

ARTICLE

Rapid Accurate and Accurate Medical Services System Innovation in Bangka Regency Depati Bahrin Hospital

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Abstract: Depati Bahrin Hospital experiencing an death rate increased from year to year, seen in 2015 the death rate in Depati Bahrin Hospital have 348 people, while in 2016 amounted to 384 inhabitants. This is what lies behind the need for investment to reduce the mortality rate. This innovation makes the application of a fast service system medical accurate and precise. The method used is descriptive research with qualitative analysis application is proven to be effective to reduce death rate, in 2017 the death rate in Depati Bahrin hospital down to 308 people. It is hoped that in the future this application can be more developed and useful for mankind.

Keywords: Service System Applications, Innovation, Hospital, Medical Service

1. Preliminary

The community has the right to get quality, affordable and safe health services (Hadiyadi, et al, 2017). In this 21st century, the hospital has an important role in improving the health status of each individual by providing counseling, prevention, treatment and rehabilitation to improve the standard of human life (Figueras, J, 2012), this is evident from the rapid growth of hospitals in various cities in Indonesia. This is supported by data from the website of the Indonesian hospital association that the growth of public hospitals every year is an average of 0.4%, while in private hospitals the average growth is 15.3%, and also the growth of private hospitals is on average. an average of 7% while the government hospitals averaged 3%. This can be a competitive advantage for each hospital to perform fast, accurate and precise medical services. So that service quality is defined as differences in customer expectations and reality services received (Cronin, JJ, and Taylor, SA, 1992).

In the health care industry body and spirit, the hospital has to provide the types of services the same, will but they do not provide the quality of service the same (Yousef, FN, 1995). Meanwhile, customers now tend to choose other alternatives offered in an effort to increase the level of service that can increase their life expectancy. In the health care industry, patients are customers and they are a very vital part of the development of the health care industry in (Yanuar, Jak and Grace Rumengan, 2018).

The existence of service quality will certainly provide satisfaction to health service users (Hadijah, 2016). The quality of service itself must start with the patient's needs and end with the patient's perception or judgment. This means that good quality is not seen from the perception of the service provider, but based on the patient's perception. The patient's perception of service quality is a comprehensive assessment of the superiority of a product or service. Service quality itself is formed by a comparison between the ideal and the perceptions of the performance of the quality dimension. The quality of service itself is determined solely by the patient so that patient satisfaction can be achieved by providing good quality (local government of Bangka Regency).

The patient's perception of the quality of hospital services is an overall assessment of the ability of more than a product or service. Service quality itself is formed by a comparison between the ideal and the perceptions of the performance of the quality dimension. The quality of service itself is determined solely by the patient so that patient satisfaction can be achieved by providing good quality (Hartono and Bambang, 2010).

Previous studies revealed that as the number of patients increases, hospital management requires a fast and accurate data management system, manual data management has many weaknesses and takes a long time, it is necessary to create web-based management (Topan W, Hans F, Xaverius B, (2015). Another study revealed that medical records in one hospital in Indonesia still use manuals and have not been integrated with all units, using this manual can increase human error (Renny, A and Benni, P., 2016).

The Depati Bahrin Regional General Hospital is one of the highest referral hospitals in Bangka. As one of the government hospitals that image government services to the general public, competition with private hospitals and other government hospitals is also quite popular with the community, and complaints from patients are often found due to the lack of optimal health services at the Depati Bahrin Regional General Hospital so require Depati Bahrin General Hospital to conduct continuous service improvement in all aspects, in order to always take place in the hearts of the public .

Currently, the Depati Bahrin Regional General Hospital has a problem with the high patient mortality rate. seen from the following data (local government of Bangka Regency), in the year 2015 the total number of patients who died was 348 people, in 2016 it increased to 364 people from initial research and surveys. One of the contributing factors is the frequent delay in reading the results of medical supporting examinations (results and radiological laboratory). causing delays in determining medical diagnoses resulting in delays in providing advice and action and therapy by DPJP to patients. This is the background for researchers to make innovations in order to accelerate services so as to minimize the mortality rate from year to year. This problem in the Depati Bahrin regional general hospital with previous studies has the same problem in the lack of speed of information delivery to other units (local government of Bangka Regency). The solution to this problem will be discussed in this study



Picture 1. Depati Bahrin Hospital

(source: <https://bangka.tribunnews.com/2018/07/31/rsud-depati-bahrin-tetap-berikan-pelayanan-bpjs-untuk-3-hal-ini>)

In this case, researchers and a team from the management of the Depati Bahrin Regional General Hospital plan to make innovations to make it easier for the public to get fast, accurate and precise medical services by making the application SIMPANAN CANTIK (Fast Accurate and Accurate Medical Service System).

