

The Influence Of Online And Offline Registration Education On The Level Of Patient Satisfaction At Colomadu 1 Health Center

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ABSTRACT

A very simple and fast registration service is one of the efforts to improve the quality of service to patients which will affect patient satisfaction. The development of technology and information influences various aspects, one of which is the health sector, known as e-health. One application of e-health. This is online registration which is carried out together with direct registration, but to inform the public there must be education regarding online and offline registration so that the public understands the process. The goal of service is patient satisfaction, where according to minimum service standards, the customer satisfaction level is more than 90%. It is hoped that an effective, efficient registration system and minimal waiting time will increase patient satisfaction. Quantitative research type with a cross sectional approach. The research sample of patients who registered online and manually was divided into two groups, namely the online registration group and the direct registration group using accidental sampling techniques. The data analysis technique uses the chi square statistical test. From the results of the bivariate analysis it is known that the data analyzed using the independent t-test shows that the average knowledge score in the offline group (Mean= 14.95; SD= 2.87) is greater than the average knowledge score in the group with online registration (Mean= 11.74; SD= 2.74), and this result is statistically significant ($p < 0.001$). Online registration group and direct registration at Colomadu 1 Community Health Center.

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INTRODUCTION

Health development means sufficient resources, appropriate policy direction and health development strategies, so that limitations or lack of availability of accurate, precise and fast data and information makes it difficult for policy makers to make the right decisions. Data and information are strategic resources in managing health development, namely in the management process, making government decisions, and implementing accountability. (Eni, H., et al 2020).

The development of information technology influences and supports changes in various aspects, one of which is the health sector. The development of information technology is an opportunity that makes it easier to strengthen and develop health information systems. In line with the United Nations (UN) policy in the 2007 Global Information Society Watch (GISW), it is stated that all member countries are asked to apply information and communication technology (ICT) in integrated development infrastructure. The integration system includes e-government, e-business, e-

learning (e-education), electronic health (e-health), e-employee, e-environment, e-agriculture and e-science.

The health sector cannot be separated from e-health which is defined as the use of information and communication technology to support the health sector and matters related to health, knowledge and research. Another definition of e-health is the application of information and technology (ICT) in the health sector which has the potential to increase the efficiency of health services, expand the reach of services and improve patient outcomes. (Eni, H., et al 2020).

The implementation of e-health in several countries has not been carried out optimally. Research in America explains that of the countries in America that implement national e-health policies, there are only 26.3% of entities that carry out regulatory quality, safety and reliability oversight for e-health. The same as research in Bangladesh, even though e-health has been implemented since 2011, only less than a quarter of the programs can be evaluated. In developing countries there are obstacles to implementing e-health, due to the unavailability of resources and system readiness to guide implementation and evaluation. The implementation of e-health in Indonesia is covered by the Regulation of the Minister of Health of the Republic of Indonesia no. 97 of 2015. There are 8 applications available in e-health including (medical records, laboratory information, pharmaceutical information, patient registration system, patient tracking, evaluation and monitoring system, clinical support systems, patient reminder systems, collection and research systems).

According to research from (Jeremia et., all 2020). This research examines the level of use of the hospital's online registration application which is influenced by the expected effort and expected performance due to individual trust with experience as a moderator. This research uses a survey approach. The sampling technique is purposive sampling with the results providing the meaning that to form satisfaction with online application services, the expected performance is established due to trust.

According to research from (Anton et., all 2019). Very sophisticated technology with one of its goals being to facilitate the implementation of services, people's familiarity with various technological products such as laptops, smartphones, and the availability of increasingly cheap internet connections are also increasingly providing opportunities to utilize information and communication technology in implementing online systems.

Digital public services in the era of industrial revolution 4.0 are a necessity. The concept of digital public services leads to effective principles. Effective means carrying out something correctly, while efficient means carrying out something correctly. Public services at the lowest level are at the RT and RW levels as the spearhead in determining the course of action for both central and regional government programs. RW has a very big role in achieving the goals and targets of government programs because RW is the one who knows best the existing conditions in the environment of its residents. Digital public services are expected to provide convenience for anyone who needs access. Digital public services are characterized by the use of media other than paper or what is often called paperless.

Technology has an important role so that digital public services can run as they should. Nowadays, almost everyone can run or operate a device, meaning that everyone can have convenience because they can access information easily through the device they own. The challenges faced in implementing digital public services must be faced by having managerial competence and serving competence. When these two competencies are collaborated, they will create superior service quality. This superior service quality can be reflected in the satisfaction of service users, in this case local residents. (Ani, 2021).

The update of this title is "The Effect of Online Registration on Patient Satisfaction Levels at Colomadu 1 Health Center" to form satisfaction with online application services and make it easier to access service information and instructions for use for patients who register.

