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The challenges to improving patient satisfaction and patient loyalty in public hospitals during a pandemic: A review

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Abstract--The COVID-19 pandemic impacts all sectors and aspects of life, including in health care facilities. To meet the demands of improving health care quality, public hospitals must continue to strive to increase patient satisfaction and loyalty. However, previous studies did not provide much insight into patient satisfaction and loyalty in public hospitals during the COVID-19 pandemic. This study reviewed at articles that discussed factors and strategies for increasing patient satisfaction and loyalty in public hospitals during the COVID-19 pandemic. This study employs a narrative review method to examine 12 research articles on patient satisfaction and patient loyalty published

between January 2020 and December 2021 on the Science Direct, Google Scholar, and ProQuest databases. During a pandemic, the overall quality of health services contributes to patient satisfaction. Furthermore, hospital image, patient experience, patient trust, quality of service, customer value, perceived value, hospital health promotion, and service innovation all have an impact on patient satisfaction and loyalty. This review identified the determinants of patient loyalty and patient satisfaction in public hospitals during the COVID-19 pandemic, allowing them to meet the demands of meeting service quality targets.

Keywords---COVID-19, patient satisfaction, patient loyalty, public hospital, pandemic.

Introduction

The COVID-19 pandemic has impacted global changes in a variety of fields, including healthcare facilities. People now have high expectations for better healthcare quality because it has become their basic needs and rights to receive the best care. Furthermore, as the number of hospitals grows, so does competition for meeting hospital performance goals (Asnawi *et al.*, 2019; Siriwardana, 2020; Jazieh & Kozlakidis, 2020, Setyawan & Lestari, 2020). Even during a pandemic, the government has provided best practices and guidelines to improve the safety of healthcare services and prevent the spread of infection and transmission of COVID-19 (Setyawan & Lestari, 2020; Meywati, Handaru, & Wiralaga, 2021). In this regard, public hospitals face significant challenges in meeting healthcare expectations and demands, including managing a large number of chronic disease cases (Aladwan *et al.*, 2021; Almomani *et al.*, 2014; Kulsum & Syah, 2017).

During pandemic, the government has designated most of the public hospitals as Covid-19 referral hospitals. However, on the other hand, patients must decide whether to go to a public hospital or not because they are afraid of becoming anxious and depressed as a result of the COVID-19 stigma. People are concerned about hospital visits, the spread of misinformation about the virus, and movement restrictions during the pandemic (lockdown and stay at home). Aside from that, hospitals must implement complex treatment plans for COVID-19 patients while also improving care for patients with other medical conditions (McCabe *et al.*, 2020).

As a result of hospital capacity being focused on COVID-19 diagnosis, patient access to hospitals other than COVID-19 has decreased (McCabe *et al.*, 2020). Hospitals are also concerned about the safety of medical personnel and other health workers who have been exposed to COVID-19, necessitating good planning on the part of management for the hospital's performance to remain stable. Personal protective equipment (PPE), facilities, information technology, infrastructure restrictions, human resources and service quality are all issues that public hospitals face during the pandemic era (McCabe *et al.*, 2020; Yamamoto *et al.*, 2021). Hospitals faced increased operational costs for PPE, disinfectant fluids, supplements, and COVID screening tools, and a decrease in income due to a

reduction in patient visits during the pandemic era (Cohen & Rodgers, 2020; Gomez-Carmona *et al.*, 2022; Mao *et al.*, 2021).

Several public hospitals saw a drop in inpatient visits during the Covid-19 pandemic, which led to a decline in patient loyalty. Patient loyalty and patient satisfaction are healthcare indicators that contribute significantly to the hospital's long-term viability. Patient satisfaction refers to a patient's satisfaction or dissatisfaction with the quality of services provided by the hospital. Patient satisfaction is now widely used to assess the quality of medical services because it is an essential indicator of the proper functioning of the health system (Kulsum & Syah, 2017, Zhou *et al.*, 2017). The patient will be satisfied with the service if it meets their expectations.

