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IMPLEMENTATION OF THE HEALTH SERVICE MANAGEMENT INFORMATION SYSTEM IN THE MEDICAL RECORDS UNIT

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ABSTRACT

The Setabelan Community Health Center has not implemented the SIMPUS application optimally because the internet network is unstable, there are still new employees who have not received socialization regarding the use of the SIMPUS application, and online patient registration has not been opened because the community is still unfamiliar with technology. Analyzing how effective the acceptance of the use of the SIMPUS (Community Health Center Management Information System) application is using the TAM (Technology Acceptance Model) theory at the Setabelan Health Center in Surakarta City. This type of research is qualitative and descriptive with data collection methods in-depth interviews with 11 informants including SIMPUS coordinators, SIMPUS programmers, nurses, midwives, pharmacists, dental nurses and administrative staff. The sample selection method used purposive sampling method. Using the SIMPUS application is useful for facilitating and speeding up health services and providing accurate data and information for decision making. There needs to be increased supervision and training of medical personnel in using the SIMPUS application. The use of the SIMPUS application is considered effective in the report submitted to the Surakarta City Health Service, however improvements to the interface and usability are still needed to make the application more attractive and easy to understand for all users and It is necessary to evaluate and develop applications periodically.
Key Word: *SIMPUS; Perceived; behavioral*

ABSTRAK

Puskesmas Setabelan belum mengimplementasikan aplikasi SIMPUS secara optimal dikarenakan jaringan internet belum stabil, masih terdapat pegawai baru yang belum mendapatkan sosialisasi terkait penggunaan aplikasi SIMPUS, dan belum dibukanya pendaftaran pasien secara online dikarenakan masyarakat masih awam dengan teknologi. Menganalisis seberapa efektif penerimaan penggunaan aplikasi SIMPUS (Sistem Informasi Manajemen Puskesmas) menggunakan teori TAM (Technology Acceptance Model) di Puskesmas Setabelan Kota Surakarta. Jenis penelitian ini adalah kualitatif dan deskriptif dengan metode pengumpulan data wawancara mendalam kepada 11 informan meliputi koordinator SIMPUS, programmer SIMPUS, perawat, bidan, apoteker, perawat gigi dan tenaga administrasi. Metode pemilihan sampel menggunakan metode purposive sampling. Penggunaan aplikasi SIMPUS bermanfaat untuk mempermudah dan mempercepat pelayanan kesehatan serta menyediakan data dan informasi yang akurat untuk pengambilan keputusan. Perlu

adanya peningkatan pengawasan dan pelatihan terhadap tenaga medis dalam penggunaan aplikasi SIMPUS. Penggunaan aplikasi SIMPUS dinilai efektif dalam laporan yang disampaikan kepada Dinas Kesehatan Kota Surakarta, namun demikian masih diperlukan perbaikan pada sisi interface dan usability agar aplikasi lebih menarik dan mudah dipahami oleh seluruh pengguna serta perlu dilakukan evaluasi dan pengembangan aplikasi secara berkala.

Kata Kunci: SIMPUS; Dirasakan; Perilaku

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INTRODUCTION

The high demand for the quality of health services at this time is important to note, especially in improving the level of health of the Indonesian people who are more optimal in achieving the highest degree of health (Mahendradhata et al., 2017). According to Law Number 36 of 2009, concerning Health in article 168, it explains that to organize effective and efficient health services, health information requires an information system. The government provides public access to health information in an effort to improve public health status (Creswell & Creswell, 2018).

One of the ways to improve health services to the community is information technology. Information technology is increasingly sophisticated, health services are also developing, especially in terms of health information systems. The benefits of health information system are to facilitate and accelerate health services, standardize procedures and service standards and obtain accurate data and information to support decision making (Darmawan & Sjaaf, 2017)

Setabelan Health Center Surakarta City is one of the health centers that has a health information system in the form of an application, namely the SIMPUS application or called the Electronic Health Center Health Information Report. This application was created in 2017, where the SIMPUS (Community Health Center Management Information System) application is a Community Health Center application whose main function is to manage all patient data starting from registration, examination (diagnosis) and treatment of the patient. The data that has been inputted is accommodated in a database which will later be categorized according to parameters for report needs such as daily visit reports, payment methods, types of diseases and other reports as needed in Community Health Center management. Simpus really supports community health center services, because Simpus can

bridge other applications from the Ministry of Health, as well as BPJS such as P-care (Fahlevi et al., 2019).

Data on the number of patient visits at the Setabelan Health Center in Surakarta City after using the SIMPUS application in 2017 was 19,458 people, in 2018 it was 27,094 people, and in 2019 it was 32,501 people, it was 2020 by 24,829 people and in 2021 by 23,559 people. Based on the results of the preliminary study, health workers at the Setabelan Health Center in Surakarta City who use SIMPUS (Community Health Center Management Information System) still work manually to manage health data and report the results of activities every month which takes quite a long time. Based on interviews with sources at the Setabelan Health Center in Surakarta City, the use of SIMPUS is considered less effective because reporting to the Surakarta Health Office is still manual because the database is stored on each computer so that it is recapitulated monthly, but there is already automatic input of patient data (Setabelan Health Center Health Profile, 2022).

