Drug Monitoring Information System Development On Mother Medika Clinic Web Based

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Abstract

Mother Medika Clinic is one of the entities that serve the general medicine (general practitioners and dentists), obstetric services, and service BPJS the diversity of services in the clinic persalinan. Seiring Mother Medika then providing medicines are increasingly banyak. Dengan diversity of services, then also increased the number of types and jumlahobat. Currently the process sales transactions, checks, and pencatatanobat drugs in the clinic is still done conventionally using a written form. In order to facilitate the clerk in the sale, checking, and inputting drugs, the author makes a drug monitoring information system on Mother Medika Clinic. Indapat monitoring information system displays drug stocks so as to enable staff to check the availability of the drug, drug sales transactions, displays incoming stock reports contain any notification regarding a new drug is added. And display reports the stock exit from transactions of sale of drugs.

Keywords:
Information Systems, Monitoring, Drug, Ideas.

1. Introduction

Mother Medika Clinic is one of the entities that serve the general medicine (general practitioners and dentists), obstetric services, and service BPJS the diversity of services in the clinic persalinan. Seiring Mother Medika then providing medicines even more and more.

With the diversity of services, it also increased the number of types and jumlahobat. Oleh for Mother itu Klinik Medika wish to implement web-based monitoring information system which is supporting application activity control drugs through the media of computers connected by the Internet network. Because now process sales transactions, checks, and pencatatanobat drugs in the clinic is still done conventionally using a written form.

According to Mercy (2015) Monitoring is defined as a cycle of activities that include collecting, reviewing, reporting, and act on information about a process that is being implemented.

Based on the existing problems in Klinik Bunda Medika author intends to do research to build a web obat berbasis monitoring information system, in order to facilitate the clerk in the sale, checking, and inputting drugs.

2. Literature Review

2.2 Understanding Information Systems

According to O’Brian (2012: 17) on the book Introduction to Information Systems, information systems (information systems) is a regular combination of people, hardware, software, communication networks, and data resources that collect, transform, disseminate information in an organization.

According to Robert A. Leitch, understanding of the information system is a system within an organization reconcile the needs of daily transaction processing, support the operation, managerial and strategic activities of an organization and provide certain outside parties with the necessary reports.

So the information system is a system in an organization that is a combination of people, hardware, software, communication networks, and data resources that collect, modify, distribute information within
an organization that is useful for the needs of processing daily transactions, support the operation, managerial and strategic activities of an organization and provide certain outside parties with the necessary reports.

2.3 Understanding Monitoring

According to Sutabri (2012) Monitoring juga is defined as a measure to assess whether the activities undertaken in accordance with the plan, identify the problems that arise in order to direct insurmountable, to assess whether the work patterns and management used was appropriate for the purpose, knowing the links between activities with the aim of to obtain a measure of progress.

According to Aviana (2012) Monitoring merupakan one of the processes in the organization's activities is very important to determine whether or not a goal accomplished organization. The purpose of monitoring is to ensure that the principal task of the organization can be run in accordance with a predetermined plan.

According to Mercy (2015) Monitoring is defined as a cycle of activities that include collecting, reviewing, reporting, and act on information about a process that is being implemented.

2.4 Understanding Drugs

According to Ansel (2001), the drug is a substance used for diagnosis, reduce pain, and treating or preventing disease in man or animal. Drugs in the broad sense is any chemical substance that can affect the process of life, pharmacology is the science of very wide-ranging.

According to the Ministry of Health (2015) The medicine is a preparation or guidance materials - materials ready to be used to modify or explore physiological systems or pathological states for determination of diagnosis, prevention, cure, rehabilitation, improvement of health and contraception.

Drugs are substances that are used for the prevention and cure of disease and the recovery and health improvement for users.