Patient loyalty is critical for healthcare providers' business success and patient health outcomes¹⁷. Loyal patients will repurchase or reuse hospital services, continue to use them even if other hospitals provide the same services, and recommend them to others (Liu *et al.*, 2021; George & Sahadevan, 2019; Fatima, Malik, & Shabbir, 2019). Increasing patient loyalty is very beneficial for the continuity of healthcare facilities' services. It impacts the services provided by patients, as patients will feel more at ease when receiving treatment (Huang *et al.*, 2021).

Oliver defines patient satisfaction as a reaction to a service performance or results compared to their expectations. This level of emotion indicates that the patient will be satisfied if the performance is better than expected. If the patient believes that the performance demonstrated falls short of their expectations, they will be disappointed (Oliver, 2010). According to the expert, many factors affect patients' satisfaction, such as hospital care, the image of medical facilities, the quality of services, perceived value, innovation, and equipment. Patients satisfied with their treatment will be more obedient to treatment procedures, have a long-term positive relationship with their doctors, and receive better care (Asnawi *et al.*, 2019; Shirley & Sanders, 2013, Amor, Talbi, & Almurad, 2018). Patient loyalty is defined as the patient's commitment to continue using the product or service despite various circumstances and other marketing implications influencing the patient (Oliver, 2010). Griffin claims that, in comparison to patient satisfaction, patient loyalty can be used to forecast sales and financial growth (Griffin, 2013). According to Amor, Talbi, and Almurad (2018), loyalty is a patient's commitment to a provider, describing a behavior using the same brand or company. Furthermore, loyalty is a combination of attachment to a service, demonstrated by a willingness to be immune to other services and promote that service to others (Griffin, 2013). Thus, patient loyalty in healthcare services refers to a patient's desire to reuse health services at the hospital, continue using the service even if other hospitals provide the same service, and recommend services to others. Furthermore, rapid technological development, including information technology, has encouraged hospitals to create innovations and become brilliant hosts (Meywati, Handaru, & Wiralaga, 2021). Public hospitals must continue to increase patient satisfaction and loyalty to meet the needs of improving the quality of health care. On the other hand, previous studies did not provide much insight into patient satisfaction and loyalty in public hospitals. As a result, during the COVID-19 pandemic, this study reviewed at articles that discussed factors and strategies for increasing patient satisfaction and loyalty in public hospitals.

Material and Methods

The researchers used a narrative review design in this study through several stages: identifying the problem, searching the literature, the literature was objectively reviewed to select relevant articles, the findings were summarized, and data was analyzed to conclude the study results. Data collection techniques include selecting articles based on the proposed topic and research objectives, screening articles based on keywords, selecting journal articles based on title, abstract, and full text, critically evaluating the articles, and making recommendations for future research. The data was collected in April 2022 using Science Direct, ProQuest, Google Scholar, and PubMed. Research on patient satisfaction and patient loyalty in public health facilities on the COVID-19 pandemic in full text and journal articles publishing from January 2019 to December 2021 were used as inclusion criteria for data collection. The text was written entirely in English. Exclusion criteria for this literature review include books or documents, only abstracts and reviews. The literature search was conducted using keywords related to the research topic, “patient satisfaction”, “patient loyalty”, “public hospitals”, “public health facilities”, “pandemics”, and “COVID-19”. The literature search turned up 8,792 journals from databases like Science Direct, ProQuest, Google Scholar, and PubMed. As a result of the selection process, up to 12 articles met the inclusion criteria. The method of searching and reviewing the literature in this study is depicted in Figure 1.

