IAPJ
INTERNATIONAL ACTIVA-PASSIVA JOURNAL
MAGISTER MANAJEMEN-UNISSULA

The Primary Objective of These Interviews Was to Gain a Deeper Understanding of The Use of The Hospital Management Information System (SIMRS) At Pratama Hospital in Yogyakarta City

Danang Sri Wibowo

Faculty of Economic, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: danangsriwib@gmail.com

Abstract. *Agencies or companies must take action related to application systems to meet these needs. Agencies or companies must perform tasks related to computer-based application systems to meet these needs. By using these systems, they are expected to be able to solve problems more quickly, precisely, effectively, and efficiently when carrying out all operational activities. This type is often used in qualitative research because it allows researchers to obtain more in-depth and contextual information (Creswell, 2013). Unstructured interviews, on the other hand, are conducted without standardized question guidelines, making them highly flexible and exploratory. This technique is typically used to gain an initial understanding of a phenomenon or when researchers lack a clear conceptual framework (Patton, 2002). The choice of interview type is tailored to the research objectives and approach used.*

Keywords: *Information System; Information System; Understanding; Management.*

1. Introduction

A hospital is a type of healthcare service that enables a team of trained and educated professionals to handle medical problems to ensure optimal patient recovery and health maintenance. A hospital is defined as a healthcare institution that provides comprehensive individual healthcare services, including inpatient, outpatient, and emergency care, according to Regulation of the Minister of Health of the Republic of Indonesia No. 82 of 2016 (Permenkes, 2016). Clinical workflows can be assisted by a good information system to provide better patient care. To utilize information as a basis for administration and data management, many sectors require application systems (Fadilla, 2021).

Agencies or companies must implement application systems to meet these needs. Agencies or companies must perform tasks related to computer-based application systems to meet these needs. By using these systems, they are expected to be able to solve problems more quickly, precisely, effectively, and efficiently when carrying out all operational activities.

Hospitals must be able to monitor and control operational costs, improve medical services, reduce medical errors, and provide information quickly (Wulur et al., 2023). However, some

hospitals still fail to meet these requirements. Some hospitals still use complex manual systems. When manual systems fail, processes often become lengthy and prone to human error. Furthermore, manual systems in hospitals can lead to data inaccuracies, which in turn can impact the quality of work and data management. Furthermore, manual systems themselves have limitations that can prevent medical teams from providing the information they need quickly, which can impact the quality of patient care (Sofianto, 2020).

A system that connects an organization's strategic activities, daily transaction processing needs, and reports required by external parties is called an information system (Ana Maulida, 2020). The shortcomings of implementing a hospital management information system mean that hospitals continue to use manual recording. However, there are advantages to managing hospital data. Digitally recording patient data is not only faster and more accurate than manual recording, but also much easier to read and organize. Furthermore, the continuity of system data helps management make decisions, according to Joko Susilo (2023).

It is crucial to analyze the current use of the SIMRS during the information system development process at Pratama Hospital in Yogyakarta City. It is expected that users of the information system will be willing and able to use it in their work activities. These changes will not be beneficial if staff do not use and implement the information system application. Therefore, testing the quality of the information system at Pratama Hospital in Yogyakarta City is necessary.

Many users utilize the information system at Pratama Hospital in Yogyakarta City to perform their duties. Medical personnel and management, including directors and employees, are users. Research is needed to identify the source of the problem, as there are differing perspectives between management and medical personnel regarding the use of the information system.

Several factors can be used to assess the quality of an information system, one of which is usability. Usability refers to the extent to which users can utilize an information technology product to achieve their goals and the level of satisfaction of staff in using and operating the SIMRS. Usability is used as an approach to making an information system easier to use during the design process, in this case, the use of a user-friendly information system.

With usability research, what is obtained is as follows: (Tullis et al., 2008)

a. Obtain data based on processed input from informants. The results will be objective because they don't rely solely on personal opinions.

b. Can be used to compare the level of usability between two types of products.

c. Helps classify existing problems with the products used.

d. Provides a more realistic prediction of the product when used.

e. Provide an overview of the product from real situations in the field.

