

Patient Trust and Its Impact on Patient Satisfaction and Loyalty

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Abstract

The condition of public health care system in Jordan become disappointing due to many reasons some of which included regional political burdens, lack of vision and guided growth, and budgetary constraints, most importantly, it functions without governance and witnessed a considerable turnover, and needs cooperation and support in providing better services to ensure that patients are satisfied and loyal. This study focuses on concerns of patient loyalty in the industry of health care, specifically from the standpoint of Jordanian public hospitals. The research tests the relationship between patient trust, patient satisfaction, and patient loyalty at public hospitals in Jordan. The survey questionnaire was gathered from 400 patients. To obtain the findings and to analyse the hypotheses, the study used partial least squares structural equation modelling (PLS-SEM). The findings indicate that patient trust has a positive direct effect on patient loyalty, and patient satisfaction mediated the relationship between patient trust and patient loyalty. There is limited research addressing these factors in Jordanian public hospitals. This study fills a gap in the existing literature and how trust within the Jordanian culture can help inform healthcare practices and policies. Also, the sample of the study consists of patients visiting public hospitals while other studies focus on outpatient clinics, and the existing literature on healthcare in Jordan has mostly focused on the perspectives of healthcare providers rather than patients. The survey results will aid public hospital administrators in developing effective strategies and will serve as a foundation for further research into patient loyalty. The findings will encourage hospital executives to pay attention to the elements that influence patient trust, patient satisfaction, and patient loyalty to sustain patient loyalty to medical facilities in the hospital.

Keywords: Patients Trust, Patients Loyalty, Patients Satisfaction, Public Hospital.

1. Introduction

The demand for improved and better healthcare service quality has increased, putting pressure on service providers and making it a difficult task for hospital administrators, government policymakers of the government, and therapeutic specialists to meet the needs of patients, thereby increasing satisfaction and loyalty in the developing health sector [1]. In Jordan, the government owns and highly subsidizes the public healthcare sector, but the quality of care, personnel, and facilities are far from satisfactory for many reasons some of which included regional political burdens, lack of vision and guided growth, and budgetary constraints [2, 3].

Most importantly, it functions without governance: no clinical pathways, no clinical audits, no accountability, and no measurement of health care outcomes, quality of life, near misses, medical errors, misdiagnosis, medication error, hospital infections, and patient experience among others and this vacuum of real data masks the outcomes; the costs incurred both financially and at a humanitarian level, and the specific areas of improvement [4].

The trust crisis is a widespread issue today. The lack of trust between patients, doctors, and government officials is especially concerning [5]. The belief that doctors are equipped with the knowledge and abilities required for diagnosis and treatment is defined as patient trust, can prioritize patients' interests, and thus accepting medical services with confidence [6]. A doctor-with-patient relationship is a form of engagement with a customer, and a good customer relationship is necessary to compete with customers [7]. Patients' medical care is founded on the

exchange of trust in health care, which is represented in the patient's readiness to consume the attitudinal loyalty of a hospital on a regular basis and real behavioral loyalty [8]. It can assist the hospital by cutting costs, both financially and socially, it is development and maintenance expenses in order to attract new customers, as well as giving health benefits to the patients themselves and reducing customer churn. Loyal clients are also inclined to pay more, more likely to purchase, and resistant to conversion [9].

According to the Jordanian Ministry of Health, the number of private hospitals has risen from 56 in 2015 to 117 in 2021[10]. This has had a significant influence on public hospitals [11]. Therefore, this study investigates what factors influence patients' loyalty and decisions to go to public hospitals rather than private ones, because of which public hospitals can keep their current patients while also attracting new ones.

Furthermore, since 38% of all hospital beds are controlled by the Ministry of Health, enhancing the quality of care delivered in public hospitals is a demand made by hospital administration, medical professionals, and patients. Examining patient trust with the impact of perceived healthcare quality at government hospitals on patient satisfaction and loyalty is needed. With this context in mind, the study's aims are to examine the impact of patient trust on patient satisfaction and loyalty at Jordanian public hospitals.

