Organizational Relations and Human Resources with Information Quality in Health Center Information System Operators

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ABSTRACT

Introduction: Preliminary studies found that the low quality of information in the implementation of the Health Center Information System was caused by the absence of a Health Center Management Information System management team, lack of knowledge and human resource capabilities, lack of funding and specific guidance on Health Center Information System Software operations and lack of use of technology such as computers in processing input, data processing and information output. So that it attracts researchers to conduct research on the Quality of Information on Health Center Information System Operators.

Method: This research is quantitative research, with a Cross Sectional Study design. The population in this study were 36 people with a total sample of the Health Center Management Information System management team in East Kolaka, namely 36 people with a proportion of 3 people. Each Community Health Center used a non-probability sampling technique in determining the sample.

Result: The results of the chi square statistical test at the level of confidence show that the value of $p = 0.002$ and the calculated $X^2$ value $= 9.257 >$ the $X^2$ table value $= 3.841$, which means there is a relationship between Organization and Information Quality. And the results of the chi square statistical test show that the value of $p = 0.04$ and the calculated $X^2$ value $= 4.050 >$ the $X^2$ table value $= 3.841$, which means that there is a relationship between Human Resources and Information Quality.

Conclusion: There is a moderate relationship between Organization and Information Quality and there is a weak relationship between Human Resources and a moderate relationship between Information Quality in the Implementation of Health Center Information Systems in East Kolaka Regency.

Introduction

In performance of organization, system in information have role which offer many benefits ranging from simple jobs, for example, handling exchanges at the operational level to complex and inconvenient tasks such as making serious choices in important positions in the organization. Accuracy, completeness and adequacy of
information is very much needed in making choices before decisions are made. Decisions that result in rational and risk-free choices cannot be made without correct, complete and accurate information. Therefore, institutions need a forum and structure that is useful to be used as a valid and correct database so that decisions taken do not cause instability.[1]

Health Center as one of the government's official health institutions in providing services to the community in a certain area that has a fairly wide range of services will certainly indicate the emergence of obstacles complicated existence of information systems accurate and reliability must be required. The process of collecting, recording, managing, storing and utilizing data in an effort to find solutions to health problems in the community. However, due to the many factors that are at the Health Center, it also determines the speed with which information reaches users within the scope of the Health Center.[2]

Quality information is needed for organizations in making decisions where the quality of information can become the basis for determining the right steps to produce an effective and efficient policy. Not only that, quality information also determines the quality of activity planning in an agency so that with valid planning, a quality management cycle is created as well. In creating quality information, it is also supported by the use of technology. The more advanced the use of technology in an organization, the easier and faster the management of the Health Center Management Information System is in processing data into information.[3]

Most of the data collection processes carried out by the health Center at this time still use non-electronic methods in filling out Report forms. This method is less effective and efficient in terms of the use of time and energy due to the frequent repetition of the same type of work on several different forms. There is still very few health Center that use computers to input and process data, let alone use information in policy making. In fact, almost all Health Center have been facilitated by computers, but their use in the health Center information system plays a more role as a medium for providing recording and reporting forms. And not only that, limited capability in operating computers is also an obstacle in the health center information system in East Kolaka.

Based on the results of a preliminary survey at the District Health Office East Kolaka and also several Community Health Centers in East Kolaka that the reporting system often experiences delays where it is according to the agreement that routine monthly reports that should have been at the East Kolaka District Health Office every 05 but in fact exceed the predetermined deadline. This happened due to the late submission of reports originating from the implementation of activities outside the building such as auxiliary health center and village midwives so that the reporting at the health center also experienced delays. What's more, there are several reports that are not inputted completely. In the data input process, there are several Health Center that still use the old method, namely by using a pen to fill out the report form so that the data is processed takes a long time where this can result in the resulting data or information being incomplete, inaccurate and late so that it has an effect on the low quality of the information produced. So, based on the problems mentioned above, the writer is interested in researching: "Organizational Relations and Human Resources with Information Quality in the Health Center Information System Operators".

Method

This research is a quantitative study with a Cross Sectional Study design.[4] Research locations in all Community Health Centers in East Kolaka Regency. The population in this study were 36 people with a total sample of the Health Center Management Information System management team in East Kolaka, namely 36 people with a proportion of 3 people. Each community health center used a non-probability sampling technique in determining the sample. The inclusion criteria are the management information system management team for 12 community health centers and participating in research and work in the Working Area of East Kolaka Regency in 2020, while exclusion are respondents who not in place when study set three visits in a row.
Result

Table 1 shows that of the 36 respondents studied there were 15 respondents who were Organizations in the sufficient category and there were 21 respondents who were Organizations in the less category. Furthermore, from 15 respondents with sufficient organization category, there were 12 respondents (80.0%) who had good information quality and there were 3 respondents (20.0%) who had poor information quality. Then from 21 respondents with less organization category, there were 6 respondents (28.6%) who had good information quality and there were 15 respondents (71.4%) who had poor information quality. The results of the chi square statistical test at the 95% level of confidence (α = 0.05) show that the value of p = 0.002 and the value of $X^2_{\text{count}} = 9.257 >$ the value of $X^2_{\text{table}} = 3.841$, which means there is a relationship between organization and information quality.

