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UTILIZATION OF RFID IN BUILDING AN ORDER OF ADMINISTRATION AND DISTRIBUTION IN MATERIAL WAREHOUSE INSTALLATION GATOT SOEBROTO HOSPITAL INDONESIA

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ABSTRACT
RSPAD Gatot Soebroto is a type A government hospital with the highest referral in the ranks of the TNI and serves as a health service for the general public and continues to strive to improve the quality of excellent health services for each patient. For this reason, the Gatot Soebroto Army Hospital always provides medical supplies generally stored in the material warehouse installation. The Gatot Soebroto Army Hospital's material warehouse installation consists of a general and Health material warehouse. For health services to run well, improving the quality of the material warehouse installation unit is necessary. The development of Radio Frequency Identification (RFID) technology is increasing rapidly from year to year; its benefits can be integrated into managing material warehouse installations to build orderly administration and distribution of material medical supplies needed in each installation unit at the Gatot Soebroto Army Hospital. Through the warehousing application with the RFID application, it is hoped that the process of procurement, receipt, storage, and distribution of material for medical supplies will be more easily controlled, both for evaluation of use, as well as evaluation of stock-taking of supplies which will later become the basis for material procurement for the following year. In addition, RFID also controls the material distribution designation and year of procurement. So that the distribution of material as hospital assets will be recorded accurately and the health services provided can also run well and have good quality.

Keywords: Gatot Soebroto Army Hospital; Material Warehouse Installation; Health Supplies; Radio Frequency Identification (RFID).

INTRODUCTION

Groot Militair Hospitaal Weltevreden, which the Dutch Colonial government founded in October 1936, was the forerunner of the Gatot Soebroto Army Central Hospital (RSPAD Gatot Soebroto). During the Japanese colonial era, this hospital was renamed "Rikugun Biyoiri" which was tasked with providing health services for the Imperial Japanese Army (Dai-Nippon) (https://nasional.tempo.co). However, after Japan surrendered to the Allied Forces, this hospital was again under the control of the Koninklijke Nederlands(ch)-Indische Leger (KNIL), which was the royal army of the Dutch East Indies under the name "Legger Hospital Batavia." After Indonesia's independence, this hospital was handed over to the Indonesian Army National Army (TNI AD) and changed its name to the Central Army Hospital (RSTP).

In 1970, the Central Army Hospital was named Gatot Soebroto to pay homage to a meritorious Indonesian Army figure, General Gatot Soebroto, through Decree Number SKEP-582/X/1970, dated October 22, 1970. The Army Chief of Staff stipulated that the name of this hospital became Gatot Soebroto Hospital, abbreviated as Rumkit Soebroto. In order to standardize the names of hospitals within the TNI AD, the Head of the Army Health Office, through circular No. SE/18/VIII/1977, dated 4 August 1977, changed its name to Gatot Soebroto Army Central Hospital (RSPAD Gatot Soebroto).

Along with its current existence, the Gatot Soebroto Army Hospital is a type A government hospital and is the highest reference in the ranks of the TNI in general and the TNI AD in particular, which also serves as a health service for the general public. RSPAD Gatot Soebroto is an implementing element at the level of the Army Headquarters (Mabesad), which is directly under the Chief of Staff of the Indonesian Army (Kasad) which has the main task of providing the highest level of health services within the Indonesian Armed Forces in order to support the duties of the Indonesian Army. Apart from being the highest referral hospital in the ranks of the TNI, the Gatot Soebroto Army Hospital is also the main Presidential referral hospital. RSPAD Gatot Soebroto, apart from being accredited nationally and internationally, is also designated as a PK-BLU hospital which has the main task of providing complete health services for VVIPs, soldiers and civil servants, and their families and is guided by applicable laws and regulations in order to improve service quality and patient safety.

