

# Factors Affecting the Level of Satisfaction of Doctors Using the YesDok Telemedicine Information System

Marshell Timotius Handoko<sup>1</sup>, Laura Lahindah<sup>2</sup>

<sup>1,2</sup>Sekolah Tinggi Ilmu Ekonomi Harapan Bangsa, Bandung, Indonesia

Email: [doktermarshall@gmail.com](mailto:doktermarshall@gmail.com)

## Abstract

Healthcare is one of the most important things in today's society, especially with technology. Indonesia has the fewest doctors in Southeast Asia, at 0.4 doctors per thousand population. This innovation in medical services can help patients and medical personnel to be more efficient and effective. Telemedicine as the practice of using technology to deliver health services remotely. In virtual situations, trust becomes very important in online services. Doctors are the main important part of YesDok telemedicine services and the importance of doctor satisfaction as users of telemedicine information systems is the main target. Quantitative research was conducted on a sample of all YesDok in-house doctors, the data was analyzed with SPSS 25. The results showed a significant effect on the level of satisfaction of doctors using the telemedicine system on the information quality factor and the level of reliability. Showing the main important factors needed by doctors as users of the telemedicine system.

**Keywords:** *Telemedicine, Satisfaction Level, Information System, Doctor, YesDok*



## A. INTRODUCTION

Economic activities that provide services that are not produced in physical form are usually consumed directly in the production process, which we often call the service sector, which produces added value such as convenience, pleasure and entertainment (Setiawan, 2019). Combining the physical and digital worlds with the basics we know, a new approach was born, Industrial Revolution 4.0, a technology that can change people's behavior (Tjandrawinata, April, 2016) (N. A. Hamdani, 2019). Health care is one of the most important things in today's society, especially with technology (Lindayani, 2019).

During the Indonesian COVID-19 pandemic, World-odometers 2021 reported that Indonesia was among the countries with the highest incidence of COVID-19 in the world (Azwar, 2020). The number of cases of coronavirus disease 2019 (COVID-19) is increasing rapidly, the World Health Organization announced on March 11, 2020 that this case can be classified as a pandemic. Data from the World Health Organization (WHO) shows that as of March 22, 2021, the number of confirmed cases in Indonesia is 1,465,928 cases with a total of 39,771 deaths (WHO, 2021). The novel coronavirus disease 2019 (COVID-19) has had a major impact on the world's economy and society, including enormous challenges to health services. (Jnr, 2020).

The World Bank 2010-2017 reported that Indonesia has the fewest doctors in Southeast Asia, at 0.4 doctors per thousand population. The imbalance between doctors and society and the conditions that demand everything to be efficient and

effective led to the emergence of telemedicine innovation, which is the ease of health consultation with technology. Telemedicine is defined as the practice of using technology to deliver health services remotely between service providers and consumers. COVID-19 is not only deadly but also contagious, so preventive measures in the form of social prisons can save a person's life (S. Rahi, 2021). Telemedicine as a telehealth service has several key strengths that can improve emergency response to environmental or biological hazards (al., 2020). This innovation in medical services can help patients and medical personnel become more efficient and effective, such as doctors who can serve patients online (Ryu, 2012). Several applications are available to ensure continuity (A. Alaboudi, 2016), (A. Alaboudi, 2016). Some applications are available to ensure continuity of care, as demonstrated by American hospitals, where doctors are now using telemedicine for remote care of COVID-19 patients. In addition, telemedicine allows people to navigate the healthcare system and receive routine care during the pandemic. (S. Rahi, 2021).

