

# AN EMPIRICAL STUDY OF PARADIGM SHIFT IN PATIENT LOYALTY TOWARDS HOSPITALS IN THE WAKE OF THE COVID-19 PANDEMIC

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## ABSTRACT

### PURPOSE:

This research paper aims to identify the factors that have influenced patients' loyalty towards hospitals, doctors, or healthcare providers during the COVID-19 pandemic. The study seeks to create a comprehensive model that takes all these factors into account.

### DESIGN/ METHODOLOGY/APPROACH:

The study collected primary data from 400 valid responses using a Google Form, and a non-probability, convenient sampling technique was used. The sample size was calculated using G\*Power software. [21] The respondents were mostly from Bhopal or nearby areas in Madhya Pradesh, India. SmartPLS software [22] was used to conduct partial least square structural equation modelling. The study used confirmatory composite analysis to observe interrelationships in terms of linear compounds, and tested research hypotheses using a structural model.

### FINDINGS:

The COVID-19 pandemic has had a profound impact on the healthcare industry, including patient loyalty and expectations. The research highlighted that patients are increasingly looking for a more human-centered approach from medical staff, which includes better communication and more personalized care. This means that healthcare providers need to focus on building strong patient relationships based on trust, empathy, and respect.

### ORIGINALITY VALUE:

The present research work will help in identifying the key drivers of patient loyalty so that hospitals can focus on improving the areas that matter most to their patients, such as the quality of care, staff communication, accessibility, and overall patient experience. This, in turn, can increase patient satisfaction and ultimately lead to higher levels of patient loyalty.

### KEYWORDS

human resources, patients' experiences, patients' satisfaction, patients trust, patient's loyalty.

## INTRODUCTION

Patient expectations of health care are growing, and this is an issue that has to be addressed properly. Patients come to healthcare consultations with a variety of expectations that can be influenced by their cultural background, health beliefs, previous experiences, and level of understanding of their condition.[1] Patients may have expectations about the type and quality of care they will get, the level of communication and information they will get from healthcare providers, and the outcome of their treatment. Managing patients is basically customer management for the healthcare industry.

While there are some similarities between managing patients in healthcare and customer management in other industries, there are also significant differences. Unlike in other industries, where customers may be seeking a product or service for personal or recreational reasons, healthcare patients are seeking treatment for medical conditions that can have significant impacts on their well-being and even their lives. In cases where patients are critically ill and have urgent and time-dependent concerns, the pressure on healthcare providers can be even greater. In such situations, it's important for healthcare providers to communicate clearly and effectively with patients and their families, providing them with information about the patient's condition and the steps being taken to address it. The degree of understanding between the practitioner and the patient is a critical aspect of the consultation process, and it can significantly impact the progress of the visit. Effective communication and mutual understanding between the practitioner and the patient can help build trust, establish rapport, and improve patient satisfaction and health outcomes.

Patient demographics, such as age, gender, ethnicity, education level, and cultural background, can influence how patients perceive and respond to healthcare communication.[2] For example, some patients may prefer a more direct and assertive style of communication, while others may respond better to a more understanding and supportive style. Visit factors such as the purpose of the visit, the length of the consultation, and the patient's emotional state can also affect the degree of understanding between the practitioner and the patient.

A hospital is a place where everyone has high hopes and expectations. It is a medical aid institution that is

appropriately created with a task force of specialized human resources (such as doctors, surgeons, nurses, administrative staff) that provide special treatments for patients, the situation has changed dramatically, not just as a result of COVID-19, but also because patients are now more educated and aware of the latest treatments and other accessible options. Every hospital strives to offer the best possible care for its patients. The COVID-19 pandemic has certainly put a lot of stress on healthcare systems around the world. The sheer scale of the pandemic and the number of people who have become infected have tested the capacity of hospitals, clinics, and other medical facilities to their limits. This has, in turn, led to a lot of frustration and anxiety among people who may have been unable to access the care they need or who may have had to wait longer for treatment than they would have in non-pandemic times.

The COVID-19 pandemic has had a significant impact on the healthcare infrastructure in India, leading to a shortage of medical facilities and resources, including ICU beds, ambulances, doctors, support staff, oxygen concentrators, and ventilators. This shortage has resulted in long queues and wait times outside hospitals, causing anxiety among patients and their families. The situation was particularly dire during the second wave of the pandemic in India, which saw a sharp rise in the number of cases and deaths. The surge in cases overwhelmed the healthcare system, leading to a shortage of critical resources such as medical oxygen, hospital beds, and life-saving drugs. The shortage of medical facilities also led to a rise in the number of deaths, and crematoriums were overwhelmed, leading to delays in cremations and funerals. In fact, marriage halls, hotels, community halls, and all other possible venues have been converted into isolation and health care centers. The situation was further exacerbated by the lack of coordination and communication between the government, healthcare providers, and citizens.[3] Also, patients do not have the freedom of choice to opt for medical facilities and services due to the outbreak of the pandemic like they used to. Many cases have come to light in which hospitals were caught red-handed charging patients' extra fees. This, no doubt, has shaken the trust of the common man, who cannot afford basic medical health care facilities during this pandemic.

Patient satisfaction is a key driver of patient loyalty, and there are many different factors that can influence a patient's satisfaction with their healthcare experience. It can be the quality of care, communication, timeliness,

access to care, cleanliness and comfort, empathy and compassion, cost, and value. In the current pandemic of COVID-19, many concepts and management theories either failed or were made to change. Therefore, in the present research, an attempt has been made to identify whether there has been a change in loyalty in the wake of the COVID-19 pandemic, as the canvas on which factors like human resources and patient experience impacted patient satisfaction and patient trust leading to loyalty was totally different prior to the pandemic. This study aims to record COVID patients' experiences with health-care attributes (access, physician care, and staff care) that impacted their overall satisfaction with care and service quality (overall satisfaction). This research work attempts to contribute to the healthcare sector and government agencies to understand that different approaches need to be followed for different situations.