Based on the results of the preliminary study, the Setabelan Health Center in implementing the SIMPUS application management has not been maximized and there are still obstacles, namely the application of the SIMPUS application at the Community Health Center when the application will be used or needed, there are often errors from the server or network at the Community Health Center itself. At the end of each month, the server or network often crashes and does not have a good provider, so the report must be made manually. At the beginning of the SIMPUS application, employees who were 50 years old and above or *midlife* still did not understand the features in the SIMPUS application. Now they are getting used to using the application, but if there is an update to a feature or menu, they need to be educated further because they do not understand the feature (Abdisa, Amanuel Benti, et. Al. 2022). There are new features or menus in the application and have not been used by community health center employees because there has been no further socialization from the community health center (Junaedi, et al, 2018).

Based on the background of the problem, is interested in conducting research on the effectiveness of acceptance of the use of the SIMPUS (Community Health Center Management Information System) application at the Setabelan Health Center in Surakarta City. This research is expected to increase knowledge and insight regarding the effectiveness of the use of the SIMPUS application (Community Health Center Management Information

System) for health workers at the Setabelan Community Health Center, Surakarta City. And can be used as input and evaluation for the Community Health Center and health workers who join in using the SIMPUS Community Health Center Setabelan Surakarta City application.

METHOD

The type of research used is descriptive research and uses qualitative methods. Using descriptive qualitative methods because there are several considerations, the first is because it can more fully describe the situation in the field, the second is that in this study in-depth interviews will be conducted with employees / health workers who join in the use of the SIMPUS application and work at the Setabelan Health Center, Surakarta City. Third, this research aims to understand a phenomenon experienced by the research subject, for example, behavior, perception, motivation, action, and others, in the form of descriptions in the form of words and language in a special natural context and by utilizing various scientific methods (Creswell & Creswell, 2018). So qualitative descriptive research is a case study approach that describes the situation that occurs in a subject or object in the field, then written in words or sentences to get a conclusion.

The research subjects/informants in this study are employees/health workers who join in the use of the SIMPUS application and work at the Setabelan Health Center, Surakarta City, totaling 4 informants including the head of the SIMPUS coordinator, SIMPUS programmer, nurse, midwife, pharmacist, dental nurse and administrative staff. The sampling technique in this study used *non-probability sampling techniques* (non-random sampling), namely the *Purposive Sampling* technique. *Purposive sampling* technique is a sample taken not randomly or randomly but based on consideration with the purpose or purpose of the study. This type of sample is also known as *judgment sampling* (Fauzy, 2019). A person or informant is taken as a sample because the researcher considers that the person or informant has information and understanding of the SIMPUS application and runs the SIMPUS application daily according to the applicable SOP in serving patients needed for his research. Toobtain valid data in this research, appropriate data collection techniques are needed (Ganing.A, et al. 2017). The data collection technique in this research uses in-depth interview techniques using a questionnaire with TAM theory. This research has received a certificate of ethical eligibility by the Health Research Ethics Commission of Kusuma Husada University Surakarta with an ethical number: 094/UKH.L.02/EC/IX/2022.

RESULTS AND DISCUSSION

Data from informants in this study were obtained by conducting in-depth interviews with 4 informants who use the SIMPUS application and work at the Setabelan Health Center Surakarta City including pharmacists, medical recorders, dental nurses, and midwives. The characteristics of the informants can be seen in the table 1.

Table 1. Informant Characteristics In the Working Area of Setabelan Health Center Surakarta City

No.	Informant	Age (y)	Education	Position	Year of Service (y)	Methods
1	**Y**	49	D-III Nursing	Dental Nurse	15	In-depth Interview and checklist
2	RR	27	D-III Medical Records and Health Information	Skilled Medical Recorder	5	In-depth Interview and checklist
3	N	33	Pharmacist Profession	Pharmacist	7	In-depth Interview and checklist
4	F	45	D-III Midwifery	Midwife	12	In-depth Interview and checklist

Source: Primary Data, 2022

Perceived usefulness of use is a level where a person believes that using a particular system will improve one's performance and the effectiveness of an organization. One of the goals of creating a health information technology system is to shorten the time it takes for users to complete a job. The utilization of the SIMPUS application is expected to be able to cut the time to do a job or search for information contained in the application, but a health information system has advantages and disadvantages when using it (Darmawan & Sjaaf, 2017).