The vision of the Gatot Soebroto Army Hospital is to become a standard presidential hospital, which is the pride of the soldiers, the large TNI family, and the community. Meanwhile, the mission of the Gatot Soebroto Army Hospital, among others: is (a) Organizing the highest health services for the President and Vice President and their Families, Former Presidents and Former Vice Presidents and their Families, and State Guests; (b) Organizing plenary hospital services and the highest referral for Soldiers, the TNI Family, High State Officials, and the Community; (c) Organizing a National Health System through international standard hospital services; (d) Providing world-class service excellence; and (e) Improving the ability of health workers through education and training as well as developing research-based excellent services.

In achieving its vision - mission above, the Gatot Soebroto Army Hospital, which was built on a land area of 12.5 hectares with a building area of 115,010 m2, is equipped with adequate facilities and infrastructure, one of which is the installation of material warehouses that store health supplies as mandated in the Law Republic of Indonesia Number 36 of 2009 concerning Health. Article 1, paragraph 3 of the Law of the Republic of Indonesia Number 36 of 2009 concerning Health states that health supplies are all materials and equipment needed to carry out health efforts. Health efforts are any activity and series of activities carried out in an integrated, integrated, and sustainable manner to maintain and improve the degree of public Health in the form of disease prevention, health promotion, disease treatment, and health restoration by the government the community. Therefore, the Gatot Soebroto Army Hospital always provides medical supplies generally stored in the material warehouse installation. The Gatot Soebroto Army Hospital's material warehouse installation consists of a general and health material warehouse.

Regarding the installation of material warehouses, every health institution, be it a hospital or a health center, certainly has technical and non-technical obstacles. As a result of research by Palupiningtyas (2014), it is known that there are still many warehouse installations for materials needed by hospitals in Indonesia that do not meet the requirements, such as not using an alphabetical system in their arrangement, not using the FIFO or FEFO systems and using inadequate stock cards. Meanwhile, in Prihatiningsih's (2012) study at a private hospital in the Jakarta area, it was found that standard operating procedures for storing all hospital need that the hospital had set had not been optimized optimally by material warehouse installation workers.

Furthermore, Rumambi's study (2017) results show that technology-based hospital information systems significantly influence the handling of all hospital management processes, from diagnosis, patient care, medical records, pharmacy, billing, databases, staffing, payroll, and control. Management to organize warehouse administration orderly. However, the Hospital Information System (SIRS) at Dr. Samratulangi Tondano General Hospital, Minahasa Regency, North Sulawesi, has not run optimally due to the limited availability of IT units and IT staff. Then the results of similar studies regarding several hospitals in Indonesia that already use adequate technology systems can manage warehouse data efficiently and effectively. Utami, et al, 2020; Ghozali, et al, 2021; Kristiadi, et al, 2021). On the other hand, procurement and management of warehouse goods without using technological assistance cause redundancies, ineffectiveness, and inefficiency in data management in the warehouse.

Based on several related research results and observations, for the installation of material warehouses at the Gatot Soebroto Army Hospital, in the opinion of the author, there are still several obstacles. These obstacles include: (1) Materials received by the warehouse after being commissioned by the commission team ordered, not all of them enter the health material warehouse. Because the warehouse capacity is inadequate, so that the recording of expenses has not been optimally controlled; (2) Materials received by the warehouse are still not equipped with contracts and are only based on official notes and delivery orders; (3) Apart from that, because the warehouse conditions are not yet ideal so that the storage and writing of stock cards is not optimal, the storage of incoming goods is based on empty shelves; (4) General material warehouse and health material warehouse are located separately, this certainly makes it difficult in terms of monitoring; (5) In addition, it is also tricky for material warehouse installations to carry out data collection and inventory of materials that are received directly to users because the receiving system is still manual; (6) Medical device material is received directly by the user because the warehouse capacity does not allow it to be received at the installation warehouse or material warehouse; (7) It is challenging to check material that has been received in previous years because the code in the material does not have a barcode which makes it easier to monitor; and (8) Procurement of material for health supplies and medical supplies (medical supply) has not been well planned, so that materials coming to the health material warehouse tend to be paid in installments. So that it affects the condition of stock-taking, which is less accurate and can impact planning material needs for the following year.