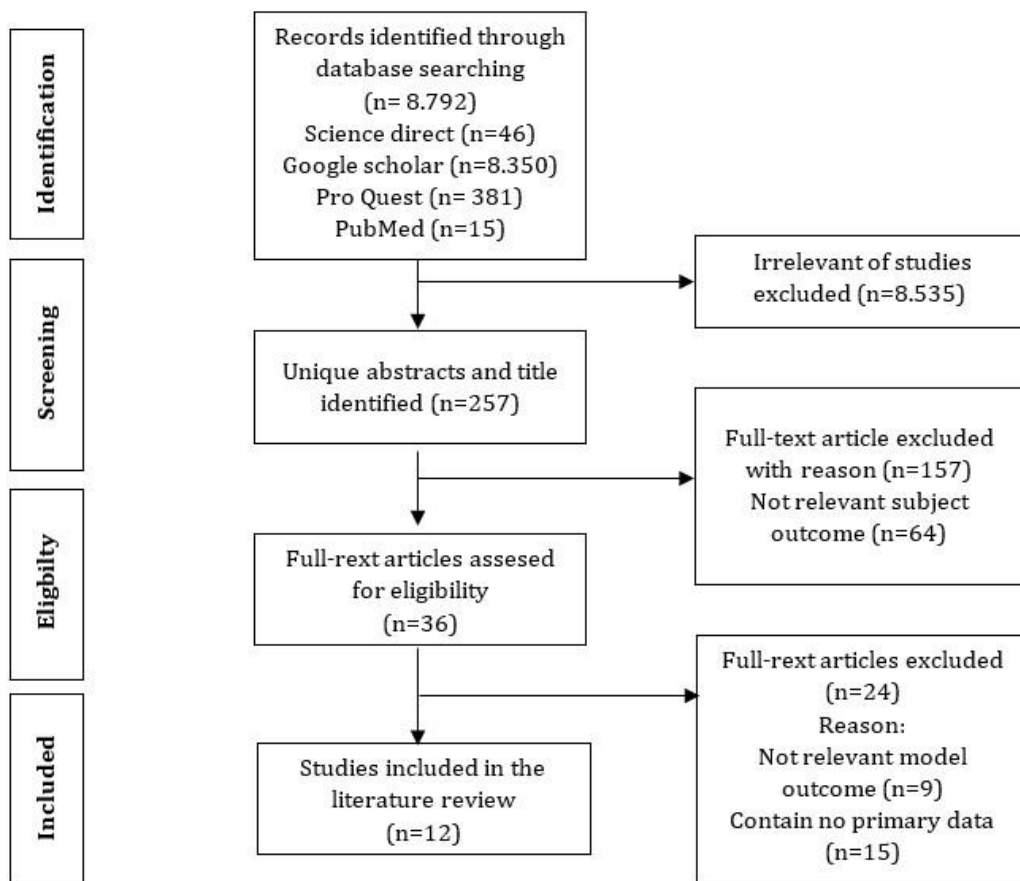


Figure 1: Flow diagram of study procedure

Results

Previous studies have investigated several determinants of patient satisfaction, including hospital image, patient experience, patient trust, quality of service facilities, patient value, perceived value, hospital health promotion, and health service innovation (Table 1). Other factors that influence patient loyalty include hospital image, patient experience, service quality, patient value, and perceived value.

Table 1: Review results of service quality, patient satisfaction, and patient loyalty in public hospitals

Author/year	Region	Sample	Objective	Result
Almomani <i>et al.</i> (2020)	Jordan	354 respondents	To ascertain the effect of health-care quality on	Patient satisfaction was affected by admission, medical service, overall services, hospital

Author/year	Region	Sample	Objective	Result
			patient satisfaction.	discharge, and hospital social responsibility.
Asmaryadi <i>et al.</i> (2020)	Indonesia	110 patients	To analyze patient experience and hospital image affect patient loyalty, as well as how satisfaction are influenced by patient experience and hospital image.	Patient experience and hospital image have an impact on patient satisfaction. Furthermore, the hospital's reputation has a direct impact on patient loyalty. Patient satisfaction and patient experience have an indirect effect on patient loyalty.
Parizad <i>et al.</i> (2021)	Iran	196 respondents	To identify factors associated with COVID-19 patient satisfaction in Iranian public hospitals.	The provision of professional care was linked to the highest levels of patient satisfaction, while patient education was linked to the lowest levels of patient satisfaction.
Aladwan <i>et al.</i> (2021)	Jordan	400 respondents	To find out how patient satisfaction and loyalty affect the way people think about health care and service quality	Patient loyalty and satisfaction are directly influenced by service quality. Patient satisfaction acts as a buffer between service quality and patient loyalty.
Nguyen & Duong (2021)	Vietnam	539 respondents	To investigate the impact of the patient guide, infrastructure, professional capacity, and service attitude on the quality of	The patient guide, infrastructure, professional capacity, and service attitude all impacted the quality of hospital services.