## LITERATURE REVIEW

### HUMAN RESOURCES (PATIENTS RELATIONSHIP MANAGEMENT)

Positive patient relationships management were related to decreased levels of malpractice fears after errors. When physicians have a positive relationship with their patients, they are less likely to fear malpractice claims and more eager to reveal errors. In contrast, physicians with poor patient relationships are more likely to fear malpractice claims and be less eager to reveal errors. Improving patient relationship management may be an effective method for lowering malpractice fears and encouraging error reporting, ensuring patient safety, and mitigating the negative effects of medical errors. [4]

### HUMAN RESOURCES (PATIENTS RELATIONSHIP MANAGEMENT) AND PATIENTS EXPERIENCES

The article "The effect of patient relationship management on patient satisfaction in private hospitals," by Ghorbanian and Asadi [5], explores the impact of patient relationship management (PRM) on patient satisfaction in private hospitals. The study aims to understand how private hospitals can enhance the patient experience and increase patient satisfaction by improving their patient relationship management practices. The results of the study showed that patient relationship management practices have a significant positive effect on patient satisfaction in private hospitals. Specifically, the study found that communication, empathy, and responsiveness were the most important factors in patient relationship management that influence patient satisfaction. Furthermore, the study

revealed that patients who received better patient relationship management were more likely to recommend the hospital to others. The study concludes that private hospitals should focus on improving their patient relationship management practices to enhance patient satisfaction and loyalty. By developing effective communication channels, showing empathy, and being responsive to patient needs, private hospitals can build stronger relationships with patients and create a positive patient experience. This, in turn, can lead to improved patient satisfaction and loyalty, which can have significant benefits for private hospitals in terms of reputation and financial performance. [5]

### PATIENTS' EXPERIENCES AND PATIENTS' SATISFACTION

Patients' experiences and satisfaction with healthcare services are influenced by various factors, including communication, empathy, respect, trust, involvement in care, accessibility, affordability, quality of care, and outcomes. Patient-centred care is important because it puts the patient's needs and preferences at the center of healthcare. This can help patients have better experiences and be happier with the services they receive. [6] Telehealth visits in primary care are generally well received by patients and may offer advantages in terms of convenience, accessibility, and efficiency of telehealth visits. However, there are still some concerns and challenges to be addressed to ensure the quality and effectiveness of telehealth visits, such as concerns about the quality of care, a lack of physical examination, and technical difficulties. The review also found that patient satisfaction with telehealth visits was not significantly different from in-person visits in most cases. In some cases, patients reported higher satisfaction with telehealth visits compared to in-person visits. [7]

A cross-sectional study in Quebec found that patients who had better access to primary care reported higher satisfaction with their healthcare experience, and factors such as availability of appointments and shorter wait times were important for improving access to primary care. [8] The article "Defining patient experience," by Wolfe et al, provides a comprehensive definition of patient experience as the sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care. [9]

### PATIENTS EXPERIENCES AND PATIENTS TRUST

"Patients' experiences of trust in primary care: a systematic review" is a research paper that examines patients'

experiences of trust in primary care. The review finds that trust is a crucial aspect of patient relationship management and is linked to better health outcomes, increased patient satisfaction, and higher levels of adherence to treatment. The study identifies several factors that influence patients' trust in their primary care providers, including communication, empathy, shared decision-making, and continuity of care. However, the review also identifies challenges in establishing and maintaining trust, such as cultural differences, power dynamics, and lack of time. The research also highlights the need for further research to better understand how trust develops over time and how it can be effectively measured and improved in primary care settings. [10]

The article "Patients' experiences of trust in healthcare professionals: a systematic review and thematic synthesis of qualitative research" presents a comprehensive synthesis of qualitative research on patients' experiences of trust in healthcare professionals. The review found that patients' experiences of trust are shaped by a variety of factors, including communication, competence, empathy, honesty, continuity of care, and respect for patients' values and preferences. Patients' trust in healthcare professionals is influenced by both personal and contextual factors, including past experiences, cultural background, and healthcare system characteristics. The article concludes that developing and maintaining trust in healthcare relationships is critical to improving the quality of care and patient outcomes. [11] "Patients' experiences of trust in healthcare professionals in a multicultural context: a systematic review of qualitative studies" explores patients' experiences of trust in healthcare professionals in a multicultural context. The review identifies common themes across the studies, including the importance of communication, empathy, cultural sensitivity, and a non-judgmental attitude in building trust between patients and healthcare professionals. The study shows how important it is for health care workers to be aware of and sensitive to their patients' cultural backgrounds and experiences in order to build trust and give care that is culturally appropriate. [12]

### **PATIENTS SATISFACTION AND PATIENTS' LOYALTY**

The article "Patient satisfaction and loyalty: A literature review" by Khan and Khan provides an overview of research on the relationship between patient satisfaction and loyalty. The author suggests that patient satisfaction is strongly linked to patient loyalty and that healthcare organizations should prioritize improving patient satisfaction

in order to increase patient retention and positive word-of-mouth. Putting the spotlight on the fact that patient satisfaction and loyalty are important parts of good healthcare management and should be a top priority for healthcare organizations. [13] "The effect of patient satisfaction on loyalty to healthcare services: Evidence from China" is a research article that examines the relationship between patient satisfaction and loyalty in the context of healthcare services in China. The authors conducted a survey of patients from five different hospitals in China and analyzed the data to determine the impact of patient satisfaction on loyalty. The study found a strong positive correlation between patient satisfaction and loyalty to healthcare services. This suggests that improving patient satisfaction can lead to more loyalty and better health outcomes in the long run. [14]