In Indonesia, telemedicine services receive direct guidance from the president. President Joko Widodo (Jokowi) said Indonesia has a "hospital without walls and is about treating coronavirus cases." Jokowi said. This is what distinguishes Indonesia from other countries. - I also really appreciate, this is something that has not been talked about much, that we have a hospital without walls, telemedicine. It will be very good if it can be continued," Jokowi said in a press conference sent by the Presidential Secretariat, Monday (April 13, 2020), (detikcom, 2020). In particular, YesDok telemedicine is also part of the handling of the COVID-19 pandemic that IDI is recommended to use by the government. (Indonesian Ministry of Health, 2021). In terms of doctors' views, specifically the 31st IDI Congress stated that telemedicine services are a complement to post-COVID-19 services, of course without ignoring the principles of evidence-based medicine and paying attention to aspects of data security and confidentiality. The problem is that the adoption of telemedicine depends on the willingness of the community to accept change and replace old habits. Physical services in hospitals and telemedicine are mutually reinforcing, telemedicine can be an alternative to physical medical services (Zhou, 2019)

The DeLone and McLean information system model integrates several factors, namely: information quality, system quality, organizational impact, patient impact, user satisfaction, and system usage for successful information utilization (McLean, 1992). One of the reasons for the decision to use telemedicine during the COVID-19 pandemic is information quality. (Azwar, 2020). According to Mok and Phelps (1999), two factors affect user satisfaction, namely: 1. The commitment factor refers to whether the existing system is really wanted by management and users. The involvement factor consists of: management support and perceived benefits, including user perceptions of the system. 2. Ergonomic factors refer to whether the existing system helps users complete their tasks. Ergonomics is the physical and behavioral impact of objects such as computers and office equipment on users. Ergonomic factors include ease of use, reliability and accuracy of information (Prasetyo, 2004).

In health sciences, trust between patients and doctors is very important, trust is the belief or expectation that doctors will do things that can help their patients (F. Meng, 2019). In virtual situations where people cannot communicate directly, trust is very important in online services and is at the center of usage decisions (D. Wu, 2021). Patient trust is defined as a belief about his/her wishes. Previous research investigating trust significantly encourages patients' use of telemedicine (F. Saigi-Rubió, 2016). However, there are still people who do not want to use it because they do not trust telemedicine and fear the flow of information and user privacy (S. A. Kamal, 2020). Previous studies on information systems show that the failure rate of telemedicine projects is 75% (ICT Applications and Cybersecurity Division, 2008.), (L. van Dyk, 2013.) However, in developing countries, telemedicine is growing quite fast, at 90% (A. Alaboudi, 2016), (A. Alaboudi, 2016).

Many studies related to satisfaction with telemedicine information systems have been conducted only on the patient side as a user, but this study wants to measure how doctors' satisfaction as users of telemedicine information systems, specifically YesDok telemedicine.

## **B. LITERATURE REVIEW**

### **1. Information System**

Management needs information to make decisions. The usefulness of information is to reduce uncertainty when making decisions about a situation (Hidayat, 2010). The definition of information system itself has an understanding of a system that receives data from sources around the environment which is commonly called input (input) and processes input so that output is obtained into useful ready-to-use information. As for the characteristics of information systems: having a system target, having input or output, having a data processor or processor, having output or input, having an interface, having boundaries, having an environment, having components (Nugroho, 2021). Accurate, timely, and relevant are three factors that determine the quality of information. Information must be accurate and not biased or misleading. In addition, accurate also means that the information must arrive on time. Relevant means that the data is useful for the owner (Sutabri, 2012). Telemedicine, or telemedicine, is one type of information system technology used by healthcare companies.

### **2. Telemedicine and YesDok**

Telemedicine is a type of technology that can facilitate health services. The term refers to the use of electronic services to support a variety of services, such as monitoring, education, and patient care (Schwamm, 2014). In healthcare, telemedicine has been widely used to prevent COVID-19. Patients and healthcare professionals can communicate through apps, even though they do not need to see each other (Cheng, 2020). Telemedicine is an inexpensive and easy-to-use application that serves as a way to prevent COVID-19 (Turolla, 2020). A Systematic Review conducted by Andrews et al (2020) showed that patients and healthcare providers were generally very satisfied

with the use of telemedicine during the covid-19 pandemic. Many patients and healthcare workers reported that they would like to continue using it after the pandemic (Andrews, 2020). Furthermore, a descriptive observational study conducted with the aim to determine the satisfaction of users of telemedicine services during the Covid-19 pandemic in Indonesia found that 1,975 (98.8%) respondents stated that they were satisfied, and 1,215 (60.8%) stated that they did not find obstacles when using telemedicine services (Adinda, 2021). Previous studies show that different types of telemedicine have been used as healthcare solutions during the COVID-19 pandemic. This is closely related to government appeals and startups (Lubis, 2020).

