

Supplement

Causes of Decreasing Hospital Visit during the Covid-19 Pandemic

Penyebab Penurunan Kunjungan Rumah Sakit selama Pandemi Covid-19

Devvy Megawati¹, Devita Rahmani Ratri², Alfian Erzi^{1,3}

¹Hospital Management Study Program Faculty of Medicine Universitas Brawijaya Malang

²Department of Public Health Faculty of Medicine Universitas Brawijaya Malang

³Rumah Sakit Tulungagung

ABSTRACT

The problem of decreasing bed utilization resulted in a decrease in hospital income during the Covid-19 pandemic, including in a class D private hospital, Tulungagung, that experienced a 32.5% decrease in revenue. The decrease in hospital income has made the hospital suffer losses and, at the same time, threatened the cash flow, the operating expenses, and the continuity of service operations. The study was conducted to identify the root cause of the decreasing patient visits at the hospital. The research was conducted with a case study approach at a private hospital in Tulungagung in September and October 2020. The data were collected using a Focus Group Discussion (FGD) with eight respondents who were determined based on purposive sampling. Data were analyzed using Fishbone diagrams and priorities were set based on cumulative percentages. The public's stigma about hospitals during the Covid-19 pandemic and the cost of rapid tests are the two root causes that are suspected of contributing to the decline in patient visits at the hospital.

Keywords: Community stigma, Covid-19 pandemic, decreased visits

ABSTRAK

Permasalahan penurunan utilisasi tempat tidur mengakibatkan penurunan pendapatan rumah sakit pada masa pandemi Covid-19 termasuk pada salah satu rumah sakit swasta kelas D Tulungagung yang mengalami penurunan pendapatan sebesar 32,5%. Penurunan pendapatan rumah sakit berdampak pada arus kas, beban operasional meningkat, rumah sakit mengalami kerugian, dan mengancam kelangsungan operasional pelayanan. Kajian dilakukan untuk mengidentifikasi akar masalah penurunan kunjungan pasien di rumah sakit. Penelitian dilakukan dengan pendekatan studi kasus pada rumah sakit swasta di Tulungagung pada bulan September dan Oktober 2020. Metode pengumpulan data menggunakan *Focus Group Discussion* (FGD) dengan 8 responden yang ditentukan berdasarkan *purposive sampling*. Data dianalisis menggunakan diagram *Fishbone* dan ditetapkan prioritas berdasarkan persentase kumulatif. Stigma masyarakat tentang rumah sakit di masa pandemi Covid-19 dan biaya *rapid test* menjadi dua akar masalah yang diduga berkontribusi pada penurunan kunjungan pasien di rumah sakit.

Kata Kunci: Pandemi Covid-19, penurunan kunjungan, stigma masyarakat

Correspondence: Devvy Megawati. Hospital Management Study Program Faculty of Medicine Universitas Brawijaya Malang, Jl. Veteran, 65145, Malang Tel. (0341) 568989 Email: devvy_megawati@yahoo.com