The narrative regarding the problems with warehouse installation above can make it difficult for both the commission and warehouse acceptance teams. Meanwhile, the commission team's staff is limited and must carry out other material commissions. This can have an impact on materials that are not commissioned carefully. Based on these conditions, it is necessary to carry out and improve the management of material warehouse installations in order to achieve the vision - mission of the Gatot Soebroto Army Hospital. One of the efforts is integrating Radio Frequency Identification (RFID) in building an orderly administration and material distribution at the Gatot Soebroto Army Hospital. RFID is a technology that uses communication via electromagnetic waves to exchange data between a terminal and an object, such as medical device products, medicines, or other medical supplies, for identification and tracking through an RFID tag. Through the use of RFID, it is hoped

that it can minimize the obstacles that exist in matters of an administrative nature and the distribution of materials from the storage warehouse at the Gatot Soebroto Army Hospital.

RESEARCH METHODS

The approach used in this research is a descriptive-analytic method. The descriptive-analytical method is designed to obtain information about using Radio Frequency Identification (RFID) in building an orderly administration and distribution of material warehouse installations at the Gatot Soebroto Army Hospital. According to Nazir (2023), this descriptive-analytic research aims to make an in-depth, systematic, factual, and accurate description, picture, or painting of the facts, characteristics, and relationships between the investigated phenomena. Descriptive research methods are focused on problems based on facts which are carried out by observing/observing, interviewing, and studying documents. This method was chosen as one of the writing methods to get an overview of the use of RFID in building an orderly administration and distribution of materials from the storage warehouse at the Gatot Soebroto Army Hospital. In the descriptive method, the writer tries to see the focus of the problem and then illustrates it as it is., Sudjana and Ibrahim (2009) revealed that the descriptive method is research that seeks to describe something, events, and events that are happening at present. In other words, the descriptive method takes the problem or focuses attention on actual problems as they were at the time the research was carried out. Given this nature, the descriptive method in this study functions more to solve practical problems in the administration and distribution of material warehouse installations at the Gatot Soebroto Army Hospital, Indonesia.

RESULTS AND DISCUSSION

The working mechanism for installing material warehouses at the Gatot Soebroto Army Hospital has been going well. This reality can be seen in employees' work ethic in material warehouse installations, such as cooperation, discipline, speed, responsibility, and coordination which have been running optimally. However, the administration and distribution of the material warehouse installation at the Gatot Soebroto Army Hospital, as far as the author's observation, still has several obstacles. This, of course, cannot be separated from the condition of the management system, human resources, and infrastructure resources. This is what the author thinks needs to be evaluated to improve the quality of the administration and distribution of material warehouse installations at the Gatot Soebroto Army Hospital.

Self-management systems describe how units or institutions organize themselves within their structures and processes to act systematically, ensure the smooth running of processes, and achieve planned results. In its development, modern management systems usually follow the PDCA (Plan-Do-Check-Act) cycle: planning, implementing, reviewing, and improving. In the material warehouse installation management system at Gatot Soebroto Army Hospital, the reception system is still manual, so it is difficult for material warehouse installations to collect data and inventory material, and it is challenging to check the material that has been received in previous years because the code in the material warehouse does not have a barcode which makes it easy to monitor. In addition, some of the materials received by the warehouse are still not equipped with contracts and are only based on Official Notes and Delivery Orders, and the procurement of materials for Health and medical

supplies is poorly planned. So, the material that comes to the health material warehouse tends to be done in stages. This can affect the condition of stock-taking, which is less accurate, and the implications for planning material needs for the following year. For this reason, it is necessary to evaluate, plan, implement, review, and improve the material warehouse installation management system at the Gatot Soebroto Army Hospital.

