



EFFECTIVENESS OF USING HOSPITAL MANAGEMENT INFORMATION SYSTEMS (SIMRS) IN EMERGENCY INSTALLATION PATIENT SERVICES EMERGENCY (IGD) WITH A *TECHNOLOGY APPROACH* ACCEPTANCE MODEL (TAM) AT ALIYAH II HOSPITAL KENDARI CITY IN 2026

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(Naskah diterima: 1 Juni 2026, disetujui 31 Juni 2026)

Abstract

This study aims to analyze the effectiveness of the Hospital Management Information System (HMIS) in supporting patient services at the Emergency Department of RSUD Aliyah II Kendari using the Technology Acceptance Model (TAM) approach. This study employed a descriptive qualitative research design. The informants were selected through purposive sampling and consisted of information technology (IT) officers and healthcare workers who directly used the HMIS in the Emergency Department. Data were collected through in-depth interviews, observations, and documentation, and were analyzed using the interactive model of Miles and Huberman, including data reduction, data display, and conclusion drawing. The findings indicate that the implementation of the Hospital Management Information System at the Emergency Department of RSUD Aliyah II Kendari has been relatively effective. Based on the Perceived Ease of Use dimension, users considered the system easy to learn and operate. From the Perceived Usefulness perspective, the system improved service efficiency, facilitated access to patient information, accelerated healthcare processes, and reduced documentation errors. Furthermore, the Attitude Toward Using dimension showed that most users had a positive attitude toward the system and supported its continued use in healthcare services. However, several challenges were identified, including network disruptions, limited electrical capacity, and the need for continuous user training. Therefore, improvements in technological infrastructure and human resource capacity are necessary to optimize the implementation of the Hospital Management Information System and enhance the quality of patient services in the Emergency Department.

Keywords: Effectiveness; Hospital Management Information System (HMIS); Technology Acceptance Model (TAM); Emergency Department; Patient Services.

Abstrak

Studi ini bertujuan untuk menganalisis efektivitas penggunaan Sistem Informasi Sistem Manajemen Rumah Sakit (SIMRS) dalam pelayanan pasien Instalasi Darurat Darurat (UGD) di Rumah Sakit Umum Aliyah II, Kota Kendari dengan pendekatan penggunaan Technology Acceptance Model (TAM). Studi Metode penggunaan ini studi kualitatif dengan pendekatan deskriptif. Studi informan yang dipilih menggunakan teknik purposive sampling, yang terdiri dari informasi teknologi petugas (IT) dan kesehatan tenaga kerja yang menggunakan SIMRS pada pasien pelayanan di ruang gawat darurat. Pengumpulan data dilakukan melalui wawancara secara mendalam, observasi, dan dokumentasi, kemudian dianalisis menggunakan model analisis interaktif Miles dan Huberman yang meliputi reduksi data, penyajian data, dan kesimpulan ekstraksi data. Hasil penelitian menunjukkan bahwa penggunaan SIMRS pada



Instalasi Gawat Darurat di RSUD Aliyah II, Kota Kendari telah berjalan cukup efektif. Berdasarkan aspek Kemudahan Penggunaan yang Dirasakan, SIMRS dinilai mudah dipelajari dan dioperasikan oleh pengguna. Dari aspek Perceived Usefulness, SIMRS memberikan manfaat dalam mempercepat proses pelayanan, meningkatkan efisiensi kerja, mempermudah akses informasi pasien, dan mengurangi pencatatan data kesalahan. Sementara itu, dari aspek Sikap Terhadap Penggunaan, sebagian pengguna besar menunjukkan sikap positif terhadap penggunaan SIMRS dan mendukung pemanfaatannya dalam layanan kesehatan. Meskipun demikian, masih ada sejumlah kendala, seperti jaringan gangguan, keterbatasan kapasitas listrik, dan kebutuhan untuk melatih pengguna dengan cara yang berkelanjutan. Oleh karena itu, peningkatan teknologi infrastruktur dan sumber kompetensi pengembangan Power man perlu dilakukan agar implementasi SIMRS dapat berjalan lebih optimal dalam meningkatkan kualitas pelayanan pasien dalam instalasi Darurat Darurat.

Katakunci: Efektivitas; Sistem Informasi Manajemen Rumah Sakit (HMIS); Model Penerimaan Teknologi (TAM); Departemen Gawat Darurat; Layanan Pasien.

I. INTRODUCTION

Development technology information has bring significant changes in various sectors, including sector health. Hospital as institutions service health sued For capable give fast, accurate, effective and efficient service. One of them effort For increase quality service the is through implementation System Information Hospital Management System (SIMRS). SIMRS is a system information based technology that works integrate the entire service process House sick, starting from registration patient, record medical , services laboratory, pharmacy, finance, to reporting management . With the existence of SIMRS, the service process expected become more integrated, accurate , and capable support taking decision in a way fast. The implementation of SIMRS in Indonesia has become obligation for every House Sick as arranged in Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013 concerning System Information Hospital Management . In addition , the Law Number 17 of 2023 concerning Health also emphasizes that House Sick must organize service health in a way plenary supported by the system integrated information . Therefore that , the implementation of SIMRS is not only become need operational , but also a form compliance to regulations government in support digital transformation in the field health .