Table 2 shows that of the 36 respondents studied there were 20 respondents who had sufficient Human Resources and there were 16 respondents who had insufficient Human Resources. Furthermore, of the 20 respondents who had sufficient Human Resources, there were 13 respondents (65.0%) who had good information quality and there were 7 respondents (35.0%) who had poor information quality. Then of the 16 respondents who had insufficient Human Resources, 5 respondents (31.2%) had good information quality and 11 respondents (68.8%) had poor information quality. The results of the chi square statistical test at the 95% level of confidence (α = 0.05) show that the value of p = 0.04 and the value of $X^2_{\text{count}} = 4.050 >$ the value of $X^2_{\text{table}} = 3.841$, which means there is a relationship between Human Resources and Information Quality. The results of the closeness test showed that the value of phi = 0.335, which means that there is a weak relationship between Human Resources and Information Quality in the Implementation of Health Center Information Systems in East Kolaka Regency.

**Table 1.** Organizational Relations with Information Quality in the Implementation of Health Center Information Systems in East Kolaka Regency

<table>
<thead>
<tr>
<th>Organization</th>
<th>Information Quality</th>
<th>Amount</th>
<th>$X^2_{\text{count}}$</th>
<th>$X^2_{\text{table}}$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Not enough</td>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Enough</td>
<td>12</td>
<td>15</td>
<td>27</td>
<td>18</td>
<td>50.0</td>
</tr>
<tr>
<td>Not enough</td>
<td>6</td>
<td>15</td>
<td>21</td>
<td>21</td>
<td>50.0</td>
</tr>
<tr>
<td>Amount</td>
<td>18</td>
<td>18</td>
<td>36</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 2.** The Relationship between Human Resources and Information Quality in the Implementation of Health Center Information Systems in East Kolaka Regency

<table>
<thead>
<tr>
<th>Human Resources</th>
<th>Information Quality</th>
<th>Amount</th>
<th>$X^2_{\text{hit}}$</th>
<th>$X^2_{\text{tab}}$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good</td>
<td>Not enough</td>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Enough</td>
<td>13</td>
<td>7</td>
<td>20</td>
<td>16</td>
<td>65.0</td>
</tr>
<tr>
<td>Not enough</td>
<td>5</td>
<td>11</td>
<td>16</td>
<td>16</td>
<td>31.2</td>
</tr>
<tr>
<td>Amount</td>
<td>18</td>
<td>18</td>
<td>36</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

Discussion

**Organizational Relations with Information Quality**

Information system is a system within an organization that meets the needs of daily transaction processing that supports organizational functions that are material in the strategic activities of an organization to be able to provide certain external parties with the necessary reports.\[[5]\]

Organizing is defined as the activity of applying all activities that must be carried out between work groups and assigning certain
authorities and responsibilities so as to realize business unity in achieving the goals that have been set.\textsuperscript{[6]}

Based on the results of the study, it was shown that of the 15 respondents with sufficient organization category, there were 12 respondents (80.0\%) who had good information quality and there were 3 respondents (20.0\%) who had poor information quality. There are respondents who have Organizations in the adequate category but have low Information Quality due to: competency where most of the employees placed in the Administration section do not have competence in the field of information systems and statistics so that in the process of implementing information systems they rely more on makeshift systems without paying attention to the standard flow as stated in Minister of Health regulations 31 of 2019 concerning information systems Health Center so that the low quality of information produced. Then of the 21 respondents who were in the less organizational category, there were 6 respondents (28.6\%) who had good information quality and there were 21 respondents (72.5\%) who did not suffer. There are respondents who have less organization but have good information quality due to: these officers are directly involved in the process of administering Health Center accreditation in fulfilling the assessment elements related to the Health Center Information System but these officers do not have competence in the field of information systems, statistics or epidemiology as required by Minister of Health regulations 31 of 2019 concerning Health Center Information Systems.

The results of the chi square statistical test at the 95\% level of confidence (\(\alpha = 0.05\)) show that the value of \(X^2\text{count} = 9.257 > \) the value of \(X^2\text{table} = 3.841\), which means there is a relationship between Organization and Information Quality. The results of the closeness test showed that the value of phi = 0.507, which means that there is a moderate relationship between Organization and Information Quality in East Kolaka Regency.

