The Effect Of Supervision Implementation Of Work Units On Using Hospital Information Systems At dr. Soepraoen Hospitals Malang

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Abstract

This study aims to find the effect of the implementation of work unit supervision on the use of hospital information systems in dr. Soepraoen Malang Hospital. The research method used was quantitative with a cross sectional study approach. The location in this study is Kindergarten Hospital. II dr. Soepraoen Malang. The study was conducted from October to November 2020 involving 59 samples. Data processing was performed using the SPSS application. The results showed that there was a positive and significant influence between the implementation of work unit supervision on the use of hospital information.

Keywords:

supervision, work units, hospital information

1. Introduction

The hospital is one of the health service facilities by empowering various units of trained and educated personnel in dealing with and handling medical problems for good health recovery and maintenance. Information technology has an important role in today's health services. Where the quality of information processing is an important factor for the success of health service institutions. Good information systems can support clinical workflows in a variety of ways that will contribute to better patient care (Ammenwerth E, Ehlers F, Hirsch B, Gratl, 2006). Information systems have 3 important roles in supporting the health service process, namely: supporting the processes and operations of health services.

Hospital information systems (SIMRS) can be characterized by their function through the information and types of services offered. To support patient care and administration, SIMRS supports the provision of information, especially about patients, in a correct, relevant and up-to-date manner, easily accessible to the right people at different places / locations and in a usable format. Service data transactions are collected, stored, processed, and documented to produce information about the quality of patient care and about hospital performance and costs. This implies that the hospital information system should be able to communicate high quality data between various units in the hospital. (Winter, et al, 2001).

Apart from internal communication, another important objective of SIMRS is the exchange of electronic data between health service providers (practicing doctors, primary facilities and hospitals) so as to ensure the availability of comprehensive and efficient patient information (Lestari, 2016). Complete patient information services can help process patient care better. SIMRS has also been developed for various clinical functions such as electronic medical records (EHR), computerized physician

Order entry (CPOE) and clinical decision support systems(CDSS) to support the quality of medical services and 50% of medication errors can be prevented through the useof SIMRS with CPOE and CDSS functions.

The variation in the level of adoption of electronic-basedsystems is influenced by various factors, including the size ofa health service facility, the availability of an IT (information technology) unit and its supporting personnel as well as national, regional and local policies and the implementation of work unit supervision. In Indonesia itself, there are various types and ownership of hospitals such as governmenthospitals, TNI / Polri hospitals and private hospitals, with thelevel of types that are adjusted to hospital resources, such as type A, B, C and D hospitals.

Kindergarten Hospital. II. dr Soepraoen Malang is a hospital that already uses computers as a tool to process financial data. The data processing function via a computer in this hospital is generally the same as in other companies, namely to make it easier to make accounting reports and to minimize errors. The problems that exist in the application of EDP in the information system in Kindergarten Hospitals. II. dr Soepraoen Malang are as follows: There is no separation of duties and responsibilities between the accounting and EDP departments. So that duplicate work occurs and the work cannot be done optimally and quickly. According to Obeidat (2012), the first general control is the separation of duties in system

functions. Because if the tasks are notseparated,

Security of computer data has also not been achieved optimally, because the number of computers is a small number causing them to be used together so that even if there is confidential data, it cannot be properly protected. The financial department at the hospital consists of 14 people which includes 5 cashiers. There are 5 computers available in the finance room, while 9 people work in the room. This shows that the use of computers together cannot be avoided.

According to Obeidat (2012), physical aspects of control include the separation of the data processing computer room

from other parts of the room and those who are allowed to enter that room are people who have the authority to do so. Ifthis control is not used, then of course there will be no data that can be properly protected because of the shared use of computers.