One of the service units that is in great need SIMRS support is Installation Emergency Emergency (ER). ER is door enter main service patient with condition emergency that requires handling fast and precise . In condition said , speed access information patient , accuracy data recording , as well as coordination inter-unit become very determining factor quality services . SIMRS plays a role important in speed up the administrative process , make it easier access

record medical , improve data accuracy , as well as expedite communication between power health so that service to patient can done optimally .

Although thus , success implementation of SIMRS not only determined by sophistication technology used , but is also influenced by the level reception users to system mentioned . One of the many models used For measure reception technology is *Technology Acceptance Model (TAM)* developed by Davis (1989). This model explain that reception something technology influenced by two factors main , namely *Perceived Ease of Use* (perception convenience use) And *Perceived Usefulness* (perception usefulness) . Second factor the will influence attitude user (*Attitude Toward Using*) in use technology so that determine success implementation system. RSUD Aliyah II Kendari City is one of the House Sick private sector that has implementing SIMRS using KHANZA application since 2019. Use application the aim For increase efficiency service through digitalization of administrative processes , recording medical , pharmacy , laboratory , and various service units others . However thus , based on results observation beginning and interview with officer House sick , still found a number of constraint in implementation of SIMRS, especially in services Installation Emergency Emergency . Some constraint the among others still the existence of a service process that is carried out manually when happen disturbance system consequence limitations capacity electricity and disturbance network . Condition the causing the service process become more slow and potential cause error in patient data recording. In addition , visit data patients at Aliyah II Hospital, Kendari City, showed existence trend decline amount visit in a number of year last . Condition This show that implementation of SIMRS is still need evaluated to be able to give more optimal benefits in support improvement quality service health . Evaluation to the use of SIMRS becomes important For know to what extent the system the accepted by users as well as capable increase effectiveness service at the installation Emergency Emergency .

Various study previously show that implementation of SIMRS supported by the level reception good user capable increase efficiency work , speed up service patients , improve data accuracy , as well as repair coordination inter-unit service . However however , still there is various factors that can hinder success implementation of SIMRS, such as lack of training users, limitations infrastructure technology, disruption network , and not yet optimally support management House Sick. Based on description Therefore , it is necessary to conduct research on the effectiveness of the use of the Hospital Management Information System (SIMRS) in Emergency Installation services at RSUD Aliyah II, Kendari City using *the Technology Acceptance Model (TAM)* approach. This research is expected to provide an overview of the

perception of ease of use, perception of usefulness, and user attitudes towards SIMRS so that it can be used as evaluation material and recommendations for hospitals in improving the quality of health services through optimization utilization of SIMRS.

II. THEORITICAL REVIEW

In the research this study theory focused on theory effectiveness , System Information Hospital Management (SIMRS), services Installation Emergency Emergency Department (ER), and *Technology Acceptance Model* (TAM). Fourth theory the each other related in explain How effectiveness SIMRS usage is influenced by perception users to convenience and usefulness system in support service health .

Theory of effectiveness used For explain to what extent a system capable reach goals that have been set . In context House pain , effectiveness use of SIMRS can seen from ability system in increase quality services , speed up administrative processes , reduce error recording , as well as increase efficiency Work power health . Effectiveness No only measured from existence system , but also from success system the in give benefit real for users and organizations. System Information Hospital Management (SIMRS) is system based technology designed information For integrate the entire service process at home sick , start from registration patient, record medical, services laboratory, pharmacy, finance , to reporting management . According to Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013, SIMRS is system technology information communication that processes and integrates all over channel service House Sick so that produce fast , precise , accurate and accessible information used as base taking decision . The implementation of SIMRS is expected capable increase quality service health , efficiency operational , as well as quality home data management Sick .

Service Installation Emergency Emergency (IGD) is a service unit that has characteristics special Because give service for 24 hours to patient with condition emergency . In Emergency room services , speed , accuracy , and coordination between power health become factor main in determine success service . Therefore Therefore , the use of SIMRS in IGD services is very important Because can speed up the registration process patients , making it easier access to record medical , improve accuracy recording , as well as support coordination service in real time so that capable increase quality service to patient. For measure reception users towards SIMRS, research This use approach *Technology Acceptance Model* (TAM) developed by Davis in 1989. The TAM model explains that reception somebody to something technology influenced by perception convenience Perceived Ease of Use and perception Perceived

Usefulness perception the will form attitude users to use technology (*Attitude Toward Using*), which is then influence use system in activity everyday . In study this , third construct the used For evaluate effectiveness use of SIMRS by staff health in the Installation Emergency Emergency at Aliyah II General Hospital, Kendari City.