YesDok is an app that allows you to get online doctor consultations quickly, easily and reliably. In addition, the app works with doctor partners who are registered with the Indonesian Medical Council. YesDok application is the only doctor check application that offers home delivery service and allows patients to consult with the doctor of their choice through various means, such as chat, telephone, or video call for 24 hours (Hasfera, 2023).

YesDok's difference in dedication to video-call-based telemedicine services and available 24 hours provides a different experience for users. This also provides a special experience on the doctor's side as a user, where each doctor will use a special panel (dashboard) web app-based information system in conducting telemedicine consultation services. Each doctor will be on duty according to shift hours, which are divided into 4 shifts in 24 hours starting at 6am. Each doctor also receives training in the use of the YesDok telemedicine information system panel and assistance from IT support personnel who are available 24 hours. On the doctor panel, in addition to the video-call function in conducting consultation services, doctors also use the information system presented regarding writing ICD-10-based diagnoses, patient basic data, drug lists in writing prescriptions and information data related to writing drug administration etiquette. Of course, YesDok is well aware that doctors are the main important part of YesDok services and the importance of doctor satisfaction as users of YesDok telemedicine information systems needs to be the main target and YesDok continues to focus on quality improvement in order to provide the best service for the Indonesian people.

### **3. User Satisfaction**

User satisfaction shows the alignment between user expectations and the results they get from the system, which they helped develop (Grahita Chandrarin, 1997). When Information Systems are considered as service organizations, user satisfaction is the main measure of system success. Managers can use this evaluation as the best way to convey their responsibilities to senior executives or Information Systems executives (Tyoso, 2016). Senior executives will then use user satisfaction as a way to assess employee performance because user satisfaction impacts the quality of employee work. Users who are dissatisfied with the system will result in unpleasant working conditions, while users who are satisfied with the system will improve the quality of their work, resulting in good employee performance.

According to Phelps and Mok, there are two components that affect user satisfaction. The first is the commitment factor, which relates to whether the existing system is really wanted by management and users. The commitment factor includes management support, perceived usefulness, and user understanding of the system. The second is the ergonomics factor, which relates to whether the existing system helps users do what they need. The physical and behavioral effects of items such as computers and office equipment on the people who use them are called ergonomics. Ergonomic factors include ease of use, reliability, and accuracy of information (Prasetyo, 2004).

In organizations, management plays an important role. As a leader, it is expected that employee attitudes and behavior are influenced by management support, which has a direct impact on system users. According to Cerullo, it is explained that top management support includes setting goals or assessing objectives, assessing proposed information system development projects, determining the information and processing required, and reviewing information system development programs and plans. Top management has the power and influence to socialize the development of information systems, allowing users to participate (Aplonia Lau, 2017). It is rarely considered a component that determines the success or failure of information systems development. Many people believe that factors outside of user quality are the cause of system failure. No matter how sophisticated the information system is, the success of the information system will be difficult to achieve if the quality of the users does not meet the standards required to run it. Conversely, user ignorance or anxiety about the new system can cause problems. It is said that the success of information systems is influenced by a better understanding by users of the system (Sunarti, 1998).