"The relationship between patient satisfaction and patient loyalty in healthcare services: A systematic review" is a research article that provides a comprehensive review of the existing literature on the relationship between patient satisfaction and patient loyalty in healthcare services. The study aims to investigate the extent to which patient satisfaction impacts patient loyalty and the factors that influence this relationship. The authors conducted a systematic review of 21 studies, and their findings suggest a strong positive correlation between patient satisfaction and patient loyalty in healthcare services. Factors such as quality of care, communication, empathy, and trust were identified as important determinants of patient satisfaction and loyalty. The authors conclude that healthcare providers should focus on improving patient satisfaction in order to enhance patient loyalty and that further research is needed to better understand the mechanisms underlying this relationship. [15]

### **PATIENTS TRUST AND PATIENTS' LOYALTY TOWARDS SERVICE PROVIDER/ HOSPITALS**

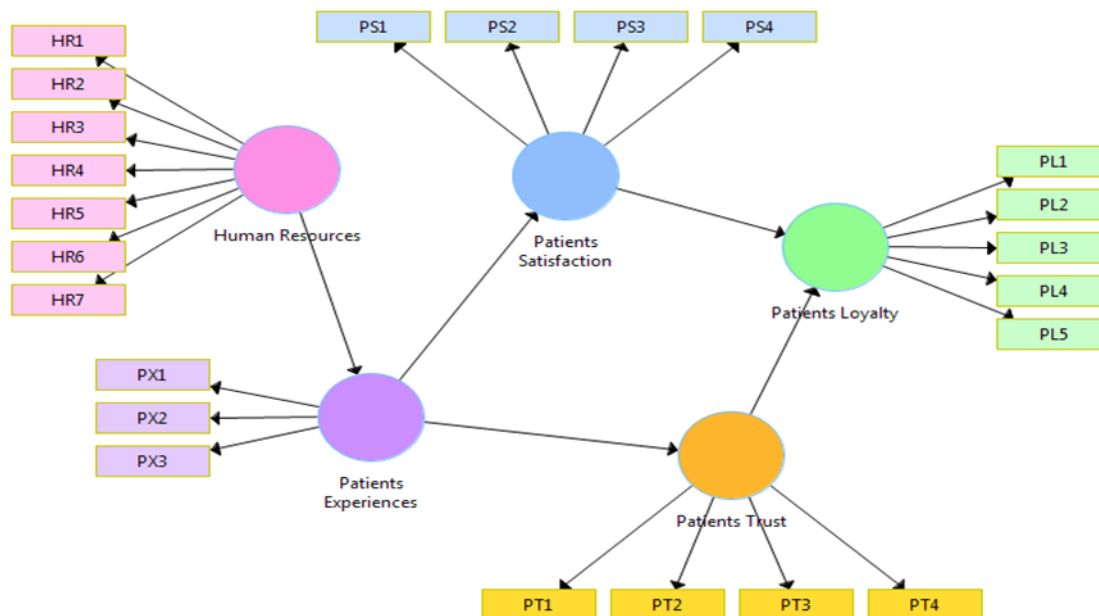
Patients who trust their healthcare service providers are more likely to exhibit loyalty toward them. Trust is a key factor in patient loyalty and can be built through consistent, high-quality care and effective communication. Research has shown that patient trust is positively associated with patient loyalty, and that trust and loyalty are critical for maintaining a long-term relationship between patients and healthcare providers. It is important for healthcare providers to build loyalty among their patients if they want to keep their patients and improve health outcomes. [16]

## CONCEPTUAL FRAMEWORK

COVID-19 has had a major impact on people's outlook on life, especially their standard of living, expectations from the government in the face of such pandemics and uncertainty, threats posed by the virus, the financial situation, availability of resources, and, most importantly, human psychology. With these considerations in mind, this study tried to establish whether the medical industry is

successfully fulfilling or failing to satisfy the expectations of its patients. An attempt has been made to see what the average person has gone through during this pandemic. A comprehensive study is being conducted to see how human resources in the medical profession impact patients' experiences, which are interlinked with their satisfaction level, trust, and loyalty.

FIGURE-1: CONCEPTUAL FRAMEWORK



Based on the conceptual framework the following hypotheses are proposed:

- H1: Human resources has no significant impact on the patients' experience.
- H2: Patients' experience has no significant impact on the patients' satisfaction.
- H3: Patients' experience has no significant impact on the patients' trust.
- H4: Patients' satisfaction has no significant impact on the patients' loyalty.
- H5: Patients' trust has no significant impact on the patients' loyalty.

## RESEARCH METHODOLOGY

The purpose of this study was to examine the variables affecting the patient's loyalty towards hospitals in Bhopal and nearby areas of Bhopal, but it was narrowly limited to Madhya Pradesh (M.P.), India. According to the literature review and conceptual framework, patients' loyalty

towards hospitals is influenced by four independent variables: human resources (patient relationship management), patients' experiences, patient satisfaction, and patients' trust. Patients' satisfaction and trust variables were used as mediators between patients' experiences and their loyalty. The primary data was collected via a questionnaire using a non-probability, convenience sampling technique. A Google form that was distributed online was used to collect data. The researchers distributed the questionnaire to a group of individuals consisting of friends and acquaintances who themselves were either hospitalized or their relatives were hospitalized. Participants were then asked to distribute the survey to their friends and colleagues in their respective locations, and the procedure was repeated.

