



Analysis of the Use of JKN Mobile Applications on the Effectiveness of Registration Queues at RSUD Bandung Kiwari

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ARTICLE INFO

Keywords: JKN Mobile Application, Effectiveness, Usage

Received : 27, March

Revised : 28, April

Accepted: 29, May

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ABSTRACT

One of the technologies that is developing today is network technology and the internet. The rapid development of information technology has encouraged BPJS Kesehatan to carry out digital innovation by launching a digital application known as the "Mobile JKN" application. This application aims to overcome the problem of registration queues that are often complained about by participants. This study aims to determine the use of the JKN Mobile application on the effectiveness of the registration queue at Bandung Kiwari Hospital, The research method used is a qualitative method with a descriptive approach, with data collection techniques through interviews, observation, and documentation. The source of information in this study came from 1 head of Medical Records and JKN installation and 10 JKN Mobile application users and non-users. Effectiveness measurement through three indicators, namely: accuracy factor, time factor, and service provider style factor. The results showed that the effectiveness of services through the JKN Mobile application at Bandung Kiwari Hospital has not been fully effective because in its use there are still often obstacles or problems found in the application.

INTRODUCTION

The development of technology today has a significant impact on various aspects of activities, especially in the field of work. The existence of this technology supports time efficiency and work productivity. The rapid advancement of technology encourages various agency sectors to utilize it to achieve success in various jobs, especially health agencies.

According to the Association of Internet and Service Providers (APJII), in 2024 the number of internet users in Indonesia is estimated to reach around 221,563,500 people out of a total population of 278,696,300 people in 2023. The results of a survey conducted by the Association of Internet Service Providers (APJII) on internet penetration in Indonesia in 2024 showed that the internet penetration rate reached 79.5%. This is an increase of 1.4% compared to the previous period. (APJII 2024).

In the face of a significant increase in the number of Smartphone and Internet users, the Social Security Administration (BPJS) Health responded by making digital innovations, given the large number of smartphone and Internet users in Indonesia, the Social Security Administration (BPJS) Health did not want to miss this opportunity by participating in the development.

This prompted the Social Security Organizing Agency (BPJS) Health to create an innovation in the form of an application known as the Mobile JKN application. This application was released on November 15, 2017. This application aims to facilitate participants in obtaining administrative-related services that were previously carried out at the BPJS Health branch office, now these services can be accessed online and can be installed via Playstore or Appstore. The JKN Mobile Application can also provide freedom for the community/participants to use it anytime and anywhere without time limits (self-service). (Komala and Firdaus 2020).

Based on the Minister of Health Regulation No. 30 of 2020 article 1 states that hospitals are institutions that provide comprehensive health services to individuals, by providing various types of services such as inpatient, outpatient, and emergency care. (Indonesian Ministry of Health 2020). In the process of organizing medical records, there are several activities carried out, one of which is patient admission or registration. According to (Shofiana 2019) Outpatient care is a health service provided to patients without having to be hospitalized in a hospital. The organization of outpatient care is one of the responsibilities of the hospital, which includes organizing the registration and admission of patients who will receive outpatient services.

Registration queues in hospitals are often a problem for both patients and hospital staff. A slow and lengthy registration process can cause inconvenience and increase waiting time for patients. The accumulation of queues is something that must be addressed immediately, with the accumulation of queues, the service process to patients is delayed. (Nugroho 2018). The use of a digital-based service system to manage queues is the most relevant solution for hospitals. The problem often faced by participants so far is the length of the registration queue and health services. With this technology, patients can easily register for services at the hospital. Using a smartphone, patients can select the

health services they need and automatically get a queue number that already contains their data. This allows patients to come to the hospital at the appointed time without the need to experience long queues. The presence of the Mobile JKN application can be a solution to overcome this problem. (Nicoamon 2021)

The implementation of the Mobile JKN application is not only aimed at the interests of an agency or improving service quality but also provides benefits for the community at large. The JKN Mobile application provides convenience in the registration process and changes in membership data, as well as providing information about family participant data, this application, also makes it easy to see the cost of paying participant contributions, provides easy access to FKTP (First Level Health Facilities) and FKTL (Advanced Health Facilities) services, and provides a means for the community to submit suggestions and complaints. In addition, this application is also useful when users forget to bring the card because by clicking this application, the JKN card can be shown directly to the officer. It is important to note that registration in the Mobile JKN application is registered per family card, not per individual. (BPJS Health 2022).