A reliable system is a system that is appropriate, meets predetermined standards, and continues to develop in accordance with the times and technological advances. One way to find out the reliability of the system is to see whether the information produced by the system is complete and in accordance with expectations or desires. If users know that the system they use is a reliable system and the information produced is in accordance with expectations, they will feel satisfied (Triantoro, 2006). The quality of information intended in this case is information that is relevant, reliable, and accurate. Accurate also means that information must arrive on time, not late, and not biased or misleading. Relevant means that the data is useful for the owner (Triantoro, 2006)

### **C. METHODS**

This type of research uses quantitative methods. The research subjects used were all YesDok internal (inhouse) doctors. The sample in this study took all YesDok internal doctors (inhouse) who were able to fill out the research questionnaire. Based on the YesDok internal doctor database, there are 52 registered accounts with existing and active doctor data. After checking, 6 accounts are testing accounts from YesDok's internal IT team. Of the 46 active doctor accounts, 3 doctors have passed away during

the COVID-19 pandemic. So that a total of 43 doctors became the sample taken as a whole. Data collection was carried out by distributing questionnaires in the form of google forms and distributing links to YesDok's internal (Inhouse) doctor network. This study uses SPSS software tools in calculating all scores obtained from the questionnaire results. The data obtained will be tested and analyzed. The results of the questionnaire show whether there is an influence between the independent variable and the dependent variable. The analysis steps are of course carried out to qualify including Validity Test, Reliability Test, Classical Assumption Test: multicollinearity, heterokedastisitas, and normality tests. Hypothesis testing is done with the t-test, significance test with the F-test, the coefficient of determination test (R<sup>2</sup>) and multiple linear regression tests are carried out.

## D. RESULTS AND DISCUSSION

### 1. Respondent Classification

**Table 1. Classification of Respondents Based on Gender**

Gender	Frequency	Percentage
Men	24	55.8%
Women	19	44.2%
Total	43	100%

In terms of gender, of the 43 respondents studied, 24 of them were male respondents and 19 were female.

**Table 2. Classification of Respondents by Age**

Age	Frequency	Percentage
Under 30 years old	4	9.3%
30-40 years old	33	76.7%
Over 40 years old	2	4.6%
Total	43	100%

The youngest age of the respondents was 28 years old and the oldest was 58 years old, with a ratio of under 30 years totalling 4 people, between 30-40 years totalling 33 people, above 40 years and above as many as 2 people.

**Table 3. Classification based on length of time as a doctor**

Length of time as a doctor	Frequency	Percentage
1-5 years	6	14%
>5 years	37	86%
Total	43	100%

In terms of length of time as a doctor of the 43 respondents studied 37 people have been doctors for more than 5 years and 6 people between 1-5 years.

**Table 4. Classification Based on Length of Joining YesDok**

Length of Joining	Frequency	Percentage
1-3 years	27	62.7%
>3 years	16	37.2%
Total	43	100%

Of the 43 respondents, 27 have been with YesDok between 1-3 years and 16 have been with YesDok for more than 3 years.

## 2. Descriptive Analysis

Descriptive analysis is an analysis of respondent data with the aim of knowing the difference in presentation of the results of each respondent's answer. The full results can be seen in the following explanation.

**Table 5. Distribution of Scores and Average of Each Question of the Satisfaction Level Variable**

Question	Score 1	Score 2	Score 3	Score 4	Average	Category
1	0	0	13	30	3.7	Agree
2	0	5	25	13	3.2	Agree
3	0	0	22	21	3.5	Agree
4	0	0	6	37	3.9	Agree
5	0	0	22	21	3.5	Agree

The Satisfaction Level variable is measured using 5 questions scored 1-4, where score 1 for the answer Strongly Disagree, score 2 for the answer Disagree, score 3 for the answer Agree and score 4 for the answer Strongly Agree. From this distribution for the Satisfaction Level (TK) variable, this variable can be categorized into agree. Of the five question items, the fourth question item has the highest score, followed by the first question item. It can be concluded that the YesDok telemedicine information system has a positive impact in the world of health, especially for doctors in serving patients online. However, there is also dissatisfaction with the expectations of doctors as users of the information generated by the YesDok telemedicine information system.