METHODS

This research method uses the type of research and development Research Development which is a research method used to produce certain products and test the effectiveness of these products. Both products can produce new products or modify existing products. To achieve accuracy and thoroughness of the data and information in this research, technically the research method was carried out in the following Problem Identification/Field Observation, namely making direct observations in the field to collect data directly from a sample of health services in online registration on the level of patient satisfaction at the Kolomadu 1 health center.

This research use Quantitative research type with a cross sectional approach. The research sample of patients who registered online and manually was divided into two groups, namely the online registration group and the direct registration group using accidental sampling techniques. The data analysis technique uses the chi square statistical test.

RESULTS

This research experienced a few obstacles when collecting research data at the Colomadu 1 Community Health Center, because at the Colomadu Community Health Center almost currently they still use offline/manual registration, but the researchers compared the existing offline registration at the Community Health Center as well as comparing online registration with the ebook application (ADKUH) with education. before doing. Patients were very enthusiastic about researchers, they felt they needed information about their disease before seeking treatment. The research results presented include subject analysis relating to the frequency distribution of respondent characteristics based on name, age, gender, occupation, new or old registration policy.

1. Sample Characteristics (continuous data)

Table 1. Sample characteristics by age

Karakteristik	Mean	SD	Min	Max
Usia (tahun)	31	13.23	15	84

Based on Table 1, it shows that the majority of subjects were 31 years old, with an age range ranging from 15 years to 84 years.

2. Sample Characteristics (dichotomous data)

Table 2. Sample characteristics based on gender

Karakteristik	Frekuensi (N)	Persentase (%)
Male	89	59.33
Female	61	40.67
Total	150	100

Based on Table 2, it shows that the majority of subjects were male, 89 (59.33%) people.

3. Univariate Analysis

Table 3. Results of univariate analysis

Karakteristik	Mean	SD	Min	Max
Kelompok 1 (online)	11.74	2.74	6	20
Kelompok 2 (offline)	14.95	2.87	8	22

Based on Table 3, it shows that the average subject knowledge score in the group using the online registration method is 11.74 with an SD value of 2.74. Meanwhile, the average subject knowledge score in the group using the offline registration method was 14.95 with an SD value of 2.87

4. Bivariate Analysis

Table 4. Independent t-test results of knowledge scores between the online registration group and the offline registration group regarding the Adukuh ebook registration application

Karakteristik	Mean	SD	p
Kelompok 1 (online)	11.74	2.74	<0.001
Kelompok 2 (offline)	14.95	2.87	

Based on Table 4, it shows that the average knowledge score in the offline group (Mean= 14.95; SD= 2.87) is greater than the average knowledge score in the group with online registration (Mean= 11.74; SD= 2.74), and this result is statistically significant ($p < 0.001$).

DISCUSSION

This research experienced a few obstacles when collecting research data at the Colomadu 1 Community Health Center, because at the Colomadu Community Health Center almost currently they still use offline/manual registration, but the researchers compared the existing offline registration at the Community Health Center as well as comparing online registration with the ebook application (ADKUH). Patients were very enthusiastic about researchers, they felt they needed information about their disease before seeking treatment.

The research results presented include subject analysis relating to the frequency distribution of respondent characteristics based on name, age, gender, occupation, new or old registration policy. The research results show that the characteristics of the data sample (continuous) are based on the characteristics of the age sample, namely, showing that the majority of subjects are 31 years old with an age range from 15 years to 84 years. The sample characteristics based on gender show that the majority of subjects were male, 89 with a percentage of (59.33), 61 female subjects with a percentage of (40.67).

The Effect of Online Registration on Patient Satisfaction Levels at Colomadu Community Health Center 1. From the results of the bivariate analysis, it is known that the average usage score in the offline group (mean= 14.95; SD 2.87) is higher than the average knowledge score in the group with online registration (mean= 11.74; SD= 2.74), and this result is consistent. statistically significant ($p < 0.001$). Group 1 online and group 2 offline carried out a pretest and post test where they both aimed to seek treatment at the health center, for group 1 (online) the patient tried using the e-bookkadkuh application with (google random number generator) with a satisfaction questionnaire, comparing knowledge from before or after check whether knowledge has increased after the application of the Adukkuh e-book with the first page of disease knowledge and long in can register. Sample characteristics of group 2 offline patients tried to use the e-bookkadkuh application with (google generator random number) with a satisfaction questionnaire, comparing knowledge from before or after checking whether knowledge increased after the e-book application adukkuh with the first page of disease knowledge and long in can register.

The same as Jaka's research, et all 2022. That online registration has a shorter waiting time compared to offline registration where you have to wait around 5-15 minutes. Online and offline registration are actually used with the subject in mind, if the subject is teenagers, teenagers will definitely choose online registration, but if parents use it, they will use offline registration which just waits without having to read about health knowledge first.

Hendra et all's research (2022) "implementation of Web-Based Online Registration of Outpatient Patients at Community Health Centers" Online registration, not many people are aware that online registration is still very low, the innovation of online registration has not been thought of in the community because of internet complaints about internet limitations and knowledge regarding use of online registration.