The accessibility of the Mobile JKN application is very easy for anyone, especially in today's digital era. In using various services, including consulting with doctors online and making changes to first-level health facilities (FKTP) independently. This application also makes it easy for anyone to access health services. To provide convenience to participants of the National Health Insurance (JKN) program, the community hopes that this feature will provide great benefits for participants in managing their membership and increasing participation in the National Health Insurance (JKN) program. By continuing to innovate, the Social Security Administration (BPJS) Health is committed to continuously improving service quality for the satisfaction of National Health Insurance (JKN) participants. (Pinfunpapua 2024).

In this era of technological advancement, many health agencies have used online registration systems. The purpose of implementing this online registration system is to simplify the registration process for patients. An effective online registration system allows patients to register or make appointments with doctors through the JKN Mobile application or the website. Patients do not need to physically visit the hospital but can register anytime and anywhere. This is expected to reduce the waiting time and queue level of patients when registering for the polyclinic.

Similarly, Bandung Kiwari Hospital has implemented the effectiveness of an online registration system, where Bandung Kiwari Hospital has 2 (two) effective online registration systems, namely through the JKN Mobile application and online registration via the Bandung Kiwari Hospital Website. The online registration system is very useful in facilitating registration officers. One of the benefits is to help the patient registration system at Bandung Kiwari Hospital online, where patients do not need to come to the hospital in the morning to get a queue number. By running an online web-based application, it is hoped that it can overcome problems and facilitate registration officers at

Bandung Kiwari Hospital so that they can provide the best quality of service for patient satisfaction at Bandung Kiwari Hospital.

Based on the above background, the author is interested in examining the phenomenon of using the JKN Mobile application service in depth by taking the title “ANALYSIS OF THE USE OF MOBILE JKN APPLICATIONS ON THE EFFECTIVENESS OF THE REGISTRATION LINE AT BANDUNG KIWARI Hospital”.

METHODOLOGY

This research uses Qualitative research methods with a Descriptive approach. This method is a method of collecting data in a scientific setting on the phenomena that occur. In Qualitative research, the researcher acts as a key instrument that is directly involved in collecting and interpreting data. (Aulia & Sari 2023). Meanwhile, descriptive research is a type of research that aims to create a picture or description of a phenomenon or event without any manipulation or change in the variables studied. (Ridwan and Sari 2021). This research was conducted at Bandung Kiwari Hospital which is located at Jalan Raya Kopo No.311, RT.03 / RW.05, Situsaaur Village, Bojongloa Kidul District, Bandung City. Based on direct observations by researchers during the Field Work Practice (PKL) at Bandung Kiwari Hospital. The source of information in this study came from one head of the Medical Records and JKN installation and 10 users of the Mobile JKN application and non-users. Data collection in this study was conducted through interviews, observation, and documentation. The data collected is the result of student research who conducted Field Work Practice (PKL) for 2 months at Kiwari Bandung Hospital.

RESEARCH RESULT

From the results of interviews that have been conducted, the socialization of the use of the JKN Mobile application at Bandung Kiwari Hospital has begun to be implemented, by forming a new team at the Front Office by assigning officers to educate and guide the public/participants to download and use the JKN Mobile application when registering themselves at Bandung Kiwari Hospital, as follows:

Figure 1. Instructions on How to Download and Register the JKN Mobile Application



- a. Open the Playstore or Apple Store app
- b. Then type in the keyword "Mobile JKN" and download/install the Mobile JKN App.
- c. After the application is installed, click the mobile registration menu to enter the registration page, and click the Login menu if you have already registered.
- d. Enter your BPJS Health Card Number, KTP / NIK number, Date of Birth, your identity data according to the Population Identification Number (NIK)
- e. Enter the mobile number, then verify the data by entering the code that you received on your mobile number via SMS OTP, after that enter the password, and confirm the password.
- f. If successful, a notification will appear that your data has been successfully registered as a JKN Mobile application user and will return to the initial display of the JKN Mobile application.
- g. to enter the main page of the Mobile JKN application, you simply enter the JKN-KIS Card / BPJS Health Card number or NIK, password, and Captcha as shown in the picture.
- h. Then click Login to enter the main page.