While collecting data, utmost care has been taken not to violate the privacy policy law in India (Information Technology Act 2009 Amendment), and therefore a disclosure was used in the questionnaire stating sensitive personal information will not be shared without the prior consent of the respondents.



The researcher created survey questions based on the factors' definitions in the concept of each variable and then chose some dimensions of the question to represent representatives of the key variables. The total of 33 questions in the questionnaire are shown in the following:

**Part I:** The first part incorporated the screening questions, which used yes-or-no questions to screen the respondents who themselves or their family members were either hospitalized or had consultations done with a particular hospital or clinic during COVID-19. The screening questions started with "Are you from Bhopal or nearby locality of Bhopal" "Did any of your family members get infected by COVID-19?" and "Did the COVID-19 patient get hospitalized or consulted with any particular hospital or clinic?" All questions ask respondents to answer only "yes" to filter the respondents before continuing to the next question.

**Part II:** The second part of the questionnaire was about demographic information for gender, age, education level, income per month, and health care facilities available.

**Part III:** The variables were measured in this section by using a five-point Likert scale. The dependent variable was the patient's loyalty, and four independent variables consisted of patient relationship management, patient experiences, patient satisfaction, and patient trust. This part of the questionnaire incorporated five sub-parts and had a total of 23 questions. The scales range was from strongly disagree to strongly agree: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, and strongly agree = 5.

**Part IV:** In this section, there were two open-ended questions that asked the respondent to talk about their experiences while they were in the hospital or at a clinic

(hints were provided for this open-ended question in terms of availability of beds, timely oxygen supply, and availability of facilities such as ventilators and lifesaving drugs at a reasonable price). The second open-ended question was related to government/Insurance companies' assistance during the COVID period.

Since the questionnaire was self-developed and self-administered, the researcher tested the reliability of each variable (N = 30) by using Cronbach's alpha in the Jamovi software. [17, 18]

### PRETESTING OF INSTRUMENT

Using 30 surveys and Cronbach's alpha test, the researcher determined the internal consistency of the measurement scale. A Cronbach's alpha value above 0.6 suggests that the factor's reliability is adequate. [19] [20] The results of the preliminary examination are presented in the table below.

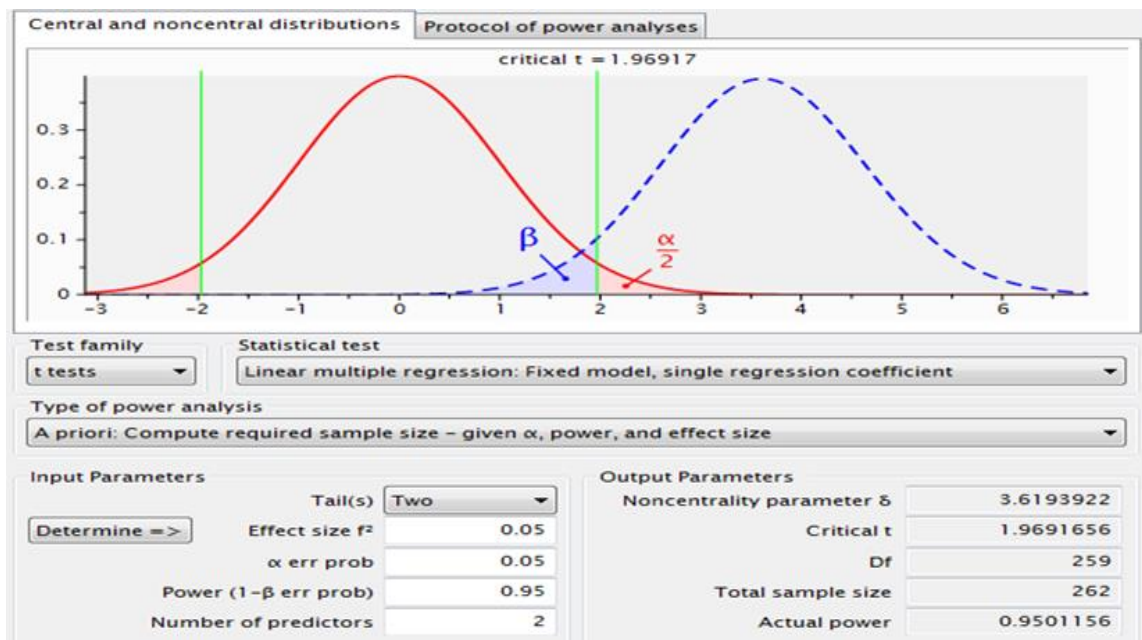
According to Table 1, the reliability test for the measurement scales was successful, and as a result, the designed instrument can be used for further investigation.

Descriptive analysis was performed to examine and explain the respondents' demographic information, such as age, gender, educational level, monthly income, and health care facilities available. A total of 427 people responded to the survey. The sample size was calculated using G\*Power software. [21] Since the software calculated a minimum sample size of 262, the responses of the first 400 respondents were considered for this study. Figure 2 depicts the estimation of the minimum necessary sample size. SmartPLS software [22] was used to investigate partial least squares structural equation modeling. As the software provides extreme flexibility, particularly when the model is complex, it was given due consideration for this research work.