2. Literature Review

A. Patient Loyalty (PL)

In service sectors, loyalty is a crucial idea [12]. A loyal customer service provider will gain many significant advantages such as market share growth, lower marketing costs for new customers, and increased revenue and profits [9]. A service provider should, therefore, effectively manage its customer loyalty. The loyalty concept refers to a good attitude, a repurchasing behavior as well as a long-term strategy engagement by the consumer to a particular product, service, or company [13]. Loyalty is a person's positive attitude, making consistent repeat purchases, and committing to a brand, store, or supplier. [14]. Patient loyalty has been used as a definition of consumer loyalty to a healthcare provider [9]. A loyal patient is one who consistently uses the services of a healthcare organization, is dedicated to that organization, and has faith in the doctor-patient relationship. [7]. For healthcare providers, the scenario might be regarded as patient loyalty, which is quite significant, that the patient continues the hospital relationship and recommends hospital services to potential patients [8].

B. Patient Trust (PT)

The concept of trust has been identified as a critical component of relationship marketing philosophy. Trust is required to build customer-firm connections, according to [20]. Trust is becoming increasingly important to research since it plays such an important role in interpersonal and commercial relationships. Thus, "patient trust refers to patients' conviction that the healthcare service provider would act as expected" [15]. The confidence that doctors will act in the patient's best interests and offer proper therapy and medical care is referred to as patient trust [16]. [17] Assume that trust includes both cognitive and emotional components and that it is socially oriented. Patient trust is a critical component of doctor-patient interaction [18]. In terms of interpersonal interactions, the building of trust in the connection between a patient and a nurse is critical. It's a requirement for getting affirmative results from patient-nurse dialogue during the caregiving process [6]. In order to achieve excellent patient outcomes, it is vital to have a caring patient-nurse relationship built on trust, nurses must be dependable, knowledgeable, experienced, and have a genuine desire to help patients in order to establish and maintain a trustworthy nurse-patient relationship [9].

C. Patient Satisfaction (PS)

Satisfaction is a client's emotional reaction in assessing the differences between expectations of services and the association of real performance. This combination of performance is achieved by physical business transactions and the production of goods and services [11]. Customer satisfaction is intended as a deceptive feeling or personal pleasure that is the result of a product's real performance compared to one's expectations [12]. Satisfaction, therefore, stems from consumer judgments as to the characteristics of goods and services or whether the goods and services can provide a level of consumer satisfaction. In fact, satisfaction is the result of customer judgment on anxiety or service that can adequately fulfill his expectations [13]. Patient satisfaction refers to patients being pleased with the healthcare services they receive, as satisfied patients are more likely to adhere to treatment plans, have better health outcomes, and recommend healthcare providers to others [19]. Patient satisfaction can be

influenced by a variety of factors, including the quality of medical care, the behavior of healthcare providers, the accessibility of healthcare services, and the overall healthcare experience [14]. Measuring and improving patient satisfaction is an important goal for healthcare organizations and providers, as it can lead to better patient outcomes and improved healthcare outcomes [11].

3. Hypotheses Development

A. Patient Trust and Patient Loyalty

The early study on Patients' interpersonal trust in their doctors was the subject of the study on healthcare trust, which refers to the belief that healthcare providers will act in the best interest of patients and provide high-quality care [20]. Patient loyalty, on the other hand, refers to patients' commitment to continuing to use the services of a particular healthcare provider or organization [21]. Patients who believe that hospital employees are trustworthy and honest are more likely to maintain a long-term relationship with the facility and be more willing to return. When patients are more willing to recommend the hospital to their friends and relatives, they are more likely to return [12]. Research has shown that patient trust is a key driver of patient loyalty [15]. When patients trust their healthcare providers, they are more likely to continue to seek care from them, follow their advice, and recommend them to others [5]. Moreover, patient loyalty can also influence patient trust. Patients who have had positive experiences with a healthcare provider or organization are more likely to trust them, and this trust can lead to continued loyalty [22, 23]. Therefore, healthcare providers and organizations should focus on building trust with their patients by delivering high-quality care, building strong relationships, and fostering open communication. By doing so, they can increase patient loyalty, which in turn can lead to improved patient outcomes and a more successful healthcare practice [24]. Thus, this study hypothesized the following:

H1: patient trust has a positive effect on patient loyalty at Jordanian public hospitals.