2. Research Methods

This research method uses a descriptive method using qualitative analysis. The descriptive method is a way to describe how innovations designed by researchers can have a positive impact on all groups, both hospitals, doctors and the community. This research is limited by making an application as a solution to reduce queues, and the Board of Physicians in charge of doctors and the team of doctors can get diagnosis information more quickly so as to reduce the death rate at the Regional General Hospital Depati Bahrin. The purpose and benefits of this research. Making the application "SIMPANAN CANTIK" or (Fast Accurate and Medically Appropriate Service System) Depati Bahrin Regional General Hospital as a problem solving solution was proposed by the Director of the Regional General Hospital Depati Bahrin and discussed in a Focus Group Discussion (FGD) which formed to accommodate individual innovative ideas and proposals to become more systemic and institutionalized.

3. Results and Discussion

3.1. Innovation Digital "Simpanan Cantik"

The results of the descriptive data in this study include descriptive, this discussion can be seen from the making of innovation planning by the Forum Group Discussion. In getting that discussions with therein Director of Depati Bahrin Hospital, Head of Planning, Head of Nursing, Head of Service, Head of Administration of effort, the

whole of Section Head, the Supervisory Board Depati Bahrin Hospital, the Medical Committee, the Nursing Committee, and Doctors in Charge of Services (DPJP), then the results were presented and discussed with the Bangka Regent. Regent Bangka very enthusiastic and supportive of innovative steps taken by the Director of Depati Bahrin Hospital because the application is very supportive of efforts for increased quality of public services to all levels of society, especially in the field of health care.

Based on the discussion in the Forum Group Discussion, that this application is urgent to get where it is needed to solve existing problems, with this application it is hoped that this application can facilitate the service of medical personnel to the community and utilize Android-based technology to help accelerate public health services, with just one applications on Android are integrated with the Hospital Information System, can solve problems faced both in outpatient and inpatient departments. In short, the Depati Bahrin Regional General Hospital made a revolution in accelerating health services to the community. .

The purpose of making the application system "SIMPANAN CANTIK" which is integrated with SIMRS and connected online to all outpatient, inpatient and medical support units at the Depati Bahrin Blood General Hospital will improve the performance of all service providers at the Depati Bahrin General Hospital, including the Doctor in Charge of Service (DPJP) to the community.

With the increase in the benefits of the hospital information system through the development of the Android-based "SAVE CANTIK" application, it has been able to solve the problems that exist in the Depati Bahrin Regional General Hospital, which is very helpful in providing easy medical services by DPJP to patients, both medical services in outpatient installations. as well as inpatient installations.

3.2. Feature Applications "Simpanan Cantik" and Strategy for Introduction of Applications to Public Services

Applications "SIMPANAN CANTIK" Depati Bahrin Hospital comprises several features that greatly help solve the problem of delay when risk of medical services to patients. Some of these features are:

First queuing data for polyclinic patients, this feature provides information to the DPJP how many patients have registered and queued at the polyclinic, so that the DPJP can predict the time of service to be carried out.

At the second outpatient and Inpatient services, this application has been connected to all medical support rooms, namely laboratories, radiology, and pharmacy rooms, thus accelerating the DPJP in providing services to patients without having to wait for patients to wait long for the results of laboratory and radiological examinations, including determination. drugs that will be received by patients, because by using this application, all data is automatically connected to the Android DPJP.

And the third this application has solved the problem of delay in providing therapy when the DPJP is not at the location of the DB Hospital, when the DPJP with patients inpatients need immediate answers from supporting examinations to determine therapy for patients where so far there is often a time lag but with the application DPJP can quickly get the results of medical support in its Android and can immediately provide advice simply by typing on the DPJP android and it will be immediately accepted by room nurses and pharmacy rooms, even though the DPJP is out of town and even abroad.

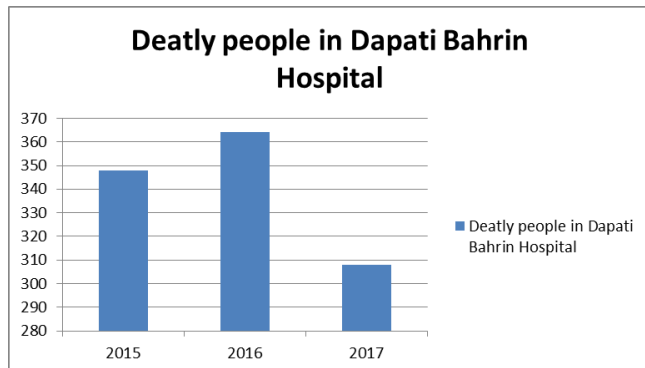
Fourth, this application also provides a means for patients to consult their DPJP via email chat, this application allows two-way communication in the treatment process being carried out, so that this system is an effort of the DB Hospital to provide transparent and accountable services by utilizing information technology in the process. patient therapy.

The management is intensively introducing the "Beautiful Savings" application to the surrounding community, the following steps are as follows: First Each security guard introduces and educates prospective patients when they want to seek treatment at the hospital to download the application by providing the purpose and function of the Cantik Savings application. Second other management, especially those on the frontliners and nurses who are in direct contact with patients, always provide education in the use of the application. As For Third Making videos of how to use the applications that are displayed in each hospital room to educate independently and Fourth Creating banners around the company to support prospective patients so that they can easily and understandably use the application.

