



Analysis Of The Effectiveness Of Implementing The Puskesmas Management Information System (Case Study of Community Health Center in South Tangerang City)

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Abstract: This research discusses the results of the analysis of the implementation of the Community Health Center Management Information System (SIMPUS) with a case study of the Community Health Center in South Tangerang City. In this study, researchers used five indicators adapted from Sutrisno (2007:125-126) to measure the extent to which the implementation of SIMPUS affects the effectiveness of health services and its benefits for local communities. Research findings show that program understanding, achievement of goals, and real changes in patient data management have reflected the positive impact of SIMPUS at the South Tangerang Community Health Center. However, technical obstacles, especially related to network and electricity disruptions, pose challenges in using the system. Therefore, suggestions are made to improve infrastructure, officer training, implementation of backup systems, routine maintenance, external cooperation, continuous evaluation, preparation of emergency policies, and development of additional features as necessary improvement and development steps to ensure sustainability and effectiveness. SIMPUS in the future.

Keywords: System, Information, Management Information System.

INTRODUCTION

Puskesmas (Community Health Center) is an important component of the health service system in Indonesia. Community Health Centers are responsible for providing primary health services to the community in an effort to maintain, prevent and overcome various health problems at the community level. Along with the development of information technology, the implementation of Management Information Systems in Community Health Centers has become a crucial issue in improving the efficiency, effectiveness and quality of health services.

The use of Management Information Systems in Community Health Centers in South Tangerang City has become the focus of attention, because Community Health Centers in the area support increasingly complex and diverse public health needs. Management Information Systems have the potential to optimize Puskesmas operations, make it easier to manage patient data, procure drugs and medical equipment, and enable more accurate reporting.

This case study aims to conduct an in-depth analysis regarding the effectiveness of implementing Management Information Systems at Community Health Centers in South Tangerang City. Through this analysis, we will evaluate the extent to which the Management Information System has influenced the performance of the Community Health Center, improved services to the community, and supported better decision making. It is hoped that the results of this research will provide valuable insight for Puskesmas managers, health stakeholders and related parties in efforts to improve and develop the health system at the community level.

This research will cover various aspects related to the effectiveness of implementing Management Information Systems in Community Health Centers. This analysis is expected to provide a comprehensive view regarding effective information systems in health services.

LITERATURE REVIEW

System

According to Azhar Susanto (2013:22) "a system is a collection or group of sub-systems/parts/components or anything, whether physical or non-physical, that are interconnected with each other and can work together to achieve a certain goal." Then according to Sutarman (2009:5) explains that "a system is a collection of elements that interact with each other in unity to carry out a process of achieving a main goal". According to Gordon B. Davis in Hasibuan (2013: 256) states that "An abstract system is an orderly arrangement of interdependent ideas or conceptions".

According to Mulyadi (2010:5) in his book entitled Accounting Systems, explains that a system is a network of procedures created according to an integrated pattern to carry out the main activities of a company or organization, while procedures are a sequence of clerical activities, generally involving people in one department or more so that it is made in such a way as to ensure uniform handling of company transactions that occur repeatedly. There are two basic groups of approaches to defining a system, namely those based on the procedure approach and those based on the component approach.

- 1) Systems approach to procedures A system is a network and procedures that are interconnected with each other, and work together to carry out a job or solve a problem.
- 2) System approach to its components. A system is a collection of elements that interact with each other in a regular pattern to form a totality to solve a particular problem.

Based on the views of several experts that have been presented previously, it can be concluded that a system refers to an entity consisting of components or subsystems that are designed and integrated together to achieve certain goals.

Information

It is generally recognized that information has a very vital role for companies or organizations in the context of decision making. Several experts have also provided a definition or understanding of information. According to Agus Mulyanto (2009:12) in his book entitled Information Systems Concepts and Applications: "Information is data that is processed into a form that is more useful and more meaningful for those who receive it, while data is a source of information that describes a real event".

Jogiyanto (2009:8) in his book entitled Analysis and Design of Information Systems, states the definition of information as "Data that is processed into a form that is more useful and more meaningful for those who receive it". Meanwhile, etymologically, the word information comes from ancient French, namely *informacion* (1387) which is taken from the Latin *informationem* which means "outline, concept, idea". Information can also be defined as data that has been processed in such a way as to become something that is more useful and has more meaning for those who will use it. Information can also be interpreted as data

that has gone through a processing process so that it becomes something more useful and has significance for those who will use it.