Then human resources, where humans are an essential component in the organization that will move and carry out activities to achieve goals. The quality of the people in it determines the success of an organization. Human resources will work optimally if the organization can support the progress of its competencies. Usually, competency-based human resource development will increase productivity so that the quality of work is higher and leads to customer satisfaction and the organization's benefit. Human resources can be defined as all humans involved in an organization in seeking the realization of the organization's goals (Hasibuan, 2000). In terms of human resources in the material warehouse installation section at the Gatot Soebroto Army Hospital, based on observations and interviews, the authors have not maximized the use of appropriate technology in the administration and distribution of material from material warehouse installations. This is because there has been no return to training and increasing their competence in line with existing technological developments.

The infrastructure resources. According to Grigg (in Kodoatie, 2003), infrastructure resources refer to physical systems that provide transportation, irrigation, drainage, buildings, and other public facilities to meet basic human needs in the social and economic sphere. In the context here, the infrastructure resources the author refers to are related to the physical installation of material warehouses at the Gatot Soebroto Army Hospital. Based on the results of observations and interviews with the author, the installation of existing material warehouses is still limited. This limited condition makes the storage and writing of stock cards not optimal, the material received is directly stored in the storage warehouse because the warehouse does not have transit warehouse space (quarantine place), the installation of general material warehouses, and the installation of health material warehouses are located separately. Indeed, demanding in terms of monitoring. In addition, they are not adequate for the installation of general material warehouses with current conditions. The implication is that the user directly receives the receipt of material for medical devices because the warehouse capacity does not allow it to be received at the material warehouse installation.

Based on the Description above, the condition of the management system, human resources, and infrastructure resources later became a constraining factor in implementing field performance for the material warehouse installation unit at the Gatot Soebroto Army Hospital. Therefore, minimizing the constraints that occur is necessary so that the performance process can run well. One real effort to overcome these obstacles is integrating Radio Frequency Identification (RFID) in building an orderly administration and distribution of materials at the Gatot Soebroto Army Hospital.

a. What is RFID

We know that The author takes as an example the use of smart cards for various community needs, such as ATMs, e-tools, e-money, and so on. The use of smart cards is based on using a technology called RFID. RFID is a technology that is proliferating along with the development of its use in various fields of human life.

Masum et al. (2013) state that RFID uses radio frequency waves in its data transmission process. The data transmission process occurs wirelessly between the device's two composite components, namely the RFID tag and the RFID reader. Usually, the use of RFID is by using a card that has an RFID tag embedded in the card. RFID with objects in the form of cards like this is widely used in various fields, such as industry, companies, hospitals, hotels, and so on. Technological advances make things easier, whereas RFID technology only does the identification process by reading data and information from tags (Masum et al., 2013; Nambiar, 2009).

This RFID technology aims to identify or recognize objects that contain data and store data and process it and produce output to a device in the identification system. This technology utilizes radio frequency waves for wireless data transmission. RFID consists of two components to work, namely RFID tags and RFID readers. The RFID tag is an object that stores data, while the RFID reader is a device that identifies the RFID tag by utilizing radio frequency. RFID was first discovered in 1940 and used in the second world war to identify aircraft (Nambiar, 2009). Aircraft identification determines whether an aircraft is an ally or an enemy. In recent years, the development of RFID has been very rapid, so its application can be found in various fields of life, such as manufacturing, agriculture, transportation, Health, public services, education, and so on.

In addition to using Radio Frequency Identification (RFID) identification systems, there are other identification systems such as Barcodes, Magnetic Strips, Optical Character Recognition (OCR), Voice Recognition, Fingerprint, Optical Strips, and so on. RFID is a form of development of barcodes (Masum et al., 2013). Of course, there are differences between the two, which represent the advantages of RFID when compared to barcodes. If using a barcode, the user has to scan one object at a time, with RFID, the data reading process can be carried out simultaneously so that the use of RFID can reduce the work of the human interface in the system. Tags embedded in particular objects also provide more resistance than barcodes generally found on paper. Tags can also store more data than barcodes. The range of reading a tag from an RFID reader can also be far greater than the range of reading a barcode with its scan tool to read data, and many other advantages of RFID are developed from the shortcomings of systems with barcodes. In the end, RFID is indeed intended as a form of development of the barcode system for identification systems. RFID works based on the workings of the two components that make up RFID, namely the tag and the reader. These components are combined so that they can identify data from the tag to the reader (Masum et al., 2013; Nambiar, 2009). An illustration of how RFID works through these components can be seen in the following figure:

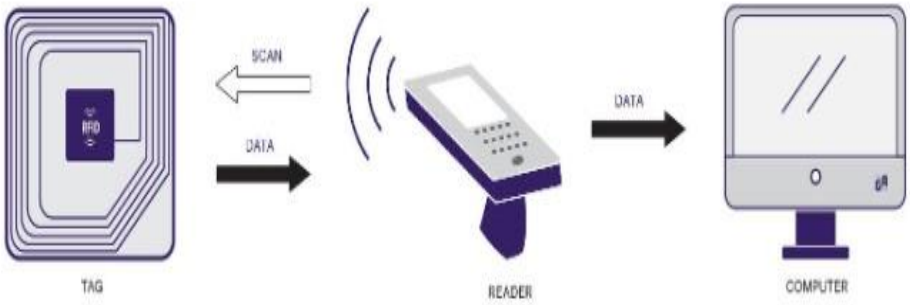

Figure 1. A simple sketch of how RFID technology works
Source: Masum et al, 2013; and Nambiar, 2009.

Based on the picture above, the RFID tag is affixed or attached to an object, which is generally a card. This RFID tag will read the data stored by the RFID reader. The RFID reader will transmit radio frequency signals to be adjusted by the RFID tag. When the RFID tag and the RFID reader have the same wave frequency, the reader can read the data and information on the tag. The radio wave transmission that is carried out causes the two components of the tag and the reader to communicate wirelessly or bring the tag closer to the reader. The data that has been read will be sent to the central identification system.

RFID also requires a control system in the form of a computer as a bridge that will connect RFID to the overall system so that it can store and process data that is read to a database to be continued with other tasks in the system. For example, displaying data on an integrated LCD with this device. For this reason, the identification system with RFID in its application is also implemented with other devices to form a system. Meanwhile, according to Parkash (2012), there are several advantages and disadvantages of RFID, including:

First, regarding the advantages of RFID compared to similar devices, this RFID is considered much more comfortable to use because of its convenience. Besides that, RFID technology is also more difficult to counterfeit, because RFID provides a much higher level of security than the others. Apart from this, RFID also has other advantages, namely: (1) It can store more data without using other tools; (2) Passive RFID types have a much smaller size, so they are easier to embed anywhere; (3) Equipped with a flexible form, coupled with a beautiful design. So that users are also more accessible when using it; (4) The manufacturing process uses special ink; (5) The process of reading information can be done quickly. This is due to the field and shape, not affected by reading. For example, the existence of a magnetic barcode or something else; (6) For flexible reading distance, depending on the antenna and the type of RFID chip to be used. For example, stock calculations on conveyor belts, toll road auto payments and gate access; and (7) data reading can run faster.

Second, related to the shortcomings of RFID, including: (1) If there is one RFID chip on one reader at the same time, it can cause information confusion which causes

information collisions from readers who receive it. Meanwhile, problems like this, it can be solved with the ability to speed up data reception. That way, the RFID chip that has entered later is considered the next data; (2) If there are two freqs on the reader in one area, it can give wrong information to the data processor or the computer. That way, the level of accuracy also decreases. Problems like this can be solved by implementing the freq collision detection tools or adjusting the position of the reading area to avoid collisions; and (3) If another freq is emitted on other equipment, it will cause interference. Moreover, when the freq is not intended for RFID, for this, it will respond to the frequency of the Wi-Fi radio transmitter, mobile phone, or something else.