CONCLUSION

From the results of the bivariate analysis it is known that the data analyzed using the independent t-test shows that the average knowledge score in the offline group (Mean= 14.95; SD= 2.87) is greater than the average knowledge score in the group with online registration (Mean= 11.74; SD= 2.74), and this result is statistically significant ($p < 0.001$). Online registration group and direct registration at Colomadu 1 Community Health Center.

REFERENCES

- Anton Z, (2019). Penggunaan Google Form Sebagai Alat Penilaian Kepuasan Pelayanan Mahasiswa. JISAMAR. Vol. 3.(1) hal 16-22.
<http://journal.stmikjayakarta.ac.id/index.php/jisamar/article/view/72>

- Eni H, Imram R, Saktya Y, Et., all., (2020), Perbedaan Tingkat Kepuasan Pelanggan Terhadap Sistem Pendaftaran Online dan Sistem Pendaftaran Langsung di Instansi Rawat Jalan Rsup DR. Sarjito Yogyakarta. DOI:<http://elibrary.almaata.ac.id>
- Ellys, M., (2021). Faktor-Faktor Yang Berhubungan Dengan Kepuasan Pasien Di Instalasi Gawat Darurat RSBP Batam. Vol. 1(1), 57-63. DOI: <https://journal.medinerz.org/index.php/IVJ/article/view/62>.
- Jaka P, Sylvia A, Faik A, et all. (2022). Pengaruh Durasi Waktu Pendaftaran terhadap Kepuasan Pasien antara Pendaftaran Online dan Offline. Jurkes. Vol 10 No. 2 Agustus 2022. Hal: 93-101. DOI: <https://doi.org/10.25047/j-kes.v10i2>.
- Hendra R, Annisa K, Agung K, (2022). Implementasi Pendaftaran Online Pasien Rawat Jalan Berbasis web di Puskesmas. Jurnal Pengabdian Masyarakat. Vol 1(1), 42-51. <file:///C:/Users/user/Downloads/572-1405-4-PB.pdf>
- Jeremia J, Didik Setyawan, Nang A, et., all. (2020). Analisis Tingkat Kepuasan Layanan Pendaftaran Online Rumah Sakit di Surakarta. Vol. 1(2020). Hal: 69-80. DOI:<https://doi.org/10.31001/cihams.v1i.12>
- Muhamad G, Fara N, Nuriyati, Ajeng M., (2020). Hubungan Pendaftaran Online dan Offline dengan Kepuasan Pasien. Vol. 1(1). <https://www.jurnal.umla.ac.id/index.php/JOHC/article/view/248>
- Marian T, Angela H., (2022). Analysis of The Quality of Online Registration Service BPJS Health to The Community in Perawangan Barat Village. Journal Of Stikes Awal Bros Pecan Baru. Vol. 3(1). Hal 25-31. DOI: <https://doi.org/10.54973/jsabp.v3i1.165>.
- Mastia W, Tuti S, (2022). Implementasi sop keperawatan berbasis elektronik di rumah sakit. Jurnal of Innovation Research and Knowledge. 1(8); 2798-3471. <https://www.banjarnjournal.com>
- Noer H, Adjat S, (2016). Analisa Tingkat Kepuasan Masyarakat Terhadap Pelayanan Pendaftaran Online BPJS Kesehatan. Hal 1-10. <https://jurnal.umj.ac.id/index.php/semnastek/article/view/846/779>
- Nuryati M, Ari K, Muhamad G, Fara N, Suratmi M, (2020). Pengaruh Pelayanan Pendaftaran Online Terhadap Kepuasan Pasien Rawat Jalan di Rumah Sakit X. Vol 1(1). <https://jurnal.umla.ac.id/index.php/JOHC/article/view/188/95>
- Wihamara E, Eti Rimawati, Haikal F, Muhammad I., (2022). Analisis Tingkat Kepuasan Penggunaan Aplikasi Dr. Oen Sobatku Menggunakan Metode End User Computing Satisfaction (EUCS) di Rumah Sakit Dr. Oen Solo Baru. Vol. 21. No. 2. DOI: <http://publikasi.dinus.ac.id/index.php/visikes/article/view/6289>.
- Yuni T, Sumami, Raden J., (2021). Implementasi Pendaftaran Online Pasien Rawat Jalan Terhadap Kepuasan Pasien di Rumah Sakit Nur Hidayah Bantul. IJHAA. Vol 4(2). Hal 43-51. Doi: [http://dx.org/10.21927/ijhaa.2021.4\(2\).43-51](http://dx.org/10.21927/ijhaa.2021.4(2).43-51).
- Yusu, Mohamad., (2021). Pengaruh Kualitas Pelayanan Pendaftaran Online Terhadap Kepuasan Rawat Jalan di RSUD Ciawi Kabupaten Bogor. FISIP. <http://repository.unida.ac.id/id/eprint/843>