This study used a measurement method through interviews with informants. The interviews were designed based on the Technology Acceptance Model (TAM) to measure aspects of usefulness, ease of use, and user satisfaction with the Yogyakarta City Pratama Hospital Management Information System. This method relies on three main aspects to assess the extent to which users feel satisfied using the information system: usefulness, ease of use, and satisfaction from the staff who use it.

Researchers used these three instruments to conduct a measurement study on the usability, ease of use, and level of user satisfaction of the Hospital Management Information System (SIMRS) used at Pratama Hospital in Yogyakarta City. As a result of the research conducted, the hospital can consider improving and developing the Hospital Management Information System to meet the needs of their patients. A SIMRS system that is in accordance with the hospital's needs indicates that the quality of the system, information, and services has been achieved. Specifically for Pratama Hospital in Yogyakarta City, this can increase user satisfaction and help patients' daily activities.

2. Research Methods

This study used a qualitative approach using interviews with informants. The primary objective of these interviews was to gain a deeper understanding of the use of the Hospital Management Information System (SIMRS) at Pratama Hospital in Yogyakarta City.

A qualitative approach was chosen because it aligns with the research objectives, which are to uncover users' experiences, perceptions, and understanding of the information system they use. This research focuses on subjective aspects that cannot be measured quantitatively, such as ease of use, satisfaction, and system usefulness.

3. Results and Discussion

3.1. Description of Research Subjects and Objects

A. General Description of Yogyakarta City Primary Hospital

Yogyakarta City's Pratama Hospital was established on the site of the former Mergangsan Community Health Center, now located at Jl. Kolonel Sugiyono No. 98 Yogyakarta. Prior to the Mergangsan Community Health Center, the Trisnowati Maternity Clinic was located on this site. The hospital's location was chosen based on the fact that the Mergangsan Community Health Center had the highest number of patient visits compared to 17 other Community Health Centers in Yogyakarta City. This indicates that the need for public health services in this area is the highest in Yogyakarta City.

This hospital was built in 2013, and construction began in 2015. RS Pratama was institutionally known as the Technical Implementation Unit (UPT) of the Yogyakarta City Health Office when it first opened. Therefore, the hospital's official name is UPT RS Pratama Dinas Kesehatan Kota Yogyakarta.

B. Profile of Yogyakarta City Pratama Hospital

The Pratama Hospital was built on the Mergangsan Community Health Center, covering 3,271.26 square meters of land and 10,085.09 square meters of building space. The building has one basement and five floors. Funding from the Yogyakarta City Regional Budget (APBD) covered the construction of the Pratama Hospital, its infrastructure, and operational costs. The budget was used for the construction of the physical building and infrastructure, both healthcare and non-healthcare.

Services at the Pratama Hospital Polyclinic are available Monday through Saturday. Open Monday and Thursday from 7:30 a.m. to 2:30 p.m., Friday from 7:30 a.m. to 10:30 a.m., and Saturday from 7:30 a.m. to 11:00 a.m. The Polyclinic offers general practice, dental practice, pediatric practice, internal medicine practice, obstetrics and gynecology practice, and a spacious and comfortable waiting area for both patients and visitors.

24-hour maternity services. Pratama Hospital offers 24-hour maternity services. Two delivery rooms at Pratama Hospital are equipped with facilities for maternal and perinatal emergencies. Caesarean section services are also available. The delivery room is designed to be as comfortable as possible. The room is equipped with medical equipment to support childbirth and a fully equipped delivery bed. Female obstetrician-gynecologists are available at Pratama Hospital. However, dental and oral surgeries are performed by dentists specializing in oral surgery.

Pratama Hospital has 80 inpatient beds, with a maximum of six beds per ward. Pratama Hospital offers inpatient care for pediatrics, internal medicine, obstetrics, gynecology, dental and oral surgery, perinatology, and intensive care units. Pratama Hospital also has a clinical pathology laboratory, radiology (X-rays and ultrasounds), pharmacy, mortuary, and ambulance unit. For people with disabilities, these services are available directly through existing health insurance programs: National Health Insurance (Jamkesnas), Social Health Insurance (Jamkesos), Regional Health Insurance (Jamkesda), and Special Health Insurance (Jamkesus).

a. Vision of Yogyakarta City Pratama Hospital

Pratama Hospital's vision is to become a quality, affordable, cultured hospital and a source of pride for the people of Yogyakarta City.

b. Mission of Yogyakarta City Primary Hospital

To achieve this vision, Yogyakarta City Pratama Hospital has established and implemented the following missions:

1. Prioritize the safety and security of patients and staff in providing services;
2. Improve service facilities and infrastructure according to standards;
3. Realizing superior and cultured hospital management

c. Motto of Yogyakarta City Pratama Hospital

The hospital's motto is "Serving with professionalism"

The values adopted by Pratama Hospital, Yogyakarta City, are based on eight values which are abbreviated as QUALITY, namely competent, superior, assertive, loyal, integrity, transparent, fair, and polite.