**Table 6. Score Distribution and Average of Each Question of Information Quality Variable**

Question	Score 1	Score 2	Score 3	Score 4	Average	Category
1	0	0	15	28	3.65	Agree
2	0	0	22	21	3.49	Agree
3	0	0	17	26	3.6	Agree

The Information Quality variable is measured using 3 questions scored 1-4, where score 1 for the answer Strongly Disagree, score 2 for the answer Disagree, score 3 for the answer Agree and score 4 for the answer Strongly Agree. From this distribution for the Information Quality (KI) variable, this variable can be categorized into agree. Of the three question items, the first question item has the highest score, followed by the third question item. It can be concluded that the information coming from the YesDok telemedicine information system is relevant and has benefits so that it can be trusted.

**Table 7. Score Distribution and Average of Each Question of Time Dimension Variable**

Question	Score 1	Score 2	Score 3	Score 4	Average	Category
1	0	7	23	13	3.14	Agree
2	0	2	8	34	3.76	Agree

The Time Dimension variable is measured using 2 questions scored 1-4, where score 1 for the answer Strongly Disagree, score 2 for the answer Disagree, score 3 for the answer Agree and score 4 for the answer Strongly Agree. From this distribution

for the Time Dimension (DM) variable, this variable can be categorized into agree. Of the two question items, the second question item has the highest score. It can be concluded that the information generated from the YesDok telemedicine information system is always up to date. Although there were also complaints from 7 respondents regarding the YesDok telemedicine information system which presented information not on time.

**Table 8. Distribution of Scores and Average of Each Question of the Reliability Level Variable**

Question	Score 1	Score 2	Score 3	Score 4	Average	Category
1	0	0	22	21	3.49	Agree
2	0	0	10	33	3.77	Agree
3	0	1	7	35	3.79	Agree
4	0	0	12	31	3.72	Agree
5	0	0	19	24	3.56	Agree

The Reliability Level variable is measured using 5 questions scored 1-4, where score 1 for the answer Strongly Disagree, score 2 for the answer Disagree, score 3 for the answer Agree and score 4 for the answer Strongly Agree. From this distribution for the Level of Reliability (TKH) variable, this variable can be categorized into agree. Of the five question items, the third question item has the highest score, followed by the second question item. It can be concluded that the YesDok telemedicine information system that is implemented always keeps up with the times and provides a sense of security to doctors as users of personal and confidential information.

**Table 9. Score Distribution and Average of Each Question Variable Level of User Understanding**

Question	Score 1	Score 2	Score 3	Score 4	Average	Category
1	0	1	11	31	3.69	Agree
2	0	1	10	32	3.72	Agree
3	0	0	6	37	3.86	Agree

The User Understanding Level variable is measured using 3 questions scored 1-4, where score 1 for the answer Strongly Disagree, score 2 for the answer Disagree, score 3 for the answer Agree and score 4 for the answer Strongly Agree. From this distribution for the variable Level of Understanding (TP), this variable can be categorized into agree. Of the three question items, the third question item has the highest score, followed by the second question item. It can be concluded that the user's understanding of the YesDok telemedicine information system can help and support activities to serve patients as doctors and users understand how to use it well.

**Table 10. Score Distribution and Average of Each Question of Management Support Variable**

Question	Score 1	Score 2	Score 3	Score 4	Average	Category
1	0	0	7	36	3.83	Agree
2	0	1	8	34	3.76	Agree
3	0	2	17	24	3.51	Agree
4	0	0	8	35	3.81	Agree

5	0	0	10	33	3.76	Agree
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The Management Support variable is measured using 5 questions scored 1-4, where score 1 for the answer Strongly Disagree, score 2 for the answer Disagree, score 3 for the answer Agree and score 4 for the answer Strongly Agree. From this distribution for the Management Support (DM) variable, this variable can be categorized into agree. Of the five question items, question item one has the highest score, followed by question item four. It can be concluded that management provides good support through training in the use of the system and users feel management support in improving the quality of YesDok telemedicine information system continuously.