The JKN Mobile Application provides various services that provide convenience for its users. 18 menus in this application that provide convenience for users, as seen in the picture below

Figure 2. JKN Mobile App Menu Display



- a. JKN Program Info
- b. Health facility location info
- c. Bed Availability Info
- d. New Participant Registration
- e. Participant Info
- f. Service Registration (queue)
- g. Doctor's Consultation
- h. Surgery Schedule Info
- i. JKN Service Complaints
- j. Changing Participant Data
- k. Dues Info
- l. Auto Debit Registration
- m. Payment History Info
- n. Health History Screening
- o. Service History Info
- p. Virtual Account Info
- q. Covid -19 Self Screening
- r. Phased Payment Plan

Flow Effectiveness of Outpatient Online Registration System Using JKN Mobile Application at Bandung Kiwari Hospital

- a. The patient already has a referral from the First Level Health Facility (FKTP).
- b. Patients register through the JKN Mobile application with the requirement that registration must be made a maximum of 24 hours before control/treatment.
- c. Patients register on the Mobile JKN application, including selecting Bandung Kiwari Hospital as the destination for treatment.
- d. The patient fills in the date of service, and the name of the doctor at the intended polyclinic.
- e. Patients are given a booking code and queue number.

- f. On the scheduled date of treatment, the patient came to Bandung Kiwari Hospital. The patient went directly to the 2nd floor and showed proof of registration in the form of a polyclinic queue number to the officer.
- g. The officer will enter the patient's identity into the Hospital Management System (SIMRS), and then the officer will direct the patient to press the check-in button on the platform machine.
- h. The maximum check-in process is 30 minutes before the doctor's schedule.
- i. The officer prints the BPJS guarantor's Participant Eligibility Letter (SEP) and polyclinic queue number, then ensures that the printed queue number matches the one listed on the JKN Mobile application.
- j. Wait until the queue number is called, then the patient can go to the registration counter and scan fingerprints, for patients under 7 years old are not required to scan fingerprints.
- k. The counter staff directs the patient to wait at the designated polyclinic.

Use of JKN Mobile Application to Improve Queuing Effectiveness at Bandung Kiwari Hospital

The use of Mobile JKN application is utilized by Bandung Kiwari Hospital to obtain information related to the activeness of participants and check the amount of BPJS Health contributions of participants. Bandung Kiwari Hospital tries to socialize the use of the Mobile JKN application to the community, by installing banners and socializing through Instagram social media. However, these efforts have not succeeded in attracting a lot of public interest in using the application. The existence of this application should be able to help the community in facilitating administrative matters.

Table 1. Number of Outpatient Visits at RSUD Bandung Kiwari

MONTHS	PATIENT MANUAL	ONLINE PATIENTS	NUMBER OF PATIENT
FEBRUARY	6.560	1.602	8.162
MARCH	6.853	1.731	8.584
APRIL	6.259	1.387	7.646
AMOUNT	19.672	4.720	24.392

Based on the results of the analysis in Table 1 above, it can be seen that there is a decrease and increase in patient visit data at Bandung Kiwari Hospital. In February the patient visit data amounted to 8,162 which decreased the number of patients, in March the patient visit data amounted to 8,584 which increased the number of patients compared to February, in April the number of patient visits amounted to 7,646 which decreased the number of patients very rapidly compared to February and March. From the overall results of outpatient

visit data who registered manually and online, there were 24,392 people during February, March, and April 2024.

Based on the data above, there was a decrease in the number of patient visits that occurred in February totaling 8,162 people in April totaling 7,646 people. An increase in patients occurred in March totaling 8,584 people. Most of the patients who come to Bandung Kiwari Hospital are manual patients. This decrease and increase is also due to the impact of using the Mobile JKN application at Bandung Kiwari Hospital. Patients prefer to come directly to the hospital rather than registering through the Mobile JKN application.

From the results of the study, it is known that the effectiveness of services and information provided through the Mobile JKN application is quite effective. Many people have used the application and expressed their satisfaction. However, there are still many people who have not used this application because they do not understand its use.