D. Structure of Yogyakarta City Primary Hospital

Structurally, the Yogyakarta City Pratama Hospital is directly under the Head of the Yogyakarta City Health Service with supervision from the Supervisory Board.

E. Information SystemsYogyakarta City Primary Hospital

The Yogyakarta City Pratama Hospital information system utilizes the services of a developer to meet its needs. The IT department oversees this information system, which continues to evolve according to user needs. Bugs or system issues are expected to be addressed because the developer consistently provides software updates.

The information system at Yogyakarta City Pratama Hospital is used by various types of users, including medical personnel and the hospital management team. The medical team utilizes the system to support patient care, such as accepting reservations and recording patient test results. Meanwhile, the management team uses the system according to their respective duties and responsibilities. The Yogyakarta City Pratama Hospital information system is continuously being developed to accommodate all work activities from each unit. The goal is to improve work time efficiency and allow the resulting reports to be processed immediately and used as a basis for decision-making by work unit leaders. The following is a display of the Yogyakarta City Primary Hospital Management Information System:

Interview Results Analysis

The data analysis method used in this study was thematic analysis, which is a qualitative approach to identifying, analyzing, and reporting patterns (themes) in data. Thematic analysis allows researchers to understand the experiences, views, and meanings constructed by participants through the process of coding data and grouping those codes into main themes. The thematic analysis theory used in this study refers to the approach of Braun and Clarke (2006), which establishes six systematic steps:

1. get to know the data
2. generate initial code
3. looking for a theme
4. review the theme
5. define and name the theme
6. compile a report

This approach is flexible and can be used within various theoretical frameworks, including the Technology Acceptance Model (TAM). In the context of this study, thematic analysis was used to extract themes related to user perceptions of the usefulness and ease of use of SIM, as well as external factors influencing user attitudes and behavior.

1. Usefulness

The usefulness theme reflects the extent to which users feel that SIMRS helps them complete work tasks effectively and efficiently. The majority of informants stated that SIMRS is very helpful in speeding up work processes, particularly in terms of searching for patient data, preparing reports, and processing claims with third parties such as BPJS.

Several informants stated that before the use of SIMRS, data retrieval was still done manually through physical files, which was time-consuming and error-prone. With SIMRS, patient data can be accessed quickly and accurately, making the service process more efficient and minimizing the potential for administrative errors.

Example quote: "With this SIMRS, I no longer need to open manual files. The data appears immediately with just a click. It saves time and effort." (Informant 2 – Filing)

Furthermore, this system also assists in the claims process, particularly for inpatient and outpatient units. Patient data automatically compiled within the system can be directly used as the basis for generating claims reports, speeding up the process and reducing the likelihood of data input errors.

2. Ease of Use

Ease of use is a key indicator in the adoption of information technology, including SIMRS. This theme reflects how easy the system is for everyday users to learn and operate. Most informants admitted that although they felt confused at first, after receiving training and becoming accustomed to the system, they were able to operate SIMRS smoothly.

The system interface was considered quite simple and intuitive, requiring no special technical skills. However, informants reported several technical challenges, such as login difficulties, slow network connections, or difficulty navigating certain features.

Example quote: "Once you get used to it, SIMRS is really easy, just click and click. It was confusing at first, but now it's smooth." (Informant 5 – Polyclinic Admin)

This shows that despite initial obstacles, ease of use remains a dominant factor in positive perceptions of the system. Support from the IT team in providing guidance was also a contributing factor to the successful implementation of this system.

3. Satisfaction

The satisfaction indicator describes the level of user satisfaction with the system as a whole, both in terms of functionality and the support provided by system administrators. The majority of informants stated that they were satisfied with the SIMRS system because it supports their work and facilitates coordination between departments.