The information system is a combination of work procedures, information, people, and information technology that is organized to achieve goals in an organization. The information system can also be interpreted as a framework that coordinates human resources to convert inputs into outputs in the form of information in order to achieve the goals desired by the organization. Based on this definition to build a good information system requires good and internal organization an organization that has a specific purpose needed the support of a good information system as well.\textsuperscript{[7]}

\textbf{Relationship between Human Resources and Information Quality}

Humans are an important component in the organization that will move and carry out activities to achieve goals. The success of an organization is determined by the quality of the people in it. Human Resources will work optimally if the organization can support their career advancement by looking at what their competencies really are. Usually, competency-based Human Resource development will increase employee productivity so that the quality of work is also higher and leads to customer satisfaction and the organization will benefit. Human Resources can be defined as all human beings involved in an organization in seeking the realization of the goals of the organization.\textsuperscript{[8]}

Based on the research results show that of the 20 respondents who have adequate human resources, there are 13 respondents (65.0\%) who have good information quality and there are 7 respondents (35.0\%) who do not have poor information quality. This happened because some of the staff in the health center information system did not apply the recording and reporting process in accordance with existing guidelines coupled with the absence of a data analysis process so that the available data could not be utilized to become information. Then of the 16 respondents who had insufficient Human Resources, 5 respondents (31.2\%) had good information quality and 11 respondents (68.8\%) had poor information quality. With the presence of several respondents who have fewer human resources also have less information quality because the respondents have never attended training on health center information systems so that respondents do not really understand matters related to terms in the implementation of health center information systems. In contrast to respondents who have fewer human resources but have good information quality because these respondents apply an information system in accordance with the guidelines available at the health center so that
they can fulfill most of the assessment aspects such as structure, function and capacity in monitoring and evaluation, indicators and guidelines reporting.

Human Resources can be interpreted as "all human beings contained in the organization in order to achieve the goals of an organization. The capacity and capability of human resources which refer to cognitive knowledge and skills can determine a person's success in completing tasks that have been charged to the fullest. Human Resource Constraints are still an important element in order to survive in this era of globalization. Humans still have the main function in completing every organizational activity even though the organization is supported by adequate facilities and infrastructure and financial resources. In addition, in an effort to achieve organizational goals, human resources along with other elements such as methods or technology, machines.\[9\]

Human resources are a very vital organizational asset; therefore, their roles and functions cannot be replaced by other resources. No matter how modern the technology is used, or how much funds are prepared, without professional human resources everything becomes meaningless.

The existence of human resources in an ever-changing environment cannot be denied, therefore a high degree of adaptability is required so that they are not crushed by the change itself. Human resources in the organization must always be oriented towards the vision, mission, goals and objectives of the organization where they are in it.

The results of the chi square statistical test at the 95% level of confidence ($\alpha = 0.05$) show that the value of $X^2$ count = 4.050 $> \text{the value of } X^2 \text{table} = 3.841$, which means that there is a relationship between Human Resources and Information Quality in the implementation of the health Center information system. The results of the closeness test showed that the value of $\phi = 0.335$, which means that there is a weak relationship between Human Resources and Information Quality.\[10\]

In terms of the implementation of the information system for the Public Health Center in East Kolaka Regency, it is still done manually and deposited in the form of a print out. This causes frequent delays in the collection of reports and the potential for non-uniformity of data produced by each program at the health Center so that it can produce data and information that is of less quality. Most of the human resources tasked with managing the Health Center information system have never attended training related to the Health Center information system, this is what causes the low quality of information produced by the Health Center,\[10\] human resources as a strategic resource. No matter how carefully the work procedures are designed, the physical infrastructure is complete, the hardware technology is sophisticated and the available software is up-to-date, in the final analysis all of this is highly dependent on the human element that utilizes and uses it.

One of the factors that influence the development of human resources in an organization Development of science and technology: The development of science and technology outside this organization has been so rapid. For this reason, organizations must improve the ability of employees by participating in training that can improve the skills and abilities of employees in an organization as well as an organization that must be able to choose the right technology for its organization. For this reason, the ability of employees must be adapted to conditions.

**Conclusion**

There is a moderate relationship between Organization and Information Quality and there is a weak relationship between Human Resources and a moderate relationship between Information Quality in the Implementation of Health Center Information Systems in East Kolaka Regency.
Therefore, it is hoped that the placement of Human Resources who manage the Health Center Information System is in accordance with their competence as stipulated in the Regulation of the Minister of Health Number 31 of 2019.

Reference