**TABLE 1 RESULT FROM PRETESTING USING JAMOVI SOFTWARE [17, 18]**

Scale	No. of Items	Cronbach's Alpha	Results
Human Resources (Patients Relationship Management)	7	0.913	Pass
Patients Experience	3	0.837	Pass
Patients Satisfaction	4	0.896	Pass
Patients Trust	4	0.873	Pass
Patients Loyalty	5	0.908	Pass

FIGURE 2: G\* POWER ANALYSIS



Source: Authors own calculations using G\*Power Software [21]

## FINDINGS AND DISCUSSION

TABLE 2: SUMMARY ANALYSIS OF THE DEMOGRAPHIC FEATURES USING FREQUENCY, PERCENTAGE, AND CUMULATIVE PERCENTAGE

Demographic Factors	Frequency	Percent	Cumulative Percent
<b>Gender</b>			
Male	187	46.75	46.75
Female	213	53.25	100
<b>Total</b>	<b>400</b>	<b>100</b>	
<b>Age</b>			
Below 18 years	13	3.25	3.05
18-30 years	46	11.5	43.51
31-40 years	103	25.75	71.37
41-50 years	154	38.5	89.69
51-60 years	53	13.25	100
<b>Total</b>	<b>400</b>	<b>100</b>	
<b>Educational Level</b>			
Below high school	3	0.75	0.75
High school or equivalent	21	5.25	6
Bachelor's degree	242	60.5	66.50
Master's degree	111	27.75	94.25
Doctoral degree	23	5.75	100
<b>Total</b>	<b>400</b>	<b>100</b>	
<b>Household income (monthly) (In INR)</b>			
Less than 25,000	81	20.25	20.25
25,001-50,000	112	28	48.25
50,001-100,000	130	32.5	80.75

More than 100,000	77	19.25	100
<b>Total</b>	<b>400</b>	<b>100</b>	
<b>Type of Healthcare Facility</b>			
Public hospital	106	26.5	26.5
Private hospital	283	70.75	97.25
Clinic	6	1.5	98.75
Other	5	1.25	100
<b>Total</b>	<b>400</b>	<b>100</b>	

Source: Authors own calculations using JAMOVI software. [17, 18]

As set out in Table 2, out of the total of 400 respondents, 187 (46.75 percent) were male. Female respondents account for 213 (53.25 percent) of the total 400 respondents. The majority of the respondents are between the ages of 41 and 50, accounting for 154 people (38.5 percent). The 31–40-year-old age group came in second with 103 people (25.75 percent). 53 respondents in the survey were over the age of 50. (13.25 percent). The smallest group consists of 13 people under the age of 18 (3.25 percent). The majority of the respondents (242 people) have a bachelor's degree (60.50 percent). There were 111 respondents with a master's degree, accounting for 27.75% of the overall sample size. There are 3 people in the smallest category, which includes those with educational levels below high school (0.75 percent). The majority of the respondents had a monthly income of between 50,001 and 100,000 INR (130 respondents), followed by 112 respondents (28%), who had a monthly income between 25,001 and 50,000 INR. Only 77 respondents (19.25%) had a monthly income above 100,000 INR. The demographic profile also revealed that the majority of the respondents (283 respondents) (70.75%) preferred private hospitals for their treatment, indicating the highest level of trust and loyalty towards private service providers. Out of the total respondents, 106 (26.5%) preferred public hospitals, and 6 respondents (1.5%) preferred clinics for their treatment.

### CONFIRMATORY COMPOSITE ANALYSIS

The study used confirmatory composite analysis to examine the interrelationship between linear compounds. As part of the convergent validation process, the researchers evaluated the measurement model using composite reliability (CR) and average variance extracted (AVE). Composite reliability (CR) is a measure of internal consistency and reliability of a set of items or indicators used to measure a construct. It considers the intercorrelations among the indicators and is considered a more accurate measure of reliability than Cronbach's alpha because it is less affected by the number of items in

the scale. A value of 0.70 or higher is generally considered to be acceptable for CR. [23]

Average variance extracted (AVE) is a measure of convergent validity, which assesses the extent to which a set of indicators measure the same construct. AVE represents the amount of variance in the indicators that is captured by the construct they are intended to measure. A value of 0.50 or higher is generally considered to be acceptable for AVE.

Therefore, in this study, the researchers likely used CR and AVE to assess the reliability and validity of the measurement model. A CR value of 0.70 or higher is expected for the measurement model to be considered reliable, and an AVE value of 0.50 or higher is expected for the measurement model to be considered valid. [24]

### DISCRIMINANT VALIDITY

To examine discriminant validity, the Fornell-Larcker criterion was used. [25] The Fornell-Larcker criterion assesses discriminant validity by comparing the square root of the average variance extracted (AVE) for each latent variable with the correlations between those variable and other variables in the model. The AVE measures the proportion of variance in the indicators that is captured by the latent variable, and a higher AVE indicates that the variable explains more of the variance in its indicators. If the square root of the AVE for a latent variable is larger than its correlation with other variables in the model, then it is considered to have good discriminant validity, since it captures more unique variance than shared variance.

Table 3 shows that the square root of the average variance extracted (AVE) was higher than all the crossed construct correlation values. This suggests that the research is ready for final analysis.



**TABLE 3: RESULTS OF CONFIRMATORY COMPOSITE ANALYSIS, CRONBACH'S ALPHA, CONSTRUCT RELIABILITY AND AVERAGE VARIANCE EXTRACTED**