However, several informants expressed a need for further system development, particularly in terms of adding features more tailored to the needs of each work unit. For example, adding automatic notifications or reminders, integrating with other systems, and increasing data access speeds.

Example quote: "In general, I'm satisfied. But if you could add a notification or reminder feature, that would be even better. So we don't have to keep checking manually." (Informant 7 – Reporting)

User satisfaction is also closely linked to the speed of response to disruptions. Several informants expressed their hope that the technical team would be more responsive when system issues arise.

Based on the results of in-depth interviews with several informants who are direct users of the Hospital Management Information System (SIMRS) at Pratama Hospital, a thematic analysis was conducted to evaluate user experiences and perceptions of this system. This analysis focused on three main indicators adopted from the Technology Acceptance Model (TAM): Usefulness (system usefulness), Ease of Use (ease of use), and Satisfaction (user satisfaction), as well as an additional category called explorative to capture other insights not included in the three main indicators.

Of the 94 relevant quotes obtained from the interviews, the Usefulness indicator recorded the highest number of citations, at 34, or approximately 36.2% of the total data. This indicates that the majority of users consider SIMRS very useful in supporting their daily work, particularly in speeding up administrative processes, simplifying patient data access, and improving coordination between work units. Users appreciate the features that support work efficiency and minimize data input errors.

The Easy to Use indicator received 32 citations (34%), indicating that most users found the system quite easy to use and could operate it without significant difficulty after a learning period. However, some comments regarding the user interface were deemed less intuitive or inconsistent across modules, suggesting improvements in interface design and user training to optimize usability.

Furthermore, the Satisfaction indicator ranked third with 28 citations (29.8%). The high number of citations related to user satisfaction indicates that users are generally satisfied with the system's performance and services. This satisfaction encompasses aspects of system reliability, technical support, and SIMRS's ability to meet the hospital's overall operational needs. However, several informants also expressed hope that future system development would consider additional, more responsive and user-friendly features.

Finally, the explorative category, which contains various additional comments and insights not directly included in the three main indicators, recorded six citations. This data includes input on the need to improve system integration with other applications, as well as suggestions for the addition of stricter security and data privacy features. This category serves as crucial material for the development of SIMRS to be more adaptive to user needs and future information technology developments.

Overall, this analysis data shows that the SIMRS at Pratama Hospital has provided significant benefits and has been well-received by users. However, there is still room for improvement, particularly in terms of usability and feature development to further enhance the user experience. The pie chart visualization clearly shows the distribution of citations for each indicator, which can serve as a basis for hospital management and system developers in designing future SIMRS improvement and development strategies. The recommended

primary focus is to strengthen system usability and increase user satisfaction as a priority, followed by continuous optimization of ease of use.

The following is a pie chart that illustrates the distribution of interview quotes related to the use of the Hospital Management Information System (SIMRS) at Pratama Hospital based on four main categories:

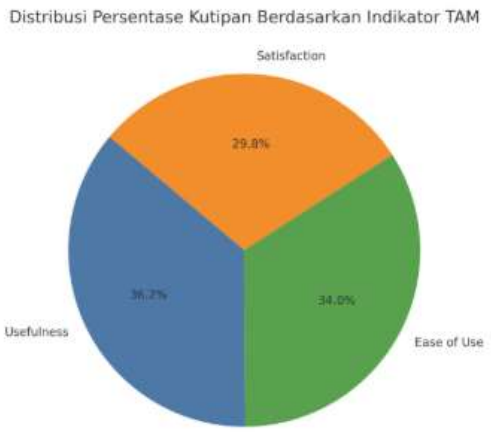

Figure Pie chart

1. *Usefulness*(System Usability): 36.2%
2. *Easy to Use*(Ease of Use): 34.0%
3. *Satisfaction*(User Satisfaction): 29.8%

This pie chart shows the proportion of quotes obtained from interviews with several informants regarding SIMRS. The Usefulness indicator is the most dominant, indicating that the majority of users consider the system very useful and helpful in carrying out daily tasks in the hospital. This suggests that SIMRS development that focuses on improving the system's benefits and functions will be highly appreciated by users. The Easy to Use indicator ranks second, with the majority of users finding SIMRS easy to operate.

