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IMPLEMENTATION OF DRUG SUPPLY CHAIN MANAGEMENT IN THE PRACTICE OF THT-KL SPECIALISTS

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Abstract: THT-KL Specialist Practice Dr. Julius Dariar is a practice that provides medical services and sells medicines for ear, nose, throat and head and neck surgery. The problem experienced is that drug preparation is still done manually, so it requires time, effort and a high level of accuracy and precision. This study aims to design an information system that can process incoming and outgoing drug supply data at the THT Specialist Practice-KL Dr. Julius Dariar by implementing Supply Chain Management. The result of his research is the design of a website-based Supply Chain Management application that can be used by users in managing drug stocks in the practice of THT-KL specialist Dr. Julius Dariar.

Keywords: Practice; SCM; Specialist; THT-KL

Abstrak: Praktek Spesialis THT-KL Dr. Julius Dariar merupakan salah satu praktek yang melayani jasa pengobatan dan penjualan obat mengenai telinga, hidung, tenggorokan, dan bedah kepala leher. Adapun masalah yang dialami ialah penyiapan obat masih dilakukan dengan manual, sehingga memerlukan waktu, tenaga serta tingkat ketelitian dan kecermatan yang tinggi. Penelitian ini bertujuan untuk merancang sistem informasi yang dapat mengolah data persediaan obat masuk dan keluar di Praktek Spesialis THT-KL Dr. Julius Dariar dengan menerapkan Supply Chain Management. Hasil penelitiannya adalah rancangan aplikasi Supply Chain Management berbasis website yang dapat digunakan oleh user dalam pengelolaan stok obat-obatan pada praktik spesialis THT-KL dr.Julius Dariar.

Kata kunci: Praktik; SCM; Spesialis; THT-KL

INTRODUCTION

Information Technology continues to experience rapid development in the current era of globalization and has a very positive impact on human life. Community activities become faster and easier, in all sectors, including technology in the health sector. Some of the impacts of technological advances in the health sector are shortening patient waiting time, speeding up service to patients, easier storing of patient data, and being able to help simplify the supply chain of medicines. The willingness of information technology also provides many choices for patients, through the ease of information that patients can get about the existence of hospitals, health centers or clinics or doctor's practices that can be used as input and considerations for patients in treating diseases. THT Specialist

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Practice Dr. Julius Dariar Sp.THT-KL is one of the THT-KL specialist practices in Kisaran, founded in 2016, to be precise in Hos Cokroaminoto street No. 321. As in general THT and Head Neck Surgery Specialist Practice, Dr. Julius Dariar Sp.THT-KL has drug sales services and treatment services for Ear, Nose, Throat, and Head and Neck Surgery. The problem experienced is that the preparation of drugs is still done manually or by bookkeeping, inspection, and calculation of drugs in warehouses including inspection of expired drugs is done manually every day. Of course, this work requires time, effort, and a high level of precision and accuracy. To determine and see the stock of medicines is also very difficult because they are not up to date so there are times when a drug is prescribed to a patient, and it turns out that the stock has run out. The impact is that the patient's waiting period to get the drug is longer. For this reason, a computer-based system is needed to be able to manage the stock of medicines from suppliers to patients. One method that can be used in Supply Chain Management. Supply Chain Management aims to increase competitiveness by increasing the company's operational performance.

Information Systems Management of drug stocks using the Supply Chain Management method makes it easier for business owners to manage drug stocks [1]. The series of activities in SCM from planning, coordination, and control can create added value for consumers and can increase company productivity through optimizing time, location, and flow of materials [2]. Rachbini in her research entitled Supply Chain Management and Company Performance explained that the supply chain influences company performance. The results of his research show that information sharing, cooperation, and integration processes positively affect company performance while long-term relations do not significantly influence performance [3]. So that Supply Chain Management has a positive effect on company performance [4].

Many studies have been conducted on the implementation of Supply Chain Management for stock control, including Fauziah and Arlan Sanjaya's research on the implementation of Supply Chain Management in controlling web-based drug stocks at Muti-ara Pharmacies. The results of his research indicate that a drug control system is designed to make it easier for all parties to carry out business processes and can provide information to all parties involved such as Suppliers, Manufacturers, and Distributors [5].

The Supply Chain Management Information System facilitates business processes between companies and suppliers, from invoices, approves, transaction approvals and determines inventory stock [6]. In addition, the research conducted by Donni and Ricky states that in the Supply Chain Management business process, it is used to arrange plans from raw materials to finished goods that are produced by consumers [7]. Research conducted by Jamaludin also supports the use of the Supply Chain Management method in inventory management where the results of his research show that logistics provision at PT XYZ through Supply Chain Management is included in the very good category in terms of product quality, price competition, price quality, time and cost efficiency [8].

Supply Chain Management has also been shown to have a positive effect and play an important role in the production process [9]. Supply Chain Manage-

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ment has also seen as an effective method to facilitate all parties involved in the production process [10].

Many studies have been conducted on the effectiveness of Supply Chain Management in managing stock or stock inventory because it can minimize time and costs and expedite the product distribution process.

In this regard, this study aims to design an information system that can process incoming and outgoing drug supply data at the THT-KL specialist practice dr. Julius Dariar to improve time efficiency in providing information on the availability of drug stock quickly and accurately as well as making it easier to get information and manage drug supplies in warehouses.