Constructs and Indicators	Codes	Factor Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
<b>Human Resources (Patients Relationship Management)</b>						
The healthcare staff at the hospital/clinic were wearing proper kit and were sanitizing themselves and the workplace timely.	<b>HR1</b>	0.793	0.912	0.914	0.930	0.655
The hospital's or clinic's medical staff were courteous and had empathy.	<b>HR2</b>	0.764				
Professionalism characterizes this hospital or clinic's medical personnel.	<b>HR3</b>	0.867				
I/We am/are satisfied with how quickly the healthcare providers attend to my/our needs.	<b>HR4</b>	0.770				
Healthcare professionals were constantly eager to assist patients and kept motivating them for speedy recovery.	<b>HR5</b>	0.863				
During my/our medical treatment with the health workers, I/We had a sense of being in a safe environment.	<b>HR6</b>	0.791				
The hospital or clinic provides the necessary support for healthcare providers, allowing them to perform their jobs effectively.	<b>HR7</b>	0.809				
<b>Patients Experiences</b>						
The hospital/clinic provided a positive inpatient experience. Provided timely facilities at reasonable prices.	<b>PX1</b>	0.925	0.913	0.914	0.945	0.852
I/We felt good because of the way I/we was/were treated by the health care workers.	<b>PX2</b>	0.913				
I'm/We are pleased with the overall service experience I/we had at this hospital/clinic.	<b>PX3</b>	0.931				
<b>Patients Loyalty</b>						
I/We will only go to this hospital or clinic.	<b>PL1</b>	0.827	0.890	0.907	0.920	0.698
I/We never even notice rival medical facilities when I/we visited this hospital or clinic.	<b>PL2</b>	0.705				
I'll/We'll extol the virtues of this medical facility to others.	<b>PL3</b>	0.914				

I'm/We are prepared to spend more to visit this hospital or clinic.	<b>PL4</b>	0.915				
In the future, I/we will refer others to this hospital or clinic.	<b>PL5</b>	0.798				
<b>Patients Satisfaction</b>						
It was a wise decision for me/us to visit this hospital or clinic.	<b>PS1</b>	0.895	0.936	0.936	0.954	0.839
This hospital/clinic lives up to my/our expectations.	<b>PS2</b>	0.926				
The overall service quality given by this hospital/clinic is outstanding.	<b>PS3</b>	0.937				
Overall, I'm/we are satisfied with this hospital/clinic.	<b>PS4</b>	0.906				
<b>Patients Trust</b>						
This hospital/clinic would be truthful and sincere in dealing with my/our concerns.	<b>PT1</b>	0.899	0.921	0.924	0.944	0.809
I/We have faith in this clinic or hospital.	<b>PT2</b>	0.908				
Never in my/our experience has this hospital or clinic let me/us down.	<b>PT3</b>	0.868				
I/We knew that if I/we needed medical attention, I/We could trust on this hospital or clinic.	<b>PT4</b>	0.921				

Source: Authors own work

**FIGURE 3: CONFIRMATORY COMPOSITE ANALYSIS**

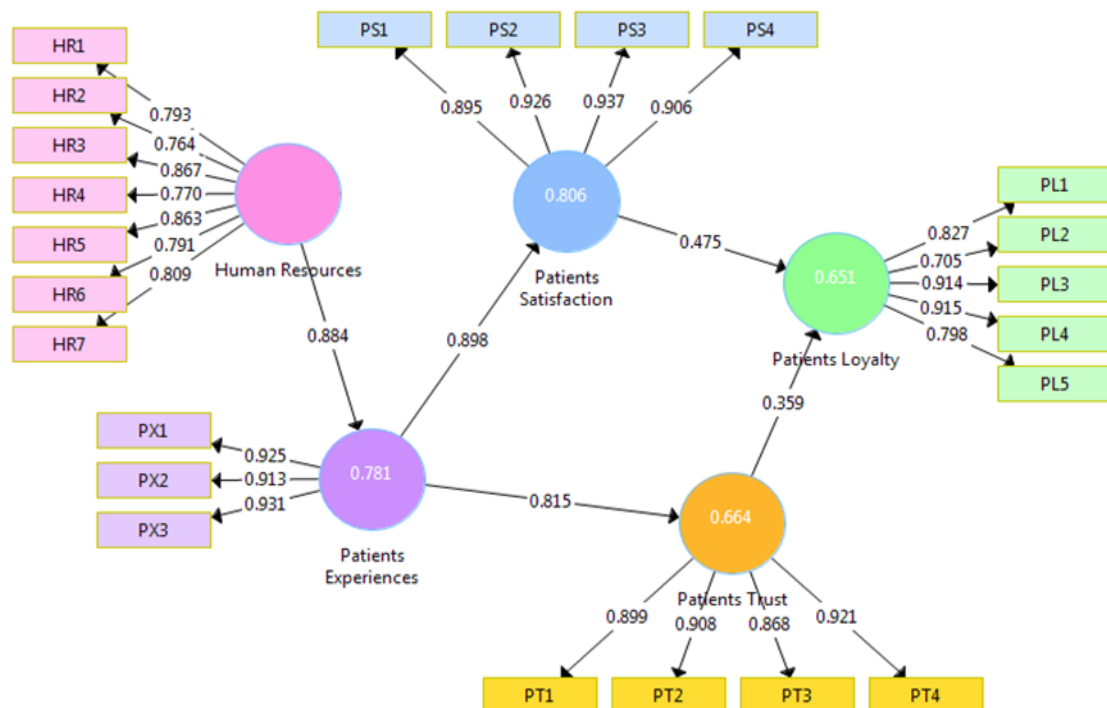


TABLE 4: DISCRIMINANT VALIDITY

Constructs	Human Resources	Patients Experiences	Patients Loyalty	Patients Satisfaction	Patients Trust
<b>Human Resources (Patients Relationship Management)</b>	<b>0.809</b>				
<b>Patients Experiences</b>	0.884	<b>0.923</b>			
<b>Patients Loyalty</b>	0.719	0.742	<b>0.836</b>		
<b>Patients Satisfaction</b>	0.858	0.898	0.787	<b>0.916</b>	
<b>Patients Trust</b>	0.799	0.815	0.772	0.870	<b>0.899</b>