Furthermore, the Satisfaction indicator ranked third, indicating that the majority of users were satisfied with the system's performance and features. This user satisfaction is crucial to ensuring consistent system use and supporting efficient work processes.

The Usefulness indicator accounted for a significant portion, at 36.2%. This indicates that while many users found the system relatively easy to use, there is still room for improvement in terms of usability and user interface to enable both new and existing users to adapt more quickly and work more effectively.

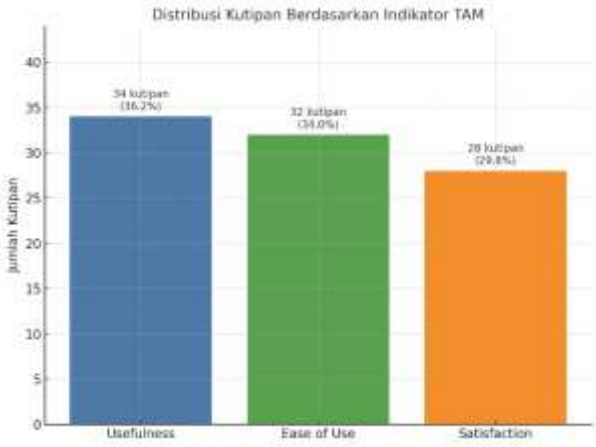

Figure Interview Results Distribution Graph

Overall, this diagram provides a clear picture of which aspects need to be prioritized in the development of SIMRS to improve usability, satisfaction, and ease of use for users at Pratama Hospital.

3.2. Discussion

This discussion aims to interpret the findings of research on the use of the Hospital Management Information System (SIMRS) at Pratama Hospital. Thematic analysis, based on in-depth interviews with SIMRS users, focuses on three main indicators in the Technology Acceptance Model (TAM): usefulness, ease of use, and user satisfaction.

1. System Usability

The research results show that perceived usability of SIMRS is the most dominant aspect perceived by users. Thirty-six percent of informant quotes highlighted how the system simplifies administrative and clinical work, particularly in patient data management, claims submission, and hospital activity reporting. This finding is consistent with the TAM theory, which states that perceived usability is a primary factor influencing user acceptance of technology (Davis, 1989).

Users consider SIMRS a very helpful tool for improving work efficiency and minimizing data input errors. Several informants stated that the system shortens data processing time and streamlines communication between work units. This aligns with previous research confirming that a useful information system strengthens organizational performance and supports decision-making (Sari et al., 2020).

2. Ease of Use (Easy to Use)

Although ease of use received a positive response of 34.0% from most informants, quotes indicated that some users felt the need for improvements in aspects of a more intuitive user interface and more comprehensive training.

This indicates that while SIMRS is generally easy to use, there are several technical and design constraints that can be a barrier for some users, especially those less familiar with information technology. This finding aligns with research suggesting that ease of use is an

important factor influencing system adoption, but its implementation must be supported by adequate training (Venkatesh et al., 2003).

3. User Satisfaction

User satisfaction indicators showed quite high results, with 29.8% of respondents quoting a sense of satisfaction with SIMRS. This satisfaction encompassed system reliability, responsiveness to technical support, and SIMRS's ability to meet hospital operational needs.

This high level of satisfaction indicates that SIMRS is not only functionally acceptable but also provides a positive user experience. User satisfaction is a crucial aspect in ensuring the continued use of the system, as evidenced in the literature that satisfied users tend to be more loyal and open to system development (Bhattacherjee, 2001).

4. Exploratory Aspects

In addition to the three main indicators, the interviews also revealed several additional aspects that require attention, such as the need for system integration with other applications and improved data security features. This indicates that although the SIMRS is already functioning well, users desire a more comprehensive system that adapts to technological developments and the increasingly important need for data security in the hospital context.

5. Implications and Recommendations

Based on the discussion, it is recommended that Pratama Hospital management and SIMRS developers focus on improving system usability by developing features that better meet user needs and improving the user interface for ease of use. Furthermore, training and outreach efforts should be continuously enhanced to ensure all users can utilize the system optimally.

Improving user satisfaction can be achieved by improving technical support services and regularly following up on user feedback. Finally, system integration and data security must be a priority in the development of the SIMRS to meet future technological and regulatory challenges.