b. Utilization of RFID in Warehouse Management of Gatot Soebroto Army Hospital

As has been explained regarding the constraints in the Gatot Soebroto Army Hospital material warehouse installation unit, specifically related to the condition of the management system, human resources, and infrastructure resources. So, through this research, the author tries to explain how to use Radio Frequency Identification (RFID) in building an orderly administration and distribution of the material warehouse installation of the Gatot Soebroto Army Hospital. Various large hospitals in Indonesia and hospitals in other countries have widely applied the use of RFID in the world of Health in general. RFID is usually used to collect data on medical devices, inpatient rooms, and patient data collection in hospitals, with real-time-based data collection, every hospital employee can experience the efficiency provided by this RFID technology because they can quickly find out the position or condition of items, as well as find out data about a patient quickly. The system can also show data when an employee or doctor cannot be disturbed by his work. Directing patient visitors can also be done more quickly. As a result, the patient handling process becomes faster, and this will improve the quality of service to patients. The following is a visualization of the use of RFID in the world of Health:

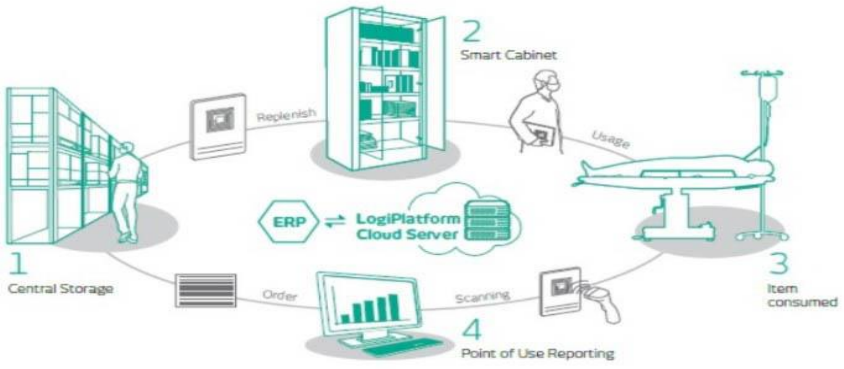

Figure 2. Utilization of RFID in the Health World
Source: Masum et al, 2013; and Nambiar, 2009.

In the context of the material warehouse installation unit of the Gatot Soebroto Army Hospital with the use of RFID, there is a system for recording general and health materials in real time or having a computerized recording system or warehousing application using RFID, both entering and leaving the warehouse. In addition, a

reporting mechanism is also made periodically and can be updated at any time by related parties regarding existing stocks in general and health material warehouses. This mechanism can be created through a programmed and connected system in the network infrastructure at Gatot Soebroto Army Hospital. So that by utilizing RFID in the material warehouse unit of Gatot Soebroto Army Hospital, it can facilitate all existing health service products, be it doctor's examinations, emergency measures, medical and nursing actions, patient care, supporting examination services, drug services, ambulance or hearse services.

In addition to using RFID, the material warehouse installation management system also needs to strengthen Standard Operating Procedures (SOP). So that the material that is procured and received by the warehouse after being commissioned by the commission team is ordered, the material received by the warehouse must also be accompanied by a Contract, Delivery Order, and Material Receipt Note. Furthermore, material, after being commissioned and received, must be stored in the transit warehouse and made a Daily Acceptance Card (KPH) before being put into the storage warehouse. Then the material already in the storage warehouse is warehouse stock and is recorded on a hanging card. To simplify data, the distribution or removal of material from the warehouse must be based on a Material Expenditure Note (NPM) signed by the Head or Deputy Head of the Hospital. Based on this NPM, the material warehouse installation issues material which later, when handed over to the user (user), must be carried out by the expenditure commission at the transit out warehouse by making Proof of Expenditure (BP) signed by the Head of the Material Warehouse Installation.

Meanwhile, in the aspect of human resources, it is essential to carry out competency-based training and development on material warehouse installation resources. This is intended so that material warehouse installation resources master skills in the field of digital technology and improve Standard Operating Procedures (SOP) in the administration and distribution of materials managed by material warehouse installations.