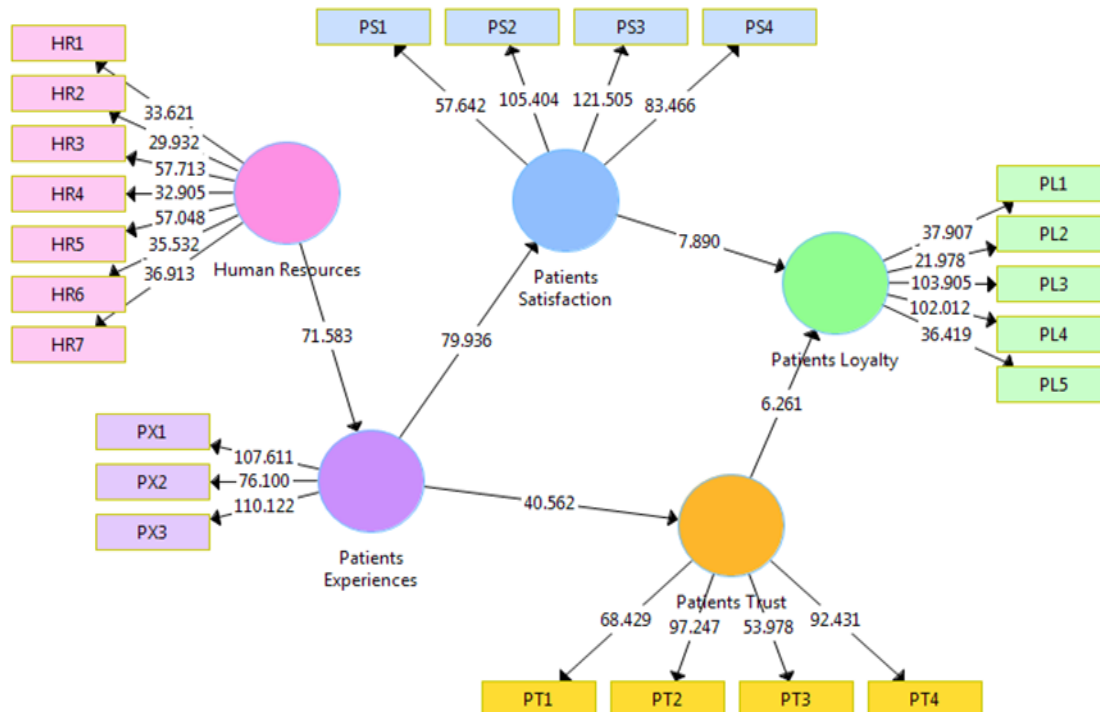
Source: Authors own work.

Notes: Figures in bold represents Square Root of Average Variance Extracted (AVE) and signifies discriminant validity. Other figures are correlation coefficients

TABLE 5: MODEL FIT

	Saturated Model	Estimated Model
<b>SRMR</b>	0.053	0.068
<b>d_ ULS</b>	0.784	1.275
<b>d_ G</b>	0.529	0.630
<b>Chi-Square</b>	1176.834	1291.308
<b>NFI</b>	0.875	0.863

FIGURE 4: STRUCTURAL MODEL



**TABLE 6: HYPOTHESES TESTING RESULTS OF THE STRUCTURAL MODEL**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values	Supported
H1: Human resources has no significant impact on the patients' experience.	0.884	0.884	0.012	71.583	0.000	No
H2: Patients' experience has no significant impact on the patients' satisfaction.	0.898	0.898	0.011	79.936	0.000	No
H3: Patients' experience has no significant impact on the patients' trust.	0.815	0.815	0.020	40.562	0.000	No
H4: Patients' satisfaction has no significant impact on the patients' loyalty.	0.475	0.474	0.060	7.890	0.000	No
H5: Patients' trust has no significant impact on the patients' loyalty.	0.359	0.361	0.057	6.261	0.000	No

Source: Authors own work

**TABLE 7: EFFECTS OF VARIOUS CONSTRUCTS CONSIDERING PARAMETERS SUCH AS STANDARDIZED DIRECT, INDIRECT, AND TOTAL EFFECTS**

Dependent Variables		Independent Variables↓			
↓		Human Resources (Patients Relationship Management)	Patients Experiences	Patients Satisfaction	Patients Trust
Patients Experiences	DE	0.884			
	IE	-			
	<b>TE</b>	<b>0.884</b>			
Patients Satisfaction	DE	-	0.898		
	IE	0.793	-		
	<b>TE</b>	<b>0.793</b>	<b>0.898</b>		
Patients Trust	DE	-	0.815		
	IE	0.720	-		
	<b>TE</b>	<b>0.720</b>	<b>0.815</b>		
Patients Loyalty	DE	-	-	0.475	0.359
	IE	0.635	0.719	-	-
	<b>TE</b>	<b>0.635</b>	<b>0.719</b>	<b>0.475</b>	<b>0.359</b>

Source: Authors own work.

Notes: DE (Direct Effects), IE (Indirect Effects), and TE (Total Effects)

Table 5 shows model fit values. A lower SRMR value indicates a better model fit, as it means that the observed covariance matrix is better approximated by the model-implied covariance matrix. The cut off of 0.08 for the SRMR value as suggested by Hu and Bentler (1999) is commonly used in the literature as a guideline for a good model fit. [26]

### ASSESSMENT OF STRUCTURAL MODEL

The present study used bootstrapped SEM estimates to calculate p-values for their study's hypotheses. The authors performed 5000 bootstraps, which means they resampled their data 5000 times and calculated the SEM for each bootstrap sample. A p-value less than 0.05 (or a chosen significance level) would suggest that the results are statistically significant and not due to chance.