### 3. Quantitative Analysis

Quantitative analysis consists of analyzing data calculated by statistical methods from data obtained during the study. This calculation is used for hypothesis testing.

**Table 11. Multiple Linear Regression Analysis Results (Source Appendix 3)**

Free Variable	Regression Coefficient (bi)	Statistics t	Significant p
Constant	3.007	.970	.339
KI	.503	2.474	.018
DW	-.175	-.520	.606
TKH	.456	2.383	.202
TP	-.047	-.202	.841
DM	.144	+.27	.360

Multiple Correlation,  $R=0.684$

Coefficient of Determination  $R^2 = 0.468$

F statistic = 6.504;  $p = 0.339$

The multiple linear regression results above were carried out with the help of the SPSS 25.0 program, based on the regression results, especially the regression coefficients of each independent variable presented in table 11 can be interpreted as follows:

The constant of 3.007 states that if there is no Information Quality, Time Dimension, Reliability Level, Understanding Level, Management Support, then the Satisfaction Level is 3.007 points. The KI regression coefficient is 0.503, stating that every increase in the Information Quality (KI) variable score of 1 point, the Satisfaction Level (TK) variable score will increase by 0.540 points. The DW regression coefficient of 0.175, states that for every 1 point increase in the Time Dimension (DM) variable score, the Satisfaction Level (TK) variable score will decrease by 0.175 points. The TKH regression coefficient is 0.456, stating that every increase in the Reliability Level (TKH) variable score of 1 point, the Satisfaction Level (TK) variable score will increase by 0.456 points.

The TP regression coefficient of 0.047, states that every increase in the score of the Level of Understanding (TP) variable by 1 point, the score of the Satisfaction Level (TK) variable will decrease by 0.047 points. The DM regression coefficient is 0.144,

stating that for every 1 point increase in the score of the Management Support (DM) variable, the score of the Satisfaction Level (TK) variable will increase by 0.144 points. The coefficient of determination ( $R^2$ ) which measures the strength of the influence of the independent variables (KI, DW, TKH, TP, DM) simultaneously on the dependent variable (TK) from the calculation results obtained  $R^2$  value of 0.468, meaning that the independent variables KI, DW, TKH, TP, DM simultaneously amounted to 46.8% while the remaining 53.2% was explained by other variables outside this research model.

#### 4. Testing Hypothesis

The first hypothesis of this study suspects that Information Quality (KI) has a significant effect on Satisfaction Level (TK). The criteria used to reject or accept  $H_0$  is  $t$  significance  $< 5\%$  then  $H_0$  is rejected and  $H_a$  is accepted. From the results of the regression analysis, the value of  $t = 2.474$  with  $p = 0.018$ , because the value of  $p = 0.018 < 0.05$ , the null hypothesis is rejected and the alternative hypothesis is accepted. Based on the results of hypothesis testing, it can be concluded that at the 95% confidence level, Information Quality (KI) has a significant effect on User Satisfaction Level (TK), which these results support the correctness of the hypotheses in this study.

The second hypothesis of this study suspects that the Time Dimension (DW) has a significant effect on the Satisfaction Level (TK). The criteria used to reject or accept  $H_0$  is  $t$  significance  $< 5\%$  then  $H_0$  is rejected and  $H_a$  is accepted. From the results of the regression analysis, the amount of  $t = 0.520$  with  $p = 0.606$ , because the value of  $p = 0.606 > 0.05$ , the null hypothesis is accepted and the alternative hypothesis is rejected. Based on the results of hypothesis testing, it can be concluded that at the 95% confidence level, the Time Dimension (DW) has no significant effect on User Satisfaction Level (TK).