Author/year	Region	Sample	Objective	Result
			hospital service	
Sukawati (2021)	Denpasar, Bali	81 respondents	To investigate the impact of hospital brand image, service quality, and patient satisfaction on hospital service users	Hospital brand image has a significant positive effect on patient satisfaction and service quality
Meywati <i>et al.</i> (2021)	Jakarta, Indonesia	400 outpatients	To assess the impact of innovation strategies and service quality on patient satisfaction and loyalty during the covid-19 pandemic	Patient satisfaction and loyalty are significantly improved by health innovation and service quality.
Wartiningih <i>et al.</i> (2021)	Surabaya	101 respondents	To investigate the impact of a health-promoting hospital on patient loyalty via expectations, perceived value, and satisfaction	Patient expectations, perceived value, satisfaction, and loyalty are all affected by hospital health promotion.
Liu <i>et al.</i> (2021)	Henan, China	1696 respondents	To investigate the relationship between patient satisfaction, patient trust, and patient loyalty	The findings revealed that patient trust influences patient loyalty and acts as a mediator between patient satisfaction and patient loyalty.

Author/year	Region	Sample	Objective	Result
Gomez-Carmona <i>et al.</i> (2022)	Spain	271 respondents	To ascertain the impact of COVID-19 preventive measures on perceived service satisfaction and quality	The findings revealed that trust in the COVID-19 safety protocol directly impacted the quality of services provided, perceived value, and user satisfaction.
Deriba <i>et al.</i> (2020)	Ethiopia	410 respondents	To evaluate factors related to patient satisfaction among those who had a follow-up in public healthcare facilities	During the COVID-19 pandemic, the level of patient satisfaction is deficient. The presence of signs and directions indicators, the availability of drugs, social distancing, the availability of alcohol, and the availability of hand sanitizers are all factors that can affect patient satisfaction during a pandemic. The interventions also emphasized the preservation of social distance and the availability of alcohol or sanitizers as a condition of necessary health protocols.
Huang <i>et al.</i> (2021)	Taiwan	350 respondents	To investigate the relationship between patient-perceived value, patient commitment, and patient loyalty and the moderating	The study discovered that perceived value, commitment, and patient loyalty influenced higher levels of trust in healthcare providers.

Author/year	Region	Sample	Objective	Result
			effect of patient trust between variables.	

The quality of service is an essential factor in determining patient satisfaction (Aladwan *et al.*, 2021; Sitio & Ali, 2019; Chang, Chen, & Lan, 2013; Hu *et al.*, 2019; Parasuraman, Zeithaml, & Berry, 1985). Reliability, assurance, physical evidence, empathy, and responsiveness are service quality indicators influencing patient satisfaction. According to Aladwan *et al.* (2021) study in government hospitals, hospital staff can control the increasing workload of patients while still providing satisfactory service, ultimately increasing patient loyalty. This situation suggest that during the COVID-19 pandemic, patients will prioritize hospitals that maintain service quality standards (Aladwan *et al.*, 2021). Consequently, hospital management must implement several strategies to increase patient satisfaction, including how to provide a comfortable waiting room for services, punctuality of examinations/consults by doctors, officers serving politely, and health professionals who are willing to assist patients and are patient in providing services (Sitio & Ali, 2019).

Another factor influencing the quality of hospital services is the patient experience, which results from interactions between the consumer and the product, business, or organizational component that responds to the patient. This genuinely personal experience necessitates patient participation in many areas, including intellectual, emotional, sensory, physical, and spiritual aspects of care (Parasuraman, Zeithaml, & Berry, 1985). On the other hand, patient satisfaction indicators such as the medical environment, medical services, and hospital prices significantly affect the doctor's interpersonal trust scale and the health care system trust scale. This condition implies that the greater the patient's positive experience with hospital services, the more likely the patient will be satisfied with hospital services (Lemon & Verhoef, 2016; Asmaryadi *er al.*, 2020; Sukawati, 2021). Professional care provided by health workers is also associated with the highest level of patient satisfaction, whereas patient education affects the lowest level of patient satisfaction (Parizad *et al.*, 2021).