On analyzing the impact of various constructs (Table 6), the study highlighted those human resources (Patients Relationship Management) strongly impacted patients' experiences strongly ( $\beta = 0.884$ ). The indirect impact of human resources on patients' satisfaction, trust, and loyalty was also strong, with values of ( $\beta = 0.793$ ), ( $\beta = 0.720$ ) and ( $\beta = 0.635$ ) respectively. The impact of patients' experiences on their satisfaction was also significant ( $\beta = 0.898$ ). Their personal experiences had the greatest impact on loyalty ( $\beta = 0.719$ ), indicating that they realized they could seek treatment at other hospitals as well. Patients' satisfaction had a greater impact on loyalty ( $\beta = 0.475$ ) as compared to patients' trust ( $\beta = 0.359$ ).

### CONCLUSIONS AND RECOMMENDATIONS

The research findings indicate that the COVID-19 pandemic has had a significant impact on patient loyalty towards the medical system. Patients have lost faith in the healthcare system due to the unavailability of necessary medical resources, the overpricing of medications and medical products, the black marketing of life-saving drugs, and delays in resolving insurance claims. These issues have led to patient dissatisfaction and distrust, which has negatively impacted their loyalty towards the medical system. The research also highlights that patients' expectations of the medical system have changed due to the pandemic. Patients not only demand the best medical treatment but also expect well-dressed and well-groomed healthcare staff who are courteous and professional. Patients also seek fast service and want to feel secure in their medical care. They prefer hospitals with high levels of interaction among personnel and want their issues

addressed in an open and real manner. These factors, such as human resources and patient experience, have a significant impact on customer satisfaction and trust, which ultimately affect patient loyalty towards the medical system.

The COVID-19 pandemic has further emphasized the need for a strong and responsive healthcare system. The pandemic showed how important it is for the healthcare industry to manage its human resources well. Therefore, the following recommendations are made:

1. Financial support and packages for patients: Governments and hospitals (private and public) should provide financial support and packages to both COVID and general patients at all levels. This will reduce the financial burden on patients and ensure they receive timely and appropriate healthcare.
2. Short turn-around time (TAT) for claim settlements: The Insurance Regulatory Development Authority of India (IRDA) should keep a close eye on claim settlements with a short turn-around time.
3. Patient satisfaction: Patient satisfaction is critical to the success of the healthcare sector. Hospitals need to understand patient behavior and provide high-quality service to attract and retain patients. This will help hospitals win patients' confidence, which ultimately guarantees the hospital's success.
4. Efficiency and effectiveness of human resources: The success of the healthcare sector depends solely on the efficiency and effectiveness of human resources. Hospitals need to have a well-equipped human resource system that can handle patients in an efficient and effective manner. This will not only create new patients but also help retain existing ones and ensure maximum market share and profit.

The healthcare sector must prioritize patient satisfaction and efficient human resource management to provide timely and appropriate healthcare services. Governments, hospitals, and the IRDA should work together to provide financial support, reduce the financial burden on patients, and ensure timely claim settlements. Overall, the research suggests that the COVID-19 pandemic has led to a paradigm shift in patient loyalty towards the medical system. Patients are now more aware of the importance of high-quality medical care and expect a more human-centred approach from the medical staff. The medical system will need to address these expectations to rebuild patient trust and loyalty. To rebuild patient trust and loyalty,



healthcare providers will need to invest in patient-centred care models that prioritize patient experience and satisfaction. This may involve rethinking traditional healthcare delivery models, such as telemedicine and virtual care, to provide more convenient and accessible care.

Additionally, healthcare providers should prioritize transparency and open communication with patients, including providing clear information about treatment options, costs, and potential risks and benefits. This will help patients feel more informed and involved in their own care.

### LIMITATIONS AND FUTURE RESEARCH

It is important to acknowledge the limitations of any study to ensure that the results are not overgeneralized or misinterpreted. The limitations of this present research work highlight some of the potential areas for improvement in future studies on healthcare marketing. First, there may be other factors beyond patient satisfaction and trust that impact patient loyalty. Future research could consider exploring additional factors that could influence patients' decisions to stay loyal to a particular healthcare provider. Second, as the study's data was collected over a specific period (from December 2020 to June 2021), it may not reflect the current situation accurately. Healthcare marketing strategies are subject to change over time, and new trends may emerge that could impact patient loyalty. Thus, it would be important to replicate the study with updated data to evaluate any potential changes in the findings. Third, the study was limited to patients in a particular region (Bhopal or nearby areas of Bhopal, M.P., India), which may limit the generalizability of the results. Future research could aim to sample more diverse populations to ensure that the findings are representative of a broader patient population. Lastly, the study relied on a self-administered questionnaire, which may have limitations in terms of data collection. A focus group interview could provide more in-depth insights into patients' experiences and perceptions. Therefore, researchers may consider using a mixed-method approach to collect both quantitative and qualitative data to obtain a more comprehensive understanding of patients' loyalty to healthcare providers.

### AUTHORSHIP

Both the authors Dr. Amit Kumar Nag and Dr. Bhumiphat Gilitwala have contributed equally in this research paper.

### ACKNOWLEDGEMENTS

We take this opportunity to thank Dr. Fr. John P J, Principal, The Bhopal School of Social Sciences and Dr. Kittiporn P, Dean, Graduate Schools, Assumption University of Thailand, for providing platform to write this research paper.

### CONFLICTS OF INTEREST

This is to certify that that the present research work titled "An Empirical Study of Paradigm Shift in Patients Loyalty Towards Hospitals in Wake of Covid-19 Pandemic" is an original piece of research work which we have undertaken for APJHM. The contents of this research article are purely based on our interpretation of primary data. Neither the contents of the paper nor any other matter related to the manuscript has any conflict of interest.

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