Based on the results of interviews with informants, the performance of this Community Health Center can be said to be good because this community health centre can implement the SIMPUS application where this application is expected to facilitate Community Health Center employees in reporting to the Surakarta City Health Office. An important point of an information system is that the confidentiality of documents can be guaranteed or not. If guaranteed, it can improve the quality of a health center organization itself. From the results

of interviews with several informants, in terms of guaranteed document confidentiality and patient privacy rights are quite well maintained using this SIMPUS application. Individual patient data including the patient's medical history is safe and not exposed to the public because this E-Link application can only be opened by health center staff using a user and password that is only known by health center staff, besides that SIMPUS can only be opened by health center staff (Metallo, C, et. Al. 2022).

Information technology is used not absolutely because of social pressure, so it can be concluded that the use of information technology is not due to an element of pressure, but because it is easy to use (Rohman, Hendra, et al. 2021). The ease of use of the system measures each user who uses the application mentally will affect daily performance, where each user who uses the SIMPUS application whether there are obstacles or difficulties experienced when using or operating the application. From the informants' statements, it can be concluded that the SIMPUS application has great benefits in the process of patient identification, history taking, action, and at Setabelan Health Center. However, there needs to be an effort to improve data integration between SIMPUS and P-Care BPJS and maintain the availability of a reliable internet network to maximize the potential use of this application in providing quality health services.

Overall, findings from interviews with medical personnel at Setabelan Health Center indicate that the main obstacle in using the SIMPUS application is the unstable network (Irawati, Tri, et al. 2020). This causes SIMPUS to often not be accessed smoothly and affects the efficiency of health services. In dealing with this constraint, efforts should be made to improve the network infrastructure and ensure that users are equipped with a basic understanding of SIMPUS usage in order to overcome barriers to its use. An information system that can run well needs guidance from the community health center to all employees / health workers and employees who *manulife.* The community health center needs to hold training on the application on a scale, for example every 3 or 6 months so that user skills increase and are motivated to continue using it in daily activities. Overall, it can be concluded that guidance from the community health center is very important in ensuring that information systems such as SIMPUS can run well. This guidance can be in the form of initial training when using the application, as well as self-taught learning and direct guidance when the application is used in daily activities (Nasution, et. al . 2017). Through this guidance, users' skills in using SIMPUS can be improved, and employees are encouraged

to continue optimizing the use of the application in improving the efficiency of health services.

Attitude towards system use in the form of acceptance or rejection as an impact when someone uses technology in their work (Putra, et.al. 2019). Measuring whether the appearance of the application can be seen clearly, interesting, understood, not boring, and can be accepted by employees / health workers of the Setabelan Health Center so that conceptually the application can run normally without disturbing the condition of the application user. Overall, the interview results show that the appearance of the SIMPUS application at Setabelan Health Center is a factor that needs to be considered to increase acceptance and effectiveness of use. Improving the display to be more attractive, understandable, and suitable for the device used can help create a more positive work environment and help the application run normally without disturbing the users of the application.

The level of use of a computer technology in a person can be predicted from the user's attentive attitude towards the technology, for example, the desire for motivation to keep using, and the desire to motivate other users (Rusli. 2017). Overall, the interview results show that there is a strong motivation from the informants to motivate other users to continue using the SIMPUS application. Some of the factors that influence this motivation include the addition of features, training related to the application, the development of digitalization in health services, and a shared sense of responsibility to fill in data properly and correctly (Hassan, Ismail Bile, et. Al. 2022). This motivation is expected to help improve the effectiveness of the acceptance and use of the SIMPUS application at Setabelan Health Center.

Overall, it is important to evaluate and develop the SIMPUS application regularly. The addition of drug monitoring data features, drug filters, and expired drug reminders are important points to improve the efficiency and quality of health services at Setabelan Health Center. By considering input from application users, it is hoped that the SIMPUS application can continue to grow and provide greater benefits in supporting better and more efficient health service management. Developing a health center management, it is necessary to control a health information system, especially in the pharmacy section or control when drug stocks are ED or *expired* (Putri, Wayan Citra W, et al. 2017). The use of the information

system aims to help facilitate the completion of human tasks in processing data and is expected to reduce *human error*. Overall, the interview results show that the appearance of the SIMPUS application at Setabelan Health Center is a factor that needs to be considered to increase acceptance and effectiveness of use. Improving the display to be more attractive, understandable, and suitable for the device used can help create a more positive work environment and help the application run normally without disturbing the users of the application (Rohman, Hendra, et al. 2021).

CONCLUSION

Using the SIMPUS application is useful for facilitating and speeding up health services and providing accurate data and information for decision making. There needs to be increased supervision and training of medical personnel in using the SIMPUS application. The use of the SIMPUS application is considered effective in the report submitted to the Surakarta City Health Service, however improvements to the interface and usability are still needed to make the application more attractive and easy to understand for all users.It is necessary to evaluate and develop applications periodically.

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