3.3. Number of Deaths After Using the Beauty Savings Application

With the application of the Fast Accurate and Accurate Medical Service System application at the Depati Bahrin

Regional General Hospital, data on the number of patients who died each year from before the use of the application "SIMPANAN CANTIK" until after using the application "SIMPANAN CANTIK" are as follows:



Graph 1. Patient Died from 2015-2017

From Graph 1. above can be seen that in 2015 patients who died in Depati Bahrin Hospital amounted to 348 people, while in 2016 patients who died were 364 people. From these two years, it was seen that there was an increase in patient mortality in DB Hospital, this is because in those two years the management has not made the application of SIMPANAN CANTIK, in 2017 the patient mortality rate at Depati Bahrin Hospital decreased to 308 people. This year the SIMPANAN CANTIK application has been used, it can be seen from the graph that it has decreased, so it can be said that the use of the SIMPANAN CANTIK application has a significant impact on all groups, both from the management of Depati Bahrin Hospital, doctors and also for the community, especially service users directly to Depati Bahrin Hospital.

3.4. Advantages Applications "Simpanan Cantik"

First make it easier for the DPJP to quickly find out how many patients have registered at its polyclinic, wherever the DPJP is, so that the DPJP can arrange service time at the polyclinic (local government of Bangka Regency).

Second speed up the DPJP in laboratory and radiology examination orders, the results of these examinations no longer have to wait or print manually because laboratory and radiology results are directly connected to the DPJP android, so that the DPJP is faster in identifying problems, faster making medical diagnoses which ultimately provide therapy to patients became fast and accurate only through the DPJP android, even though the DPJP at that time was no longer in the polyclinic (local government of Bangka Regency).

Third It is easy for the DPJP to monitor the condition of all patients in the inpatient room which is the responsibility of the DPJP with just one touch of android (local government of Bangka Regency).

Fourth acceleration of reading the results of patient investigations in the inpatient room. All results of medical support examinations of all patients in the inpatient room are automatically connected to the DPJP android, and accelerate the DPJP to provide further advice to patients, thereby reducing patient mortality (local government of Bangka Regency).

4. Conclusion and Suggestions

Based on the results of the study it can be concluded that the use of the application "SIMPANAN CANTIK" for purposes at the Depati Bahrin Regional Hospital has been proven to reduce patient mortality, as well as make it easier for doctors to make diagnoses more quickly and accurately, so that the life expectancy of patients is higher, this also makes it easier for patients to do administration, you don't need to queue to get services or just register. It is hoped that in the future this application can be developed again to facilitate all matters between patients and management of Depati Bahrin Hospital. And in the future, this application will not only be used in the Depati Bahrin Regional Hospital, but can be used in private hospitals in Bangka, as well as hospitals throughout Indonesia, this is to support the performance of hospitals in Indonesia to reduce the risk of death from patients.

5. Acknowledgments

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6. References

- Cronin, J.J. and Taylor, S.A. (1992), "Measuring service quality: a re-examination and extension", *Journal of Marketing*, Vol. 56 No. 3, pp. 55-68.
- Figueras J, McKee M, p (2012). *Health system, health, wealth and societal wellbeing*. New York: McGraw-Hill.

- Hadijah. (2016), "Analisis Kualitas Pelayanan Rawat Inap Di Rumah Sakit Umum Daerah Undata Palu Provinsi Sulawesi Tengah", e Jurnal Katalogis, Vol. 4 No. 7.
- Hadiyadi, I, Sekarwana. W, Sunjaya D. ., Setiawati P.E, (2017), "Konsep Kualitas Pelayanan Kesehatan berdasar atas Ekspektasi Peserta Jaminan Kesehatan Nasional" Dinas Kesehatan Kabupaten Bandung 1-2.
- Hartono, B. (2010). Manajemen Pemasaran untuk Rumah Sakit. Jakarta: Rineka Cipta.
- Mohamad Topan, Hans F. Wowor, Xaverius B. N. (2015), "Perancangan Sistem Informasi Manajemen Rumah Sakit Berbasis Web Studi Kasus : Rumah Sakit TNI AU Lanud Sam Ratulangi", E-journal Teknik Informatika, vol 6, No. 1.
- Yanuar, Jak dan Grace, R. (2018), "Analisis Efisiensi Sistem Pencatatan Rekam Medis Pasien Rawat Inap Di RS Sito Husada", Jurnal Manajemen dan Administrasi Rumah Sakit, Vol 2, no 2.
- Renny, A.N, and Benn,i P. (2016), "Analisis Dan Perancangan Sistem Informasi Rekam Medis Di Rumah Sakit Tk. Iv Dr. Bratanata Jambi", Jurnal Manajemen Sistem Informasi Vol 1 No. 2.