The third hypothesis of this study suspects that the Level of Reliability (TKH) has a significant effect on the Level of Satisfaction (TK). The criteria used to reject or accept  $H_0$  is  $t$  significance  $< 5\%$  then  $H_0$  is rejected and  $H_a$  is accepted. From the results of the regression analysis, the amount of  $t = 2.383$  with  $p = 0.022$ , because the  $p$  value  $= 0.022 < 0.05$ , the null hypothesis is rejected and the alternative hypothesis is accepted. Based on the results of hypothesis testing, it can be concluded that at the 95% confidence level, the Level of Reliability (TKH) has a significant effect on the User Satisfaction Level (TK), which these results support the correctness of the hypothesis in this study.

The fourth hypothesis of this study suspects that the Level of Understanding (TP) has a significant effect on the Level of Satisfaction (TK). The criteria used to reject or accept  $H_0$  is  $t$  significance  $< 5\%$  then  $H_0$  is rejected and  $H_a$  is accepted. From the results of the regression analysis, the amount of  $t = 0.202$  with  $p = 0.841$ , because the value of  $p = 0.841 > 0.05$ , the null hypothesis is accepted and the alternative hypothesis is rejected. Based on the results of hypothesis testing, it can be concluded that at the 95% confidence level, the Level of Understanding (TP) has no significant effect on the User Satisfaction Level (TK).

The third hypothesis of this study suspects that Management Support (DM) has a significant effect on Satisfaction Level (TK). The criteria used to reject or accept  $H_0$  is  $t$  significance  $< 5\%$  then  $H_0$  is rejected and  $H_a$  is accepted. From the results of the regression analysis, the amount of  $t = 0.927$  with  $p = 0.360$ , because the value of  $p = 0.360 > 0.05$ , the null hypothesis is accepted and the alternative hypothesis is rejected. Based on the results of hypothesis testing, it can be concluded that at the 95% confidence level, Management Support (DM) has no significant effect on User Satisfaction Level (TK).

## E. CONCLUSIONS

Information quality has a significant effect on the level of system user satisfaction. YesDok telemedicine information system produces relevant and useful information so that it can be trusted. This helps doctors in serving patients online, where it is undeniable that the basis of doctor services is very dependent on trust in doctor communication, especially with patients. So that relevant and useful information will greatly support doctors in fostering relationships even online through the YesDok telemedicine information system.

The level of reliability has a significant effect on the level of system user satisfaction. The YesDok telemedicine information system that is implemented always keeps up with the times and provides a sense of security to doctors as users of personal and confidential information. This is in accordance with where medical science is always developing and developing continuously, there is even a term in the field of medicine and specifically for doctors, namely "*lifetime learning / never stop (ending) learning*" and "*medicine is an art*" so that doctors' needs for telemedicine information systems are able to keep up with the times in helping doctors to serve patients. On the other hand, it is undeniable that the biggest fear for medical personnel in the technological era is related to the dubious principle of confidentiality, plus there are not a few issues regarding data leakage in the technological era or we commonly call it the industrial revolution 4.0.

The two variables above that have a significant effect provide real facts about the main needs of doctors related to telemedicine information systems. Other variables such as the Time Dimension, Level of Understanding and Management Support, which specifically still have shortcomings in the YesDok telemedicine system, do not affect the User Satisfaction Level because the main needs have been answered and in this condition doctors see the main aspects that support doctor services to patients through online.

The sample size is limited to 43 respondents. This needs to be recognized because the YesDok telemedicine system is still not "*top of mind*" in the choice of telemedicine services in Indonesia. So that the number of internal doctors is not too much is adjusted to the number of needs for consultations received by the YesDok telemedicine information system.

The variables of this study are only limited to the variables of Information Quality, Time Dimension, Reliability Level, User Understanding Level, and

Management Support. There are still many other variables that can be explored and researched further, such as the average level of system usage and other factors.

Seeing that there is a significant relationship between Information Quality and Reliability Level, the YesDok telemedicine system needs to improve the quality of information on the telemedicine information system, always innovate but without forgetting to maintain aspects of data security and confidentiality. Further research is carried out by future researchers with other variables and of course it would be better if the object is more doctors in telemedicine system users.

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