METHOD

In this research, qualitative research methods were used which were carried out through literature studies and field studies. Qualitative research methods are usually used for exploration carried out through literature studies and field studies [11].

The research framework is explained in Image 1. below:

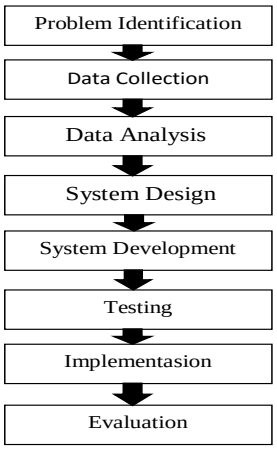

Image 1. Research Framework

1. Problem Identification
   In this process identification of problems that occur at the THT-KL Specialist Practice dr. Julius Dariar deals with stock management. The problem is that drug management is still done manually with bookkeeping so it is prone to damage and loss and discrepancies arise between transaction notes and information on drug release from the warehouse.
2. Data Collection
   Data collection was carried out through interviews with 1 THT-KL specialist and 5 nurses who assisted at the THT-KL specialist clinic and observation to obtain information on the system that is currently running.
3. Data Analysis
   The data that has been collected is systematically arranged so that it is easy to understand.
4. System Design
   After the data is compiled, system design is carried out using the Visual Paradigm application to create an overview general system to be designed.
5. System Development
   The next step is to build the system using Visual Studio Code/Sublime Text 3.
6. Testing
   After the system is built, testing is carried out to what extent the system is reliable.
7. Implementation
   After testing, then implementing or implementing the program that has been built.
8. Evaluation
   The final step is to evaluate, namely to assess the performance of the system being built. Is it running according to the company's needs or not?.

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RESULTS AND DISCUSSION

The application of SCM produces an information system for drug management at the THT-KL specialist practice dr. Julius Dariar can be used by users in managing drug stocks so that they can meet patient drug needs and speed up service to patients.

Admin Menu

Admin menu display, which includes several features such as homepage, sales, drugs, products, orders, users, suppliers, and report.

Image 2. Display of the Admin Menu

Supplier Menu Display

The supplier menu display contains the incoming order feature and then sending it back and the feature of viewing the price of each drug.

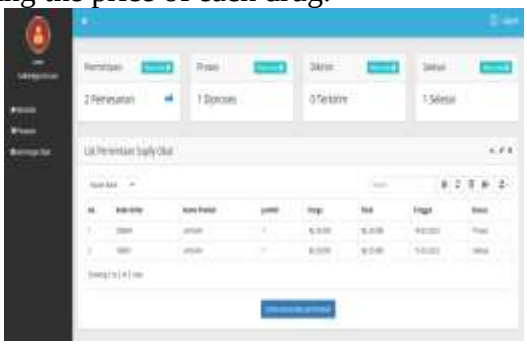

Image 3.Supplier Menu Display

Owner Menu Display

The owner's menu view contains home features and report features that can be printed via the owner user.

Image 4. Owner Menu Display

Input Drug

The drug input display functions to add drugs, and drug categories, and to display stored stock in the warehouse.

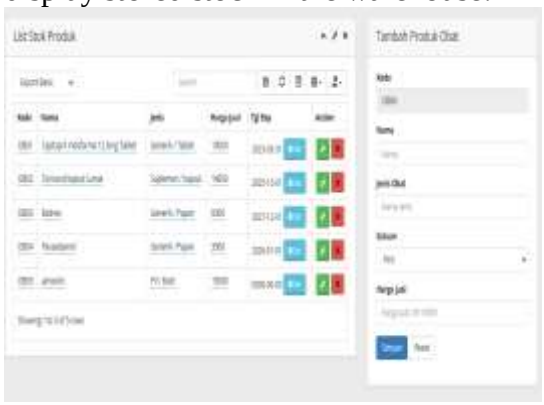

Image 5. Drug Input Display

Sales Input

The sales input display includes drug sales and print receipts for payments that can be operated by the admin.

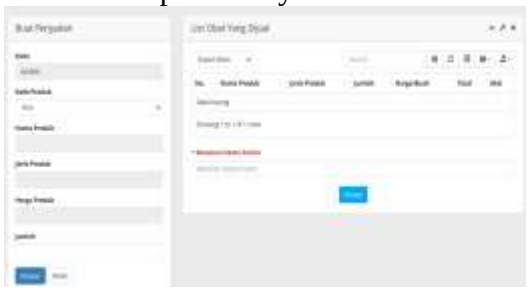

Image 6. Display of Sales Input

Order Input

The order input display is carried out by the admin which aims to increase

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the drug supply in the warehouse when the stock is running low.

Image 7. Order Input Display

Report View

The report view aims to view the history of sales and order transactions.

Image 8. Report Display

The application of website-based SCM in controlling drug supplies at the special THT-KL practice of Dr. Julius Dariar can minimize inventory costs and improve services to patients. With inventory management, it will have an impact on the quality of products/services provided by improving supplier performance. In addition, selecting the right supplier will help distribute products to end users [12].

CONCLUSION

The purpose of this study was to design a drug stock control information system with the application of Supply Chain Management to facilitate drug stock control, minimize inventory costs, and provide up-to-date information about inventory so that owners can align inventory with customer needs.

The application of SCM to Dr. Julius Dariar's special THT-KL practice is able to improve service performance so that it will have a positive impact on increasing the number of patients who come for treatment.

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