DOI: <http://dx.doi.org/10.21776/ub.jkb.2021.031.02.2s>

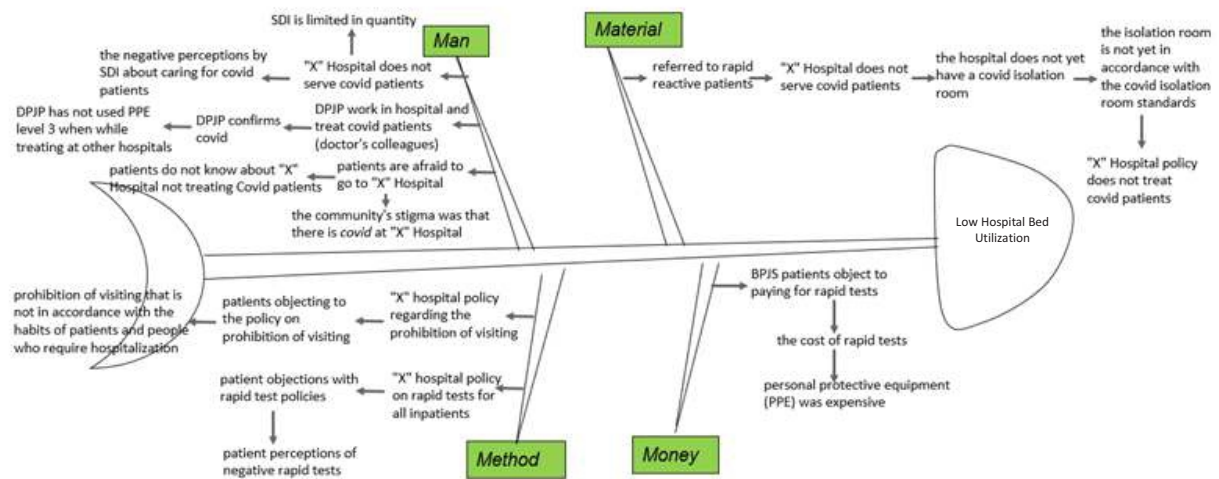


Figure 1. Fishbone diagram of root cause analysis

INTRODUCTION

Hospitals assess the efficiency of service delivery by using the Bed Occupancy Rate (BOR) indicator. Bed Occupancy Rate (BOR) is an indicator to measure the level of utilization of hospital beds. The ideal inpatient bed utilization rate according to the standard is 60-85% (1). The 2019 coronavirus (Covid-19) pandemic has caused a decrease in patient visits internationally and nationally. Decreases were seen in all age groups and diagnoses, whereas increases were seen in diagnoses of upper respiratory tract infection, shortness of breath, and chest pain. There was a 32% drop in visits in the United States in admissions during the COVID-19 pandemic in 2020 (2,3). In one of the class D private hospitals in Tulungagung, the BOR indicator achievement was substandard, namely 35.9% in 2017, 48.3% in 2018, and 59.7% in 2019, and dropped to 45.5% during the Covid-19 pandemic.

The Covid-19 pandemic has had a global impact on health and made a significant downturn in the economy. The impact of the Covid-19 pandemic is the postponement of elective surgery and non-urgent outpatient services (4). The impact of the Covid-19 pandemic on revenue is

predicted to lose \$15.1 billion(5). The decreasing bed utilization affects the hospital's income. The contribution of inpatient visits to hospital income is 67% (6). The decreases in patient visits and BOR at Hospital "X" Tulungagung were 19.2% and 14.2%, respectively, causing a declining hospital income by 32.5%. The decrease in bed utilization in inpatient units affects hospital operations. Therefore, studying and finding the causes of this decline is important, so that the hospital can find solutions and avoid the loss or hospital closure. This research was conducted to find the root of the problems at the hospital where this research was conducted.

METHOD

The research was conducted with a case study approach at a private hospital in Tulungagung in September and October 2020. The data were collected using a Focus Group Discussion (FGD) on October 6, 2020, attended by eight respondents determined based on purposive sampling, namely the hospital director, the doctor in charge of patient (DPJP), the head of medical services, the head of medical support, the head of medical services, the

Table 1. Identification of priority problems

No	Problem	Data Source	U	S	G	Total USG	Rank
1	Decreased inpatient visits	April – Juli 2020 (Covid-19 Pandemic), 33,6% BOR (decreased by 43,5%)	5	5	5	125	1
2	The process of patient discharge is more than 2 hours	Interview with the head of divisions, the head of room, and staff	4	4	3	48	
3	Patients in the inpatients oppose the pandemic era policies	Interview with the head of divisions, the head of room, and staff	4	4	3	48	
4	ER patients consider the Rapid Test expensive	Interview with the head of divisions, the head of room, and staff	4	4	3	48	
5	Marketing program is not available	Interview with the head of divisions, the head of room, and team	4	4	4	64	
6	The referral procedure in the ED remains unclear	Interview with the head of divisions, the head of room, and staff	3	4	3	36	
7	Patient food waste is higher than 20%	Nutrition unit monthly report > 30%, and interview with the head of divisions, the head of room, and staf	5	4	4	80	2
8	Time required to move patients from the ER to the inpatient is long	Interview with the head of divisions, the head of room, and staff	4	3	3	36	
9	Queue buildup in the ER	Interview with the head of divisions, the head of room, and staff	4	3	3	36	
10	HIS cannot provide the required data	Interview with the head of divisions, the head of room, and staff	4	4	4	64	

head of inpatient units, the head of nursing, and the head of the emergency department. The FGD aimed at identifying the root of the problems using the urgency seriousness growth (USG) method by determining a scale of 1-5. The issue that had the highest total score was the priority issue. The root of the problem was analyzed using the Fishbone cause-effect diagram and then grouped into themes; and, the priorities were set based on the cumulative percentage of root causes in each theme.