4. Conclusion

Based on the results of qualitative research with thematic analysis of the use of the Hospital Management Information System (SIMRS) at Pratama Hospital, the following conclusions can be drawn: 1. Perception of System Usefulness: SIMRS users generally feel that the system provides tangible benefits in administrative processes and medical services. SIMRS helps speed up patient data processing, reduces manual input errors, and simplifies information access for staff across the hospital. This demonstrates that SIMRS has high usability value for sers and supports the achievement of hospital operational goals. 2. Ease of Use: Most users found SIMRS quite easy to learn and use in their daily activities. However, several barriers were identified, such as a lack of adequate initial training and the complexity of some system features, which felt less intuitive, especially for users with limited technological backgrounds. This ease-of-use factor could be improved through a simpler interface design

and ongoing training support. 3. User Satisfaction: User satisfaction with SIMRS is quite high, based on ease of data access, increased work efficiency, and reduced manual administrative burden. Users feel the system positively contributes to smooth operations and patient care. However, some users expressed their desire for improved functionality and faster technical response to system issues. 4. Obstacles and Challenges: The study also identified several obstacles to the implementation of SIMRS, such as limited human resources with technological expertise, technical issues related to servers and networks, and the need for better system integration between work units. Furthermore, data security remains a critical concern to maintain the confidentiality of patient information. 5. Organizational and Policy Support: Hospital management provides support for the use of SIMRS, but needs to strengthen policies and strategies related to training, system development, and technical maintenance so that SIMRS implementation can run optimally and sustainably.

5. References

Journals:

Alprinces. M. 2021. Strategi Pemerintah Desa Dalam Meningkatkan Kualitas Pelayanan Publik Di Tengah Pandemi Covid-19 Di Kantor Desa pusunge Kecmatan Tabukan Utara Kabupaten Kepulauan Sangihe. Jurnal Administrasi Publik-Volume 7 Nomor 111.

Dame. W. J. 2020. Kualitas Pelayanan Kesehatan Masyarakat di Puskesmas Manganitu Kecamatan Manganitu Kabupaten Kepulauan Sangihe. Jurnal Administrasi Publik-Volume 6 Nomor 97

Idris. D. J. 2021. Kualitas Pelayanan Publik Di Kantor Kecamatan Modayag Kabupaten Bolaang Mongondow Timur. Jurnal Administrasi Publik Volume 7 Nomor 109.

Molida. N. 2020. Kualitas Pelayanan Pasien Rawat Jalan Di Rumah Sakit Umum Daerah Trikora Salakan Kecamatan Tinangkung Kabupaten Bsnggai Kepulauan Provinsi Sulawesi Tengah. Jurnal Administrasi Publik-Volume 6 Nomor 96.

Mu'ah, dan H. Masram. 2014. Loyalitas Pelanggan Tinjauan Aspek Kualitas Pelayanan dan Biaya Peralihan. Sidoarjo: Zifatama Publisher.

Sewa. S. R. 2022. Perilaku Aparatur Sipil Negara Dalam Pelayanan Publik Di Dinas Sosial Kabupaten Halmahera Barat. Jurnal Administrasi Publik Volume 8 Nomor 114.

Sondakh. I. 2020. Kualitas Pelayanan Publik Di Kantor Desa Keroit Kecamatan Motoling Barat Kabupaten Minahasa Selatan. Jurnal Administrasi Publik Volume 6 Nomor 98.

Timbawa. R. H. 2021. Pelayanan Kesehatan Di Puskesmas Gemeh Kecamatan Gemeh Kabupaten Kepulauan Talaud. Jurnal Administrasi Publik-Volume 7 Nomor 112.

Books:

Arief, M. 2018. Pemasaran Jasa dan Kualitas Pelayanan. Malang: Bayu Media Publishing.

Mamik. 2014. Manajemen Mutu Pelayanan Kesehatan dan Kebidanan. Sidoarjo: Zifatama Publisher.

Sellang, Kamarudin, H Jamaluddin dan A. Mustanir. 2019. Strategi Dalam Peningkatan Kualitas Pelayanan Publik. Surabaya: CV. Penerbit Qiara Media.

Sugiyono. 2012. Kualitatif, Metode Penelitian Kuantitatif dan R&D. Bandung: CV. Alfabeta.

Wibowo. 2011. Manajemen Kinerja. Rajagrafindo Persada, Jakarta.