting officer and sent via online SIRS to the Health Service at the beginning of each year. Trends in the top 10 diseases in hospitals include viral infections, dyspepsia, dengue fever, diarrhea, bacterial infections, anxiety disorders, radiculopathy, asthma, pulpitis and GERD

Keyword: *Medical data management, patient data collection, 10 top diseases*

INTRODUCTION

Hospitals play a very important role in efforts to fulfill and strengthen the effectiveness of various elements in the health system, in addition, hospitals also ensure the availability of continuous services for chronic and complex patient conditions. Responding to the community's need for an adequate health system, they focus on utilizing strategic resources in a systematic referral network effectively (WHO, 2020). One of the subsystems in the health facility information system that is affiliated with various subsystems in the same facility is often referred to as electronic medical records. Medical records are considered very important in improving the quality of health services in terms of fulfilling the preparation of reports because of their capabilities in providing precise and accurate explanations (Ministry of Health of the Republic of Indonesia, 2022). Medical records include content about patient identity information, diagnosis, or actions given to patients (Syah & Setiatin, 2022).

Hospital Information System (SIRS) is a method of collecting, organizing, and presenting data in hospitals. Various types of general and special hospitals, both those used for the public and certain groups as mentioned in Law No. 44 of 2009 concerning hospitals, are areas integrated with SIRS. There are two types of SIRS reporting, namely actual (updated) and periodic reporting. The SIRS form contains 5 report recaps (RL), where RL 1 contains basic data from the hospital that is reported at any time when changes in data are found, so this data is also referred to as actual data (updated). RL 2 contains employment data that is reported periodically every year. RL 3 contains data on service activities that are reported periodically every year. RL 4 contains data on patient mortality

and morbidity that are reported periodically every year. Meanwhile, RL 5 consists of monthly data containing visit data and a list of the top 10 types of diseases suffered by the majority of patients. This data is data that is reported periodically every month (Indonesian Ministry of Health, 2011).

Morbidity report is a document containing information about disease incidence in the community sourced from community based, this report is obtained through morbidity assessment and facility based data received from health service facilities by utilizing periodic data collection and reporting systems. In addition, in the contents of the morbidity report there is also a compilation of outpatient data categorized based on a basic tabulation list for each disease classification (Eka et al., 2018)

Based on the top 10 outpatient diseases according to the Indonesian Hospital Information System (Hospital Reporting System Revision VI), RL 5.4 (Top Ten Outpatient Disease Report) Contains: Form RL 5.4 is a form containing data on the top 10 outpatient diseases summarized from the number of patients who leave the hospital, either alive or dead, within a period of one year. Data is accumulated from January 1 to December 31 each year. The compilation of the top 10 outpatient disease report is obtained through a recapitulation of inpatient morbidity data (RL 4b). In compiling the ranking of the top 10 diseases, it also takes into account codes related to the condition of mothers who give birth normally, the condition of healthy newborns, as well as immunization and patients who are undergoing a Family Planning program (spiral implantation) and various other things that are not categorized as part of the top 10 diseases (Ministry of Health of the Republic of Indonesia, 2011).

The top 10 disease trends at RSUD X in the first quarter of 2024 include Breast, Cervix uteri, Hepatitis B, Atherosclerosis, Hypertension, Diabetes Mellitus, Lupus, Rectal Cancer, HNP and Delayed milestone. The results of the data are not in line with the results of my survey at hospital x.

According to research conducted by Mawardi et al. (2019) explains the analysis of the collection of outpatient morbidity data reporting in hospitals using qualitative description methods. The results of the study indicate that the data accumulation process carried out has been in line with operational standards, data processing is carried out by utilizing computerized technology through PIC who is also fully responsible for this, and data reporting is reported via email addressed to the health office at the beginning of each year.

The results of another study conducted by Wahyu (2020) regarding the Overview of Morbidity Data Reporting Management at Mataram City Hospital. The results of the study showed that the collection of morbidity data reports was in accordance with standard operating procedures, reporting management was computerized, reporting was sent via SIRS online to the health office at the beginning of each year.

Hospital X is an example of a hospital that has implemented the Electronic Medical Record (EMR) system transition, where previously this hospital implemented a Manual Medical Record system. This can be seen from its reporting system in early 2022 which already uses the new version of SIRS online. The outpatient morbidity data report (RL1–RL4) is filled in annually to be uploaded

to SIRS online, but because the data from each room is sent monthly, we process it using Microsoft Excel to process the monthly data into annual data, while RL5.4 will be uploaded monthly to SIRS online for reporting to the Health Office. The difficulty experienced in the process of managing outpatient morbidity data reporting is that for reports reported monthly, there is often a delay in the emergence of the latest annual data, while for data reported annually, officers have to work twice where we have to calculate the monthly data first then recapitulate it into annual data before it can be reported, this results in a lack of time efficiency in the process of collecting morbidity data reporting at Hospital X.