RESULT

The FGD conducted identified ten problems based on the results of interviews and secondary data. Decreased inpatient visit is the first priority issue, and food waste is the second problem (Table 1). The swift decline in inpatient visits is seen as a severe, serious, and rapidly growing problem.

Root cause analysis using the fishbone diagram identifies problems in the aspects of human (3), materials (1), methods (2), and financing (1). From these four aspects, nine potential root causes were identified, including policy factors and human resources, public perceptions and understandings that form stigma, as well as costs. The nine root causes were then grouped into five themes (Table 2). Researchers removed the doctor in charge of patients (DPJP) who did not wear level 3 PPE when treating patients in other hospitals from the root cause of the problem because it did not occur in the hospital of this research. By paying attention to the cumulative number of causes in each theme, it is found that stigma is a cause that has an 80% contribution.

Table 1. The root of problem

No	Root of Problem	Theme
1	The patient does not know that "X" Hospital is not treating Covid	Community's stigma about the covid-19 pandemic and rapid test at the Hospital
2	Community's stigma about Covid at "X" Hospital	
3	The perception of negative rapid test	
4	The visiting prohibition is not in accordance with the habits of patients who require hospitalization	Prohibition of visiting families for inpatients
5	"X" hospital policy does not want to treat Covid patients	The policy of hospital not to treat covid patients at the hospital
6	SDI (quantity) is limited	
7	DPJP has not worn level 3 PPE when treating patients in other hospitals	X
8	The high costs of PPE and Rapid Test	The high operational cost of covid screening
9	SDI's perception is negative about caring for Covid patients	SDI's stigma regarding the care of covid patients

DISCUSSION

This research identifies that the community's stigma about the Covid-19 pandemic and SDI's stigma about treating Covid patients become the main factors of the

decreasing patient visits at the hospital. The Covid-19 pandemic has made communication and education to patients limited, which is exacerbated by the lack of information about the hospital services during the Covid-19 pandemic that implements health protocols. The public's stigma about the Covid-19 pandemic and health services that have the potential for corona transmission causes people's reluctance to visit hospitals (7,8).

Stigmatization is a social process that rejects someone considered a source of disease or a threat to social life in society. Stigma affects self-esteem, interferes with family relationships, limits socialization, and makes it difficult to find a place to live and work. The Covid-19 pandemic has made every social aspect change dramatically. The ease of disseminating information creates an infodemic phenomenon, which on the one hand, provides information about the Covid-19 pandemic, but on the other hand, can also create fear if the content is inappropriate. The threat of mortality, lack of health facilities, social distancing policies, and self-isolation have caused psychological trauma, fear, and anxiety in Indonesian society. The fear and anxiety of the community have resulted in the stigma of Covid-19 sufferers, health workers, and health facilities (9-11).

In addition to the stigma on material and method factors, the hospital's policy of not treating Covid patients and the visiting prohibition for the patient's family are also thought to have contributed to the decline in patient visits at the hospital. The hospital's policy of not treating Covid patients and the prohibition of visiting patients' families are also applied in several hospitals during the Covid-19 pandemic. The visiting prohibition policy or the limit on the number of caregivers refers to the government's policy on prohibiting gathering or crowding at public facilities, including visiting sick people (12). However, Indonesia has a culture of caring for the family, community kinship has a significant meaning, and humans have social needs. Thus, the prohibition on visiting the patient's family is not suitable for the culture in the community and can be a factor in the patient's refusal to hospitalization (13).

On financial factors, the cost of Covid screening is expensive, which is thought to have caused a decrease in patient visits at the hospital. Patient screening during the Covid-19 pandemic is carried out in all hospitals (12). The operational cost of Covid screening is an additional cost that must be borne by the patient so that it can cause the patient and family to choose not to do the treatment (14).