B. Patient Trust and Patient Satisfaction

Gaining customer pleasure requires building trust because it reduces perceived risk and consumer uncertainty enables customers to have faith in their expectations. [22]. Customer satisfaction has been shown to have a positive effect on trust in certain research, while high trust perceptions contribute to customer satisfaction in others [25, 26]. In prior studies, trust and satisfaction were found to be correlated with each other. In the context of hospitality, academic literature supports the above relationship [27, 22]. Prior studies also touched upon the different sources of trust that have been proposed to positively influence the quality of experience with the firm [19]. Case in point, an individual may develop trust in an organization on the basis of positive word-of-mouth, advertising, and other communication channels, and this will positively affect his judgment of the organization, upon experiencing their services [13]. Hence, trust in the organization will lead to attitude towards the organization and increased satisfaction with its services strongly claimed that building trust is the first step in generating really happy and devoted clients. [28]. Thus, this study hypothesized the following:

H2: Trust has a positive effect on patient satisfaction at Jordanian public hospitals.

C. Patient Satisfaction and Patient Loyalty

Patient satisfaction is a significant predictor of patient loyalty, according to the satisfaction theory. The PL is longer when the PS is higher. Patient loyalty refers to those who have a favorable opinion of healthcare services [22]. Because a pleased patient will eventually become a devoted consumer, Patient satisfaction reflects organizational success metrics [26]. A study by [29] in six public and private institutions in Bangladesh, found that patient satisfaction had a beneficial impact on patient loyalty in the medical profession. Patient satisfaction and loyalty can be predicted by a pleasant medical setting, effective communication, privacy protection, and security [9]. Increased patient loyalty can help medical institutions build a positive to improve the hospital's value and reputation through word-of-mouth communication. Numerous studies have found that Customer happiness and satisfaction is a crucial factor in determining loyalty and that increasing customer satisfaction is one of the most Customer loyalty can be cultivated in a variety of ways [30, 22]. Thus, this study hypothesized the following:

H3: Patient satisfaction has a positive effect on patient loyalty at Jordanian public hospitals.

D. Mediating Role of Patient Satisfaction between Patient Trust and Patient Loyalty

Research has shown that in the healthcare industry, patient satisfaction can operate as a mediator between patient loyalty and trust. [22, 31]. When patients trust their healthcare providers, they are more likely to be satisfied with

the care they receive. This satisfaction, in turn, can lead to increased patient loyalty [32]. The relationship between patient trust and patient satisfaction can be explained by the fact that when patients trust their healthcare providers, they feel more comfortable communicating their needs and concerns, which can lead to better care and ultimately, greater satisfaction [13]. Other elements that affect patient satisfaction include the standard of medical care, the conduct of healthcare professionals, the availability of healthcare services, and the entire healthcare experience [6]. In turn, patient satisfaction can influence patient loyalty by creating a positive perception of the healthcare provider or organization [24]. Satisfied patients are more likely to continue to use the services of a particular healthcare provider or organization, and to recommend them to others [12]. Therefore, healthcare providers and organizations should focus on building trust with their patients, and providing high-quality care that leads to patient satisfaction. By doing so, they can increase patient loyalty, which can lead to improved patient outcomes and more successful healthcare practice. Thus, this study hypothesized the following:

H4: Patient satisfaction mediates the relationship between patient trust and patient loyalty at Jordanian public hospitals.

4. Research Methodology

As instruments for data collection, the current study used questionnaires that were adapted from earlier studies and given to participants using the convenience sample method. Patients who had visited public hospitals in Jordan made up the population of this study. The lowest number of samples depending on the complexity of the model was chosen as the sample size in accordance with the power of analysis. Following Green's (1991) table and using two predictors from the research framework at medium effect size. For this study, a minimum sample size of 74 patients was established. On the other hand, the sample will be more homogeneous the larger it is, the higher the rate of confidence, the smaller the variance error, and the bigger the representation of results. Thus, a total of 413 questionnaires were distributed to hospital patients. Thirteen (13) questionnaires were excluded due to missing data and the remaining 400 questionnaires were used for analysis. Measurements of [33] were used to measure patient loyalty with Seven (7) items. Measurement of [34] was used to measure Trust in five (5) items. Measurements of [35] were used to measure patient satisfaction with five (5) items. The 5-point Likert scale was used to measure all variables, which expresses the extent of the respondent's agreement with the questionnaire ranging from 1 "strongly disagree" to 5 "strongly agree." A panel of referees, consisting of academic and professional specialists with extensive professional backgrounds, verified the instrument.