RESEARCH METHODS

This study applies a descriptive method by utilizing the application of a qualitative approach carried out at hospital X in Bandung City from March to April 2024. The data collection that has been requested is the top 10 diseases per first quarter of 2024 and questions that have been limited according to the selected aspects. And this form of research will capture various aspects of qualitative information about the analysis of morbidity data management for 10 disease classifications that rank highest in outpatients at hospital X in Bandung City.

The researcher took informants/objects of this study from 5 people who served as head of medical records, medical records staff and reporting officers at hospital x in Bandung city. Instruments used. The instruments used by the study to assist in the data collection process were questionnaire guidelines, observation guidelines, interview guidelines, while the instruments needed in this study were stationery and a voice recorder. This study accumulated data collected from interview reports, observation results, and literature studies. The distributed questionnaire contained questions related to the flow of making morbidity reports so that the RL 5.4 form was formed, technical instructions for report formats, and morbidity trends of diseases during a certain period of time. In selecting the subjects of this study, the Non-Probability Sampling method was used, where this technique places researchers to determine their research subjects based on their personal subjective assessments, so it is not intended to be a random selection.

RESULTS AND DISCUSSION

A. Research Results

The data sources required for the process of presenting data on the morbidity of the top 10 diseases of outpatients at hospital x are outpatient visits summarized by medical records officers at each polyclinic, the data is reprocessed by reporting officers into morbidity data for the top 10 diseases which will be collected to the Health Office on the 6th of each month.

There are two methods applied in the data processing process in this hospital information system, namely manual processing and processing that utilizes computerized technology (Yunengsih, 2021). Manual processing is applied by recapitulating the data that has been accumulated in the

processing unit to then be presented in the form of graphs or tables. Meanwhile, computerized processing is implemented by carrying out the data entry process, including medical records of patients containing coded doctor's diagnostic records and will then be processed by the computer system to be in line with each characteristic.

According to the results of the interview survey, the procedure for reporting morbidity data for outpatients at hospital x has utilized computerized technology. However, for the 10 most common diseases, data cannot be obtained directly from SIMRS and must be sorted in Microsoft Excel from the largest to the smallest disease and diseases such as codes R, O and Z are not included in the top 10 diseases. The preparation of outpatient visit reports for the morbidity of the 10 largest diseases (RL 5.4) is in accordance with the 2011 SIRS JUKNIS.

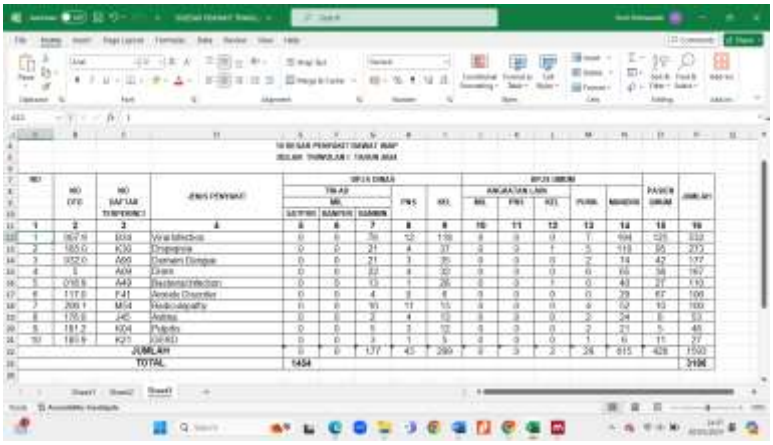
For the implementation of reporting the top 10 outpatient diseases in hospital x, namely:

1. Staff enter the medical record data of discharged patients into the computerized system, which includes the medical record number, patient identity, primary diagnosis, secondary diagnosis, payment method, and discharge status, date of admission and discharge, and doctor's name.
2. The results of the application of disease indicators will be used as material for compiling internal and external reports as required by the administrative needs of hospital management. The creation of the top 10 list of outpatient diseases is done using the Excel manual system by lining up the 10 diseases most often suffered by patients using the Microsoft Excel application.
3. After obtaining the top 10 list of outpatient diseases, the collected data will be reported to the district, provincial, and Ministry of Health health offices.

The procedure for carrying out delivery to the Health Service at Hospital X is described as follows:

1. Invitation from the Health Office regarding the online SIRS report that provides education containing RL 1.2, RL 1.3, RL 2 to RL 4.B
2. Reports RL 1 - RL 4 are filled in annually with a deadline of March and RL 5 is filled in monthly with a deadline of every 6th of each month. Because the annual one cannot be filled in monthly, it is first made in Microsoft Excel. The manual report is obtained from the polyclinic room at hospital x.
3. The results of the report are summarized every month for RL 1 - RL 4. If it is the end of the year, it is summarized into annual data.
4. Bandung City Health Office officers provide an evaluation of the assessment that has been included in the next year's report.