2.5 Understanding Clinical

According to the Ministry of Health (PMK) No. 28 tahun 2011 about the clinic Clinic is a health care facility that organizes personal health services that provide basic medical care and / or specialist, is held by more than one type of health personnel and headed by a medic. Thus, a clinic must specify the services to be provided, because it may be limited to basic medical services, or services specialist, or both. This decision will affect the clinic held.

There are two strata of the organization of the clinic are:

2.6 Website

According to Agus Hariyanto (2015), the Website is: "Ideas can be defined as a collection of pages that display information text data, image data, animation data, voice, video and a combination of all of them, whether they are static or dynamic that formed a series of interconnected buildings related, each of which is associated with tissues pages (hyperlinks) ".

According Rohi Abdulloh (2015) web is: "A collection of pages consisting of multiple pages of information in the form of digital data in the form of text, images, video, audio, and other animations provided via the internet connection".

Based on the description, the authors conclude that the web is a software which is used to display the document - the document on a website that allows users to access the Internet through the software connected to the Internet.

3. Metedologi

3.1. Walking System Analysis

Analysis of the current system is a depiction of anything what procedures existing at the time that digunakan ini. Pemodelan researchers to describe the procedures to run.

a. Analysis of Current System Weaknesses

PIECES method is a framework used for the classification of existing problems based on the categories listed under each letter Performance, Information, Economic, Control, Efficiency, Service (Whitten & Bentley, 2007). 6 aspects that include:

1) Performance Analysis (performance).
   a) System weaknesses
      Performance issues on governance processes that drug stocks can not be monitored directly every day, because the clerk just did pengecekkan ten days.
2) Analysis of Information (information).
   a) System weaknesses
      Data transactions that many drugs and could cause the administration (admin) made a mistake in the input data.

3) Economic Analysis (economy).
   a) System weaknesses
      Procurement costs for bookkeeping such as stationery and storage of bookkeeping.

4) Analysis of control (control).
   a) System weaknesses
      Because the drug stock data and transactions saved in Microsoft Word and is not equipped with a security system that allows people not responsible for manipulating data.

5) Efficiency Analysis (Efficiency).
   a) System weaknesses
      Much time is wasted for data checking and re-checking drug stocks if there is a discrepancy between the data of the administration and the pharmaceutical section.

6) Analysis Services (service).
   a) System weaknesses
      Update stock data and transactions and records printed in Microsoft Word storage long enough for the amount of data is quite a lot.

4. Discussion

4.1. Functional Needs Analysis
   The following are some of the functions required of the system:
   1. Monitoring information system can display, add, update, delete data medication.
   2. Monitoring information system can display reports of drug entry and drug sales transaction data.
   3. System monitoring can update information in and out of drug stocks.
   4. System monitoring information can help the cashier to close the sale of drugs.
   5. On the web interface system has a login page that is intended administration, pharmaceutical and Director.

4.2. System design
   Results of the system functional requirements analysis using the usecase diagram is described as follows:

   ![Use Case Diagram drug Monitoring Information System](image-url)

   **Figure 1. Use Case Diagram drug Monitoring Information System**
Figure 2. Class diagram Drug Monitoring Information System

Design DataBase as follows:

Figure 3. Relation Table

4.3. System implementation

Login to the admin page views, pharmaceutical, and director.

Figure 4. Login Page Views

a) Pageviews Transaction: Selling Drugs

Figure 5. Display Page Transaction: Selling Drugs
b) Display Purchase Receipt

Figure 6. Display Purchase Receipt

5. Conclusion

After conducting tests and analysis on drug monitoring information system in the process of monitoring the drug in the clinic Medika Mother, then obtained as follows:

1. Monitoring information system that can display, adding the stock / drug data so as to enable staff to check the availability of drugs.
2. Drug monitoring information system that can sell drugs, so that the workers can easily perform the transaction process.
3. Drug monitoring information system displays incoming stock reports contain any notification regarding a new drug is added. And display reports the stock exit from transactions of sale of drugs.

6. Reference

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