5. Data Analysis And Results

To analyze data, Smart PLS version 3.3.2 was employed in this investigation. The results of the measurement model evaluation, including path coefficients, factor loading, and coefficient of determination, are shown in Figure 2. All the goods had a loading greater than 0.70. As a result, all the objects have been kept [36].

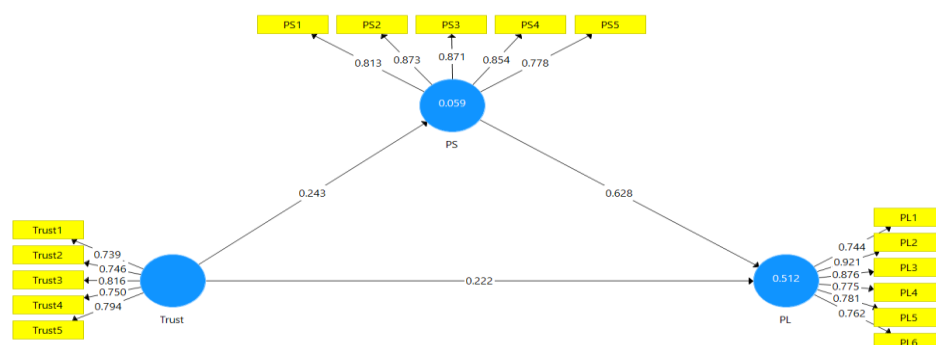


Figure 2: Results of PLS algorithm

The composite reliability test, Cronbach's alpha, and average variance extracted were used to confirm convergent validity. The convergent validity test's findings, which are shown in Table 1, showed that Cronbach's alpha and composite reliability to all constructs were greater than the predetermined threshold values of 0.70 and above [36].

All constructs had values greater than the specified threshold value of 0.50 in terms of average variance extracted by [36].

Table 1. Convergent validity

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Patient Trust	0.831	0.879	0.593
Patient Satisfaction	0.894	0.922	0.703
Patient Loyalty	0.896	0.920	0.660

The Heterotrait-Monotrait Ratio (HTMT) test was used to ensure discriminant validity. Table 2 reveals that the HTMT values for each construct were all less than 0.85 and ranged from 0.265 to 0.744 [36].

Table 2. Discriminant validity by HTMT

Construct	Trust	Patient Satisfaction	Patient Loyalty
Patient Trust			
Patient Satisfaction	0.265		
Patient Loyalty	0.407	0.744	

Using 5000 bootstrap samples, this study uses PLS bootstrapping techniques built into Smart PLS version 3.3.2 to test its hypotheses. The path coefficient, t-value, p-value, and confidence interval for testing hypotheses are shown in Table 3.

Table 3. Hypotheses testing

No.	Hypotheses	Path Coefficient	T-Value	P-Value	Confidence Interval		Decision
					95% LL	95% UL	
H1	PT→PL	0.222	2.683	0.007	0.049	0.373	Supported
H2	PT→PS	0.243	2.780	0.005	0.023	0.381	Supported
H3	PS→PL	0.628	8.031	0.000	0.455	0.765	Supported

Trust has a direct, positive impact on patient loyalty, as shown in Table 3 (Path Coefficient = 0.222; T-Value = 2.683; P-Value = 0.007; 95% LL= 0.049; 95% UL= 0.373), supporting the hypothesis. The hypothesis H2 was validated because, in addition, trust also has a positive direct influence on patient satisfaction (Path Coefficient = 0.243; T-Value = 2.780; P-Value = 0.005; 95% LL= 0.023; 95% UL= 0.381). Moreover, patient loyalty is positively correlated with patient satisfaction (Path Coefficient = 0.628; T-Value = 8.031; P-Value = 0.000; 95% LL= 0.455; 95% UL= 0.765), supporting H3. Considering the mediating role of patient satisfaction, as indicated in Table 4 (Indirect Effect = 0.153; T-Value = 2.531; P-Value = 0.011; 95% LL= 0.020; 95% UL= 0.255), H4 was supported. Patient satisfaction mediated the link between trust and patient