Management

Etymologically, the word management is taken from ancient French, namely "management", which means the art of organizing and implementing. Management can also be defined as an effort to plan, coordinate, organize and control resources to achieve targets efficiently and effectively.

According to Handoko (1999: 8) management can be defined as "working with people to determine, interpret and achieve organizational goals by implementing the functions of planning, organizing, staffing, directing and 18 leadership (leading) and supervision (controlling)".

According to Firmansyah (2018: 4) "management is the art and science of planning, organizing, compiling, directing and supervising human resources to achieve predetermined goals".

According to Sarinah & Mardalena (2017: 71) "management is a process in order to achieve goals by working together through people and other organizational resources".

Management information System

According to Handoko (2012: 237) states that "A management information system is a systematic procedure for collecting, storing, maintaining, retrieving and validating various specific data required by an organization regarding its human resources".

According to Lupiyoadi and Hamdani (2013: 222) state that "Information systems are a concept that is closely related and has a direct impact on the success of the company". Meanwhile, according to Hasibuan (2013: 256) states that "Management information systems are approaches that are planned and structured to provide expert assistance that facilitates managerial processes for leading officials".

Effectiveness

Effectiveness in general is achieving goals appropriately or choosing the right goals from a series of alternatives or choice of methods and determining choices from several other options. Effectiveness can also be interpreted as measuring success in achieving predetermined goals. For example, if a task can be completed by selecting predetermined methods, then that method is correct or effective. There are also those who explain the meaning of effectiveness as a level of success produced by a person or organization in a certain way in accordance with the goals to be achieved. In other words, the more plans are successfully achieved, the more effective an activity is considered to be.

According to Ravianto (2014: 11), the definition of effectiveness is how well the work is done, the extent to which people produce output as expected. This means that if a job can be completed according to plan, both in time, cost and quality, then it can be said to be effective.

METHOD

In this research, the author used a descriptive qualitative research type. Descriptive research aims to explain and describe the phenomenon or event being studied. This research provides a comprehensive and in-depth description of a problem, symptoms, facts, events and realities that can produce new understanding. Therefore, a qualitative approach is the most appropriate method.

The aim of this research is to provide an overview of events or phenomena that correspond to field realities. The resulting data will be in the form of written or spoken words, originating from people and observed behavior, related to the effectiveness of implementing the Management Information System. Apart from that, this research also aims to analyze the implementation of Management Information Systems at Community Health Centers, using case studies at Community Health Centers in South Tangerang City.

Qualitative research methodology is a research procedure that produces descriptive data in the form of words, both written and spoken, obtained from people and observable behavior. The main focus of this research is to evaluate the effectiveness of implementing Management Information Systems in Community Health Centers, by taking case studies at Community Health Centers in South Tangerang City. This research focuses on several indicators used to measure effectiveness, as explained by Sutrisno (2007:125-126):

- 1) Program understanding: Evaluated to what extent officers are able to understand the implementation of program activities.
- 2) Right on target: Judging from the desired achievement or realization that occurs.
- 3) Timely: Evaluated based on the use of planned program implementation time to determine the extent to which achievements are in line with previous expectations.
- 4) Achievement of objectives: Evaluated through achieving the objectives of the activities that have been implemented.
- 5) Real changes: Evaluate the extent to which these activities provide real effects, impacts and changes for local officers. Therefore, the selection of an informant must take into account their knowledge and direct involvement in the research problem. Selecting informants is not only related to their physical presence, but also to their competence, in accordance with Moleong's view (2006:132). The selection of informants is based on the consideration that the informants have a deep understanding of the research phenomenon being studied.

RESULT AND DISCUSSION

Results of research on analysis of the implementation of the Community Health Center Management Information System Case Study of Community Health Centers in South Tangerang City.