Then it is also essential to add to the integrated material warehouse installation infrastructure resources. Because considering the increasing amount of material that must be stored and limited capacity, it is necessary to have an additional building that can store the existing material stock. However, there is also a need for integration between general material warehouses and Health so that it is easy to supervise. Apart from that, it is also necessary to have minimum standards for the physical building materials, bearing in mind that currently, the existing material warehouses are not yet optimal.

Through this study, it can be seen that with the high intensity of incoming and outgoing materials in warehouse installations. Of course, it requires management and control and synergistic cooperation with other units. By utilizing the RFID system and adequate warehouse infrastructure, the problems that have been a challenge to the performance of warehouse installations will automatically be solved with a sound system.

CONCLUSION

RSPAD Gatot Soebroto is a type A government hospital and is the highest reference in the ranks of the TNI, and for the general public, it continues to improve its quality to provide comprehensive health services for each patient. Of course, one of these

efforts is followed by improving the quality of the material warehouse installation unit. Where the development of RFID technology is increasing rapidly from year to year, its benefits can be integrated into the management of material warehouse installations to build an orderly administration and distribution of medical supplies needed for each installation unit at the Gatot Soebroto Army Hospital. Through the warehousing application with the RFID application, it is hoped that procuring, receiving, storing and distributing medical supplies materials will be more straightforward and more controlled so that the health services provided can also run well and with quality.

REFERENCE

Ghozali, M. T., Latifah, D. N., & Darayani, A. (2021). Analysis of Drug Supply Management of the Pharmacy Warehouse of Prof. Dr. Soerojo Mental Health Hospital, Magelang, Indonesia.

Hasibuan, Sayuti, 2000, Human resource management: a non-secular approach, Muhammadiyah University Press, Surakarta.

Kristiadi, D. P., Hasanudin, M., Sudarto, F., & Tarmizi, R. (2021, February). INDHCI: Indonesian Districts Health Care Information Model. In Journal of Physics: Conference Series (Vol. 1764, No. 1, p. 012214). IOP Publishing.

Masum, K. M., F. Bhuiyan, dan M. A. K. Azad, 2013, "Impact of radio frequency identification (RFID) technology on supply chain efficiency: an extensive study," in Global Journal of Researches in Engineering (GJRE), Vol. 12, Issue 4.

Nambiar, N 2009, "RFID technology: a review of its applications," in Proc. of the World Congress on Engineering and Computer Science (WCECS), Vol. II, hh. 20-22.

Nazir, Moh., 2003, Research methodology, Ghalia Indonesia, Jakarta.

Palupiningtyas, Retno, 2014, Analysis of the drug storage system in the pharmacy warehouse at the Mulya Tenggerang Hospital in 2014, Syarif Hidayatullah State Islamic University, Jakarta.

Parkash, T. Kundu, dan P. Kaur, 2012, "The Rfid Technology and Its Applications: A Review," International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJECIERD), Vol. 2, Issue 3, Hal. 109-120.

Prihatiningsih, Dina, 2012, Description of the drug storage system in the hospital pharmacy warehouse. beautiful year 2011, University of Indonesia, Depok.

Rumambi, F. R., Santoso, A. J., & Setyohadi, D. B. (2017, September). Identification of Factors Influencing the Success of Hospital Information System (SIRS) by Hot-Fit Model 2006: A Case Study of RSUD Dr Samratulangi Tondano, Minahasa Regency, North Sulawesi. In 2017 International Conference on Soft Computing, Intelligent System and Information Technology (ICSIIT) (pp. 202-207). IEEE.

The history of Gatot Soebroto Army Hospital in https://nasional.tempo.co/read/1480037/History-rspad-gatot-soebroto-rumah-sakitnya-para-pejuang.

Sudjana, Nana and Ibrahim, 2009, Educational Research and Assessment, Sinar Baru Algensindo, Bandung.

Utami, F. D., Puspitasari, W., & Saputra, M. (2020, December). Design of planning model for ERP system in warehouse management: an empirical study of public hospital in Indonesia. In IOP Conference Series: Materials Science and Engineering (Vol. 909, No. 1, p. 012061). IOP Publishing.