The head of the ward is a manager at the first level in management in the inpatient care unit who has the task of directly controlling the performance of nurses (Royce & Bekelman, 2020). In relation to the documentation of nursing care, the head of the room has a duty to provide assistance / supervision to members of his room because most of the results of the documentation audit are still less than 75 (Davis & Burke, 2012) According to Davis & Burke (2012) supervision is the process of monitoring implementation of activities to ensure whether these activities run according to organizational goals and standards that have been set. Thus, as the leading manager who directly manages care for clients,the head of the room must be able to manage nursing staff and other resources through supervision.

Royce & Bekelman, (2020) defines supervision as a planned activity of a manager through activities of guidance, direction, observation, motivation, and evaluation of his staffin carrying out activities or daily tasks. Meanwhile, according to Kron and Gray in Arwani and Supriyatno (2005), supervision is defined as an activity that plans, directs, guides, teaches, observes, encourages, improves, believes and evaluates the members as a whole according to the abilities and limitations of the members. If supervision can be carried out properly, several benefits will be obtained,as stated by Suarli and Bachtiar (2009), namely as follows: 1. Supervision can increase work effectiveness. Increasing work effectiveness is closely related to increasing the knowledge and skills of subordinates, as well as fostering a more harmonious working relationship and atmosphere between superiors and subordinates. 2. Supervision can further improve work efficiency. This increase in work efficiency is closely related to the decrease in errors committed by subordinates, so that the wasted use of resources (manpower, property and facilities) can beprevented (Hsiao, et al, 2011).

2. Materials and Methods

Supervision of Work Units

Supervision as an activity that is used to facilitate deeper

reflection of the practice that has been carried out, this reflection allows staff to achieve, maintain, and be creative in improving the quality of nursing care through existing supporting facilities (Anggeria & Maria, 2018) Supervision according to Zahara & Sabri, (2011) is an activity which is the responsibility of the manager to provide support, develop knowledge and skills and values of groups, individuals or teams.

Supervision of work units in the hospital can be carried outby position holders at various levels such as team leaders, room heads, supervisors, section heads, heads of care or deputy nursing directors. The supervision system will provide clarity of duties, feedback and the opportunity for the nurse to get a promotion. Supervision according toWinasih & Kurniawati, (2015) is a form of nursing management activity that aims at fulfilling and improving services to clients and families that focus on the needs, skills and abilities of nurses in carrying out their duties. Supervision key according toWinasih & Kurniawati, (2015) includes pre (setting activities, setting goals and determining the competencies to be assessed), implementation (assessing performance, clarifying problems, conducting Q&A, and coaching), as well as post-supervision 3F (F-fair, which is to provide assessment, feedback or provide feedback and clarification, reinforcement, namely providing appreciation and follow-up improvements) (Park, et al, 2015).

Application

Application is one part of information technology that is used to improve the quality of work. In a company or organization really needs an application to simplify and speed up their work. Applications that are built must be in accordance with the management in the company or organization (Irawan & Novita, 2017).

Hospital Information System

Information system is a set of system-forming components that have linkages between one component and another with the aim of producing information in a particular fiel (Balaraman, & Kosalram, 2013). In information systems the classification of information flows is needed, this is due to the diversity of needs for information by information users. The criteria of the information system, among others, are flexible, effective and efficient (Destiningrum & Adrian, 2017).

Hospital Information System (SIRS) is an arrangement that deals with data collection, data management, presentation of information, analysis and conclusion of information and delivery of information needed for hospital activities (Susanto, 2012).

A hospital information system should ideally include the integration of clinical (medical), financial, and managementfunctions which will later become a sub-system of a hospital information system. This sub-system is an element of the hospital information system whose job is to prepare information based on existing functions to simplify servicesat a hospital (Hariningsih, 2014).

Research methods Research design

This type of research is quantitative with a cross sectionalstudy approach. Cross sectional research is a study that aims to determine the relationship or influence of theindependent variable on the dependent where themeasurement of cause and effect is at the sa

Data Collection Methods and Variables

Research The population in this study were all health workers who served in Kindergarten Hospitals. II dr. Soepraoen Malang at the time of the research, the number of health workers was 59 people. Samples were taken using exchaustive sampling technique, or so-called total sampling or saturated sampling, which is a sampling technique when all members of the population are used as samples, so that the number of samples is also 59 people.