Patient trust is also an essential factor in increasing patient loyalty. According to Liu *et al.* (2021), patients believe that honest and trustworthy hospital staff can improve the long-term relationship between patients and health workers, making them willing to return. Thus, to increase patient loyalty, hospitals must improve patient satisfaction by paying attention to the image of medical staff and improving the service quality of medical staff and health workers (Zhou *et al.*, 2017).

Hospital service innovation is critical for increasing patient satisfaction and loyalty. This can be accomplished by reducing the time required for registration and treatment. Hospitals can also use digital services to reduce patient crowds and queues. The use of technology, interaction with patients, and the development of new services are all critical indicators of healthcare innovation in hospitals. This study describes an innovative method of patient care registration carried out via an online web. Patients will arrive according to appointment hours received via the

web online or SMS using this online approach. This registration system combines an online queuing design with a Self-Registration Platform to print forms online. Furthermore, this hospital service uses a web-based Helpdesk that is available 24 hours a day, seven days a week (Meywati, Handaru, & Wiralaga, 2021).

All hospital staff should work together to improve patient care by encouraging patients to come to the hospital for medical examinations and treatment. Furthermore, hospital staff can implement information technology systems to guide patients about medication adherence and drug use instructions (dose, use, and other information). Additionally, the hospital can develop and improve a messaging system that automatically reminds patients to come in for checkups on a regular and timely basis. The use of digital information technology is critical, especially during the COVID-19 pandemic (Kulsum & Syah, 2017).

The availability of adequate physical facilities and equipment, the speed with which patients are served, the dependability of medical personnel and doctors, the friendliness of medical personnel's services, and good patient care contribute to service quality (Sukawati, 2021). Furthermore, patients are satisfied and eager to return to the hospital if they receive good nursing care, use appropriate medical equipment, and receive quality administrative services (Asnawi *et al.*, 2019). During the pandemic, the hospital also tries to persuade the public not to be afraid of going to the hospital by optimizing the marketing media that informs the hospital's health protocol. The role of hospital administration, in this case, is critical in persuading the public not to be afraid of going to the hospital via socialization through effective communication media. The presence of strict health protocols enforced by hospitals, such as indicator signs and directions, the availability of medicines, social distancing, the availability of alcohol, and hand sanitizers, can all impact patient satisfaction during the pandemic (Gomez-Carmona *et al.*, 2022; Deriba *et al.*, 2020).

This study proposed several strategies for increasing patient satisfaction and loyalty during a pandemic: (1) Carry out a COVID-19 protocol campaign through hospitals' information media, which the public can access through websites, banners, and pamphlets; (2) Improving the media for patient complaints as a way for patients to provide feedback and suggestions; (3) Use banners or other media to inform patients about the flow of services during the Covid 19 pandemic; (4) Hospitals should provide quick and easy services and facilities that can reduce queuing and patient accumulation; (5) Hospital can provide contactless service innovation in the form of telehealth or telemedicine and self-service technology; (6) Set up a cashless payment system in places like ATMs, mobile banking, or internet banking; (7) Improve communication with loyal patients in the hospital; (8) Provide health promoting hospital services to educate the public about COVID-19; (9) Hospital should increase and also managing staff, facilities, the hospital's bed, and PPE; (10) Provide home visit services to reduce patient accumulation, particularly among the elderly; and (11) Establish procedures or standard operating procedures for screening patients seeking hospital treatment.

Conclusion

Amid the COVID-19 pandemic, public hospitals have provided patients with a sense of security and comfort. Even during a pandemic, hospitals adhere to strict health protocols, which is critical for containing the virus's spread and ensuring the safety of patients and health care workers. The hospitals must provide patient safety, improve service facilities, and improve service quality due to the attitude and professional capacity of the medical team and health workers, as well as service innovations that provide convenience and speed in using services, which is expected to increase patient satisfaction. Increasing patient loyalty will be highly beneficial to the continuity of hospital services and the effectiveness of treatment for patients. The value of various medical assistance should be increased in public hospitals, as should patient-provider relationships. Knowing the factors that influence patient satisfaction and loyalty can help us provide better services in the face of the COVID-19 pandemic. To maintain patient satisfaction and loyalty, hospital administration must continue to improve the quality of monitoring programs and services.

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