To build a positive image, the hospital must provide information about rapid test screening and illustrate that the hospital applies strict protocols, such as wearing masks, hand hygiene, and maintaining physical distance in the hospital environment. Hospitals can also provide information on health protocols carried out in the hospital area, such as disinfecting all rooms every day and all officers wearing personal protective equipment (PPE) during providing services (15). The information is aimed to build public confidence towards the safety of the health care facilities.

REFERENCES

- Pertiwi DS, Fitriyari N, and Lailiyah L. *Peningkatan BOR Rumah Sakit "X" dengan Pendekatan Marketing Plan*. Jurnal Ilmiah Kesehatan Rustida. 2019; 6(1): 619-626.
- Sekarwati T. *Analisis Dampak Tingkat Hunian terhadap Rentabilitas Modal Sendiri Rumah Sakit X*. (Online) 2017. <https://www.poltekkesjakarta1.ac.id>

- /analisis-dampak-tingkat-hunian-terhadap-rentabilitas-modal-sendiri-rumah-sakit-x/
3. Sidiq R and Afrina R. *Kajian Efisiensi Pelayanan Rumah Sakit*. Idea Nurs J. 2017; 8(1): 29–34.
 4. Westgard BC, Morgan MW, Vazquez-Benitez G, Erickson LO, and Zwank MD. *An Analysis of Changes in Emergency Department Visits After a State Declaration During the Time of COVID-19*. Annals of Emergency Medicine. 2020; 76(5): 595–601.
 5. Basu S, Phillips RS, Phillips R, Peterson LE, and Landon BE. *Primary Care Practice Finances in the United States Amid the COVID-19 Pandemic*. Health Affairs. 2020; 39(9): 1605–1614.
 6. Nourazari S, Davis SR, Granovsky R, et al. *Decreased Hospital Admissions through Emergency Departments during the COVID-19 Pandemic*. The American Journal of Emergency Medicine. 2021; 42: 203–210.
 7. Wongtanarasasin W, Srisawang T, Yothiya W, and Phinyo P. *Impact of National Lockdown Towards Emergency Department Visits and Admission Rates during the COVID-19 Pandemic in Thailand: A Hospital-Based Study*. Emergency Medicine Australasia. 2021; 33(2): 316–323.
 8. Baldassarre A, Giorgi G, Alessio F, Lulli LG, Arcangeli G, and Mucci N. *Stigma and Discrimination (SAD) at the Time of the SARS-CoV-2 Pandemic*. International Journal of Environmental Research and Public Health. 2020; 17(17): 1–29.
 9. Bhanot D, Singh T, Verma SK, and Sharad S. *Stigma and Discrimination During COVID-19 Pandemic*. Frontiers in Public Health. 2021; 8: 1–11.
 10. Abdelhafiz AS and Alorabi M. *Social Stigma: The Hidden Threat of COVID-19*. Frontiers in Public Health. 2020; 8: 1–4.
 11. Sulistiadi W, Slamet SR, and Harmani N. *Handling of Public Stigma on COVID-19 in Indonesian Society*. Kesmas (Jurnal Kesehatan Masyarakat Nasional). 2020; 15(2): 70–76.
 12. Schmidt T, Cloete A, Davids A, Makola L, Zondi N, and Jantjies M. *Myths, Misconceptions, Othering and Stigmatizing Responses to Covid-19 in South Africa: A Rapid Qualitative Assessment*. PLoS One. 2021; 15(12): 1–20.
 13. Abdullah I. *COVID-19: Threat and Fear in Indonesia*. Psychological Trauma: Theory, Research, Practice, and Policy. 2020; 12(5): 488–490.
 14. Pikoulis E, Solomos Z, Riza E, et al. *Gathering Evidence on the Decreased Emergency Room Visits During the Coronavirus Disease 19 Pandemic*. Public Health. 2020; 185: 42–43.
 15. Dewi F. *Ebook End Corona: Kumpulan Informasi Seputar COVID-19*. In: Sihotang RC (Ed). Jakarta: Departemen Ilmu Kedokteran Komunitas Fakultas Kedokteran Universitas Indonesia; 2020: p. 61.