So the researcher used 5 indicators to measure implementation according to Sutrisno (2007:125-126) study at the South Tangerang Community Health Center which was seen from the following indicators:

- 1) Program understanding: Understanding the Management Information System program at the South Tangerang community health center reflects that the existence of this system helps officers in providing services, especially in medical records. This system reduces time in the service process and also makes patient data integrated.
- 2) Right on target: From the perspective of achieving goals and reality, this research evaluates whether the Management Information System at the South Tangerang Community Health Center is running according to target or not. The results of the interview show that the implementation of SIMPUS in the community health center located in South Tangerang City has gone according to the expectations and targets that have been set.
- 3) Timely: The existence of this system provides significant assistance for officers in providing services to patients. However, unfortunately, when there is a disruption to the network or electricity, this system cannot function, causing officers to have to collect data manually which takes longer.
- 4) Achievement of objectives: Evaluation of the achievement of objectives of activities that have been carried out at the Community Health Center measures the success of the flagship program, namely the Community Health Center Management Information System (SIMPUS). Although SIMPUS has been successfully implemented among officers. However, again, if there is a network and electricity disruption, this system cannot be used.
- 5) Real changes: The real effects, impacts and changes of the Community Health Center Management Information System Program (SIMPUS) are measured by the extent to which this program provides benefits to the local community. SIMPUS has had a positive impact, especially in supporting medical personnel in managing patient

data. One of the main advantages of this program is increasing the accessibility of medical personnel to patient data information more quickly and effectively, because all related data can be managed through one access, namely SIMPUS.

CONCLUSIONS

The conclusion section contains the main points of the articles. Based on the results of research regarding the analysis of the implementation of the Community Health Center Management Information System (SIMPUS) Case Study of Community Health Centers in South Tangerang City, several conclusions can be drawn:

- 1) Program Understanding:
 - The implementation of SIMPUS at Community Health Centers in South Tangerang reflects good understanding of the program.
 - This system positively contributes to improving service efficiency, especially in terms of medical records, by reducing processing time and integrating patient data.
- 2) Right on target:
 - From the results of the interview, SIMPUS at the Community Health Center in the city of South Tangerang was proven to be running in accordance with the expectations and targets that had been set.
 - Evaluation shows that the implementation of SIMPUS has succeeded in achieving the desired objectives.
- 3) Timely:
 - Even though SIMPUS provides significant assistance in patient care, problems arise when there is a disruption in the network or electricity.
 - In these conditions, officers are forced to collect data manually, which takes longer.
- 4) Achievement of Goals:
 - Evaluation of the achievement of activity objectives at the Community Health Center shows the success of SIMPUS implementation among officers.
 - However, the inability of the system when network and electricity disruptions occur is a challenge that needs to be overcome.
- 5) Real Change:
 - SIMPUS provides a positive impact by increasing the accessibility of medical personnel to patient data information quickly and effectively.
 - However, special attention needs to be paid to the inability of the system when technical problems occur.

Thus, while SIMPUS has brought positive benefits, addressing technical obstacles needs to be the focus of improvement to ensure the program's sustainability and success in the long term.

SUGGESTION

The following are several suggestions for improving the implementation of the Community Health Center Management Information System (SIMPUS) based on research findings at Community Health Centers in South Tangerang City:

- 1) Improved Infrastructure Availability: Improve technological infrastructure, including electrical networks and systems, to overcome obstacles that arise during technical problems. This will maintain the smooth operation of SIMPUS without being disrupted by technical problems.

- 2) Training and Awareness Raising: Conduct regular training to officers regarding the use of SIMPUS and educate them about the steps to be taken in emergency situations, such as network or power failures.
- 3) Backup System Implementation: Develop plans and implement backup or disaster recovery systems to ensure that data remains accessible and properly managed in the event of technical disruptions.
- 4) Regular Maintenance: Carry out routine maintenance on SIMPUS hardware and software to prevent technical problems that could hamper system functionality.
- 5) Collaboration with External Parties: Building collaboration with external parties, such as information technology service providers, to support the maintenance and improvement of SIMPUS.
- 6) Continuous Evaluation: Conduct regular evaluations of SIMPUS implementation to identify potential improvements and ensure that the system continues to be relevant to the needs of officers and the community.
- 7) Preparation of Emergency Policy: Develop clear emergency policies and action plans that can be implemented when technical problems or other disasters occur that can affect SIMPUS functionality.
- 8) Additional Feature Development: Identify and develop additional features in SIMPUS that can improve its functionality, while minimizing the potential negative impact of technical glitches.

By implementing these suggestions, it is hoped that the implementation of SIMPUS in Community Health Centers in South Tangerang City can be more effective, efficient and reliable in supporting health services to the local community.

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