Data analysis method

Data processing was performed using the SPSS for Windows application. The data analyzed are presented in

Tabel 2tabular and narrative form to discuss the research results

3. Result and Discussion

Result

ValidityTest

Item validity is the accuracy to measure what should be

measured through these items so that the validity of an instrument is strongly influenced or depends on the validity possessed by each question in a questionnaire or research instrument. A tool to test the validity is Pearson's Product Moment Correlation. An indicator is said to be valid, if n = 30 and α = 0.05, then the r table = 0.296.

Table 1 Validity Test

Variable	r-count	r-table	Description
Supervision Implementation Of Work Units	0.482-0.824	0.296	Valid
Hospital Information Using	0.513-0.817	0.296	Valid

Based on the results of the validity test above, it can be seen that the validity of the supervision implementation of work units and hospital information using instruments is declared as valid because of all values of Corrected item-total Correlation (r-count) are greater than the r-table (0.296).

Reliability Test

Reliability test is the process of testing the question items in the questionnaire, whether the contents of the items are reliable or not so they can measure the factors. Furthermore, the reliability coefficient obtained is compared with an alphaof at least 0.60. If the reliability coefficient is ≥ alpha (0.60) then the question being asked is reliable but if the reliability coefficient is ≤ alpha (0.60) then the question being asked is not reliable.

Table 2. Reliability Test

Variable	Cronbach's Alpha	Standard alpha	Description
Supervision Implementation Of Work Units	0.759	0.60	Reliable
Hospital Information Using	0.812	0.60	Reliable

According to the data above, it can be concluded that the supervision implementation of work units and hospital information using are declared reliable because they have a Cronbach's alpha value above 0.60.

Descriptive Analysis

The following is a description of the respondents 'answers based on their answers to the questionnaire related to the research variables. Descriptive analysis can also describe the value and category of each variable. The general description of these variables can be seen as follows:

Table 3. Variable Description

Variable	Mean	Category
Supervision Implementation of Work Units	4.18	Very High
Hospital Information Using	4.35	Very High

Regression Analysis

Multiple linear regression analysis is intended to determine the effect or relationship of the independent variables, supervision implementation of work units, on

the dependent variable, hospital information using.

Table 4. Regression Analysis

Variable	Beta	t-count	P-Value	Description
Supervision Implementation of Work Units	0.396	2.752	0.000	Significantly Positive

The regression coefficient for the variable supervision implementation of work units (X) is 0.396; It means that if the independent variable has a fixed value and the supervision implementation of work units variable has an increase of 1 unit, then the using of hospital information (Y) will be increased by 0.396 because the coefficient value is

positive. Furthermore, the significance value of the effect is

0.000 <0.05. So, it can be concluded that there is a positive and significant supervision implementation of working unitson the using of hospital information.

Determination Test

Table 5. Determination Test

Coefficient of Determination	0.73	73%

Based on the results of the determination test, it can be concluded that there is a positive and significant effect of 73% supervision implementation of working units on the using of hospital informations.

Discussion

The Positive and Significant Effect of Supervision Implementation of Working Units on the Using of Hospital Information

This research focused on the effect of supervision

implementation of working units on the using of hospital information at the dr. Soepraoen Malang. After doing the analysis, the researcher finds that the result is in line with the results of previous studies (Masrom & Rahimly, 2015). The researcher finds that supervision implementation of working units on has a positive and significant effect on the using of hospital information. From the findings, it can be said that how the supervision from the departments on the working units has an impact on how the health workers use thehospital information (Khalifa, 2014).

4. Conclusion

From the analysis above, it can be concluded that there is a positive and significant effect of supervision implementation of working units on the using of hospital information.

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