B. Discussion



Source: Data Processed by Hospital

Figure 1. Morbidity data for the top 10 outpatient diseases in the first quarter of 2024

The morbidity trend in hospital x is almost the same every period, even if there is a slight change or two, the most likely position is to move from the top 10 ranking of the disease, from the initial one in the following month it could be second or third. For the top 3 diseases in hospital x, namely Viral infection, dyspepsia and dengue fever. Viral infection is a disease caused by a virus that uses cells in the body of an infected person to make more of its own replication (virus). Viral infection usually causes disease in the respiratory and digestive systems and can infect most other parts of the body. In addition, viral infection can cause various symptoms, ranging from asymptomatic (no clear symptoms) to more chronic diseases. This disease is usually caused by unhealthy environmental factors and exposure to bodily fluids of infected people (Fadli, 2023). Dyspepsia is a symptom of pain that occurs simultaneously, discomfort in the upper abdomen that does not go away or recurs and various other symptoms, such as a stomach that is easily full when eating, feeling full quickly, loss of appetite, nausea, vomiting, and a burning sensation in the chest. These symptoms have been going on for the past three months and started appearing 6 months earlier. Symptoms of dyspepsia (digestive disorders) always appear in groups, so that no single symptom dominates. Dyspepsia is usually caused by increased stomach acid, alcohol consumption and inflammation that occurs in the gallbladder (Puskesmas, 2019). Dengue fever/dengue fever/DF is a disease transmitted by mosquitoes and is often found in tropical and subtropical regions. Common symptoms are high fever and flu-like symptoms. DHF can cause high fever up to 40°C, some other symptoms include headache, rash, nausea and vomiting. Acute dengue fever can also cause complications such as internal bleeding and organ damage, which are not uncommon in severe cases this disease can cause death. To prevent DHF, you can use a vaccine, for example dengue vaccination (QDenga). Even so, anticipatory measures against bites and controlling mosquito population numbers are still the main response in slowing the spread of the disease (Fadli, 2020). And for the last position of the top 10 diseases in the hospital includes GERD disease. GERD is a disorder of the digestive system, where stomach acid and its contents come up into the esophagus. Indications of GERD symptoms include nausea, a bitter taste in the mouth, and

pain when swallowing or difficulty swallowing. GERD can be caused by many things, including pressure on the stomach, high-fat foods, and the effects of drugs (A A Istri Putri Wahyuni, SKM, 2022).

This result is inconsistent with data from RSUD X in the first quarter of 2024 that the top 10 disease trends in the hospital include Breast, Cervix uteri, Hepatitis B, Atherosclerosis, Hypertension, Diabetes Mellitus, Lupus, Rectal Cancer, HNP and Delayed milestone. In RSUD X, the dominant diseases in the top 10 disease trends are cancer and chronic diseases. From the data produced, the researcher argues that the top 10 disease trends in hospital x are Viral Infection, Dyspepsia, Dengue Fever, Diarrhea, Bacterial Infection, Anxiety Disorder, Radiculopathy, Asthma, Pulpitis and GERD. The top 10 disease trends in hospital x are diseases that can become acute or chronic depending on the patient's lifestyle.

Several factors that hinder the reporting of morbidity of the top 10 most common diseases suffered by outpatients are the lack of readiness of hospital management to update standard procedures, as well as technical instructions in the reporting system for the top 10 morbidity rates of diseases. Data sources and types of reports that are consistent with the data are what hospitals need. The external reporting process is carried out manually and by utilizing a computerized system. In the manual method, reporting officers will receive data from medical record officers which is done once a month, where the reporting officers will later summarize the data into Microsoft Excel before the data is entered into the online SIRS, so this forces the officers to work twice. The conclusion of the results of this study identified that the external reporting process is carried out manually and through computerized technology, therefore, efforts are needed to maximize the performance of SIMRS in various units so that reporting officers do not need a lot of time to recapitulate the data of the top 10 diseases needed to be reported.

These results are in accordance with the research conducted by Mawardi et al. (2019) entitled "Analysis of the management of reporting of morbidity data for outpatients in hospitals", where in its implementation, the data processing process through computerization is carried out by utilizing Microsoft Excel, medical records officers will later recapitulate the morbidity data for outpatients over a period of one year. From the results of the research conducted and the supporting theory, the researcher argues that in processing the morbidity data for the top 10 diseases in hospital x, it is not yet fully computerized. This is related to technological limitations where SIMRS cannot output data for the top 10 diseases directly. Therefore, in hospital x, the processing of data for the top 10 diseases must be sorted by themselves using Microsoft Excel.

CONCLUSION

Implementation of the management of reporting of morbidity data for the top 10 outpatient diseases at hospital X, namely data collection, where the data collection carried out has been in accordance with standard operating procedures. Monthly data collection is carried out by medical

records officers and sent to the reporting service at the beginning of each following month, no later than the 6th. Data processing is carried out computerized by reporting officers, where a list of the top 10 diseases is compiled every month using Microsoft Excel. In addition, the presentation of the summarized data will be inputted by reporting officers to the Health Service, Bandung City at the beginning of each year via SIRS online. The challenges faced in managing, collecting and inputting reporting of data for the top 10 outpatient diseases are the unavailability of the latest system in reporting the 10 diseases, so the process must be done manually and creates a large workload. Reporting has been carried out in accordance with the applicable standard operating procedures for reporting the morbidity of the top 10 outpatient diseases. The data sources applied include data on people who visit and outpatient visits.

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