The reason for the small number of JKN Mobile Application users is due to the lack of public knowledge of technological developments. This was also conveyed by Mr. Taufik Hidayat, S.Tr the head of the Medical Records and JKN installation that several factors causing the small number of JKN Mobile application users at Bandung Kiwari Hospital including many patients do not have gadgets, there are network constraints that hinder the use of the JKN Mobile application, many users have downloaded the JKN Mobile Application but have not fully used it, the application sometimes crashes which causes participants to not be able to use the JKN Mobile application, and the average elderly patient prefers to come directly to the hospital because the patient does not fully understand the application. Nevertheless, in general, the services and information provided through the application are quite good and satisfying for the community. However, the target of achieving registration through the JKN mobile application has not been met. This is because there are still many people who register manually. After all many of them do not have gadgets.

Three indicators become a measure in measuring the effectiveness or not of service and information provided, namely: Time factor, Accuracy factor, and Service Delivery Style factor. Based on the results of the interviews conducted, the authors present the following analysis:

1. Accuracy factor

To improve service quality, accuracy and precision in work are required. This must be supported by adequate facilities or programs. The JKN Mobile Application at Bandung Hospital is considered very helpful for the community in receiving maximum service. With the online registration system through the JKN Mobile Application, the registration process becomes easier for patients, because patients do not need to come to the hospital in the morning to get a queue number. In addition, the implementation of an online registration system is expected to overcome and facilitate registration officers at Bandung Kiwari Hospital, to provide the best quality of service and increase patient satisfaction.

2. Time factor

From the observations made by researchers, the average waiting time for services at Bandung Kiwari Hospital was obtained as follows:

Waiting time:

Total data = 22 patients

Total waiting time = 3,590 minutes

Average waiting time = $3,590 / 22 = 163.18$ minutes

$163.18 / 60 = 2.72$ hours

$163.18 = 2$ hours 43 minutes

From the results of the study, there are 22 patient data, obtained an average waiting time of 3,590 minutes, if converted this figure is equivalent to 163.18 minutes per patient. In other words, the average patient waits for 2 hours 43 minutes to get service. From this data, it can be seen that the longest waiting time occurs when the patient is assessed by the nurse until completion before finally entering the room to be examined by a doctor. So it can be concluded that the overall waiting time is relatively long.

The minimum standard of outpatient service time in the hospital setting is ≤ 60 minutes, but the reality of outpatient services at Bandung Kiwari Hospital is still far from these standards, patients have to wait more than 60 minutes to complete the entire service process. Thus, service standards at the Bandung Kiwari Hospital still need to be improved and improved to improve the quality of services provided.

3. Service Delivery Style Factor

The form or style of service delivery at Bandung Kiwari Hospital in providing services to patients is in by the SOP, this can be seen from the beginning of the patient entering until the patient goes home, the service includes friendly, polite, and courteous providing services as well as during socialization regarding the use of the Mobile JKN application given to the community as well as the comfort felt by the community.

Based on the results of the study improving the quality of service at Bandung Kiwari Hospital requires accuracy and accuracy supported by adequate facilities. The JKN Mobile Application is very helpful for the community in receiving maximum service. The online registration system through the JKN mobile application makes it easier for patients and officers, provides the best service, and increases patient satisfaction. From the results of the average waiting time for services at Bandung Kiwari Hospital, it still needs to be improved because it exceeds the standard and is quite long. However, service delivery is by the SOP (standard operating procedure).

CONCLUSIONS AND RECOMMENDATIONS

It can be seen that the utilization of the Mobile JKN application at Bandung Kiwari Hospital has been run optimally by the Health Social Security Organizing Agency (BPJS) program. This can be seen from the socialization efforts made and the optimization of resources. The Mobile JKN application also affects the queuing system and reduces the buildup of queues at the registration counter. However, the utilization of this application is not yet fully effective and efficient. This can be seen from the various problems and obstacles that occur in the Mobile JKN application. The results of the analysis show an increase and decrease in visit data at the Bandung Kiwari Hospital in February-April 2024 totaling 24,392 people. JKN Mobile application users are not all satisfied, especially related to the performance of the JKN Mobile application performance and officer services in serving participants. Seen from the results of the average patient waiting for 2 hours 43 minutes to get service. From this data, it can be seen that the longest waiting time occurs when the patient is assessed by the nurse until completion before finally entering the room to be examined by a doctor. So it can be concluded that the overall waiting time is relatively long. Therefore, BPJS Kesehatan needs to make continuous improvements and improvements to increase the effectiveness of services to participants through the Mobile JKN application. Related to this problem in the JKN Mobile application, BPJS Kesehatan needs to continue to strive to improve and improve the performance of the application so that it can function optimally and can be utilized properly by the community/participants.

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