Perceived Ease of Use describe belief users that SIMRS is easy easy to learn understandable and easy operated without need big business . The more tall perception convenience use something system , increasingly big possibility users receive and utilize system the optimally . On the other hand , the system is considered complicated tend cause rejection or underutilization maximum.

Perceived Usefulness is belief users that use of SIMRS can increase performance , speed up settlement work , improve productivity , and support quality service to patient . If users feel real benefits from use of SIMRS, then level reception to system will the more tall so that implementation of SIMRS can walk in a way effective.

Attitude Toward Using is attitude or evaluation users to use of SIMRS which can in the form of attitude positive and negative attitude positive usually appear if users feel that system easy used and provide benefit for his job . On the other hand , if users experience difficulty or No feel benefit from system , then attitude to use technology will tend negative . Therefore that, attitude users be one of indicator important in evaluate success implementation of SIMRS. Based on theories The effectiveness of SIMRS use in Emergency Room services is influenced by user perceptions regarding the system's ease of use, the benefits it provides in supporting work, and user attitudes toward technology use. The higher the perceived ease and benefits, the more positive the user's attitude toward SIMRS, allowing the system to be optimally utilized to improve the quality of healthcare services at home. Sick .

III. RESEARCH METHODS

Study This use approach qualitative with type study descriptive purposeful For get understanding in a way deep about effectiveness use System Information Hospital Management System (SIMRS) in services Installation Emergency Emergency (ER) at RSU Aliyah II Kendari City based on approach *Technology Acceptance Model* (TAM). Approach This chosen Because capable describe phenomenon use of SIMRS based on experience, perception, and judgment users to aspect *Perceived Ease of Use* (perception convenience usage), *Perceived Usefulness* (perception usefulness), and *Attitude Toward Using* (attitude to use). Data collection was carried out through interview in-depth, observation, and documentation to selected informants in a way *purposive sampling*, namely power health and

officers involved direct in use of SIMRS in the Emergency Room. Data obtained analyzed in a way descriptive using analysis models Miles and Huberman's interactive which includes data reduction , data presentation , and data extraction conclusion , whereas data validity is tested through triangulation sources , techniques , and time so that results study expected capable give comprehensive overview about effectiveness use of SIMRS in support service patients in the installation Emergency Emergency at Aliyah II General Hospital, Kendari City.

IV. RESEARCH RESULT

Research result show that use System Information Hospital Management System (SIMRS) in the Installation Emergency Emergency Room (IGD) of Aliyah II Hospital, Kendari City general has walk with Enough effective in support the service process patient . Based on results interview with IT officers and staff health as informant research , SIMRS is assessed capable simplify the registration process patient , recording record medical , access information patients, as well as speed up coordination inter-unit service. Reviewed from aspect *Perceived Ease of Use* , in part big informant state that SIMRS KHANZA application is easy easy to learn operated , and has quite a display simple so that can used in activity service daily. In this aspect *Perceived Usefulness* , informant evaluate that SIMRS provides benefit real in increase efficiency work , save time service , reducing error data recording , as well as support provision information patient in a way fast and accurate .

Temporary that , in this aspect *Attitude Toward Using* , the majority informant show attitude positive to use of SIMRS and stated his willingness For Keep going use system the Because give convenience in carry out work . Although Thus , the study also found that a number of obstacles that still exist faced , such as disturbance network , limitations capacity occasional electricity cause system No can accessible optimally , as well as the need training sustainable for user. In a way overall , results study show that effectiveness use of SIMRS in Installations Emergency Emergency at Aliyah II General Hospital, Kendari City has support improvement quality service patients , however Still need improvements in aspects infrastructure technology and strengthening competence users for implementation system can walk more optimal.

V. CONCLUSION

Based on results study about effectiveness use System Information Hospital Management System (SIMRS) in services Installation Emergency Emergency (ER) with approach *Technology Acceptance Model* (TAM) at RSU Aliyah II, Kendari City in 2026, can concluded that use of SIMRS general has walk Enough effective in support the service process

patients in the ER. From the aspect *Perceived Ease of Use* (perception convenience use), SIMRS is assessed easy studied , understood , and operated by human resources health so that make it easier implementation service everyday . From the aspect *Perceived Usefulness* (perception benefits), SIMRS provides real benefits in speed up the service process , improve efficiency work , make it easier access information patients , reducing error recording , as well as support coordination inter-unit service . Meanwhile that , in this aspect *Attitude Toward Using* (attitude to use), some big users show attitude positive to use of SIMRS and have desire For Keep going utilise system in support service health. Although Thus , research This Still find a number of obstacles , such as disturbance network , limitations capacity electricity that can influence stability system , as well as the need training in a way sustainable for users . Therefore that , the increase quality infrastructure technology , maintenance system in a way periodic , and development competence source Power man need Keep going done to ensure effectiveness use of SIMRS can increasingly optimal and capable increase quality service patients in the installation Emergency Emergency at Aliyah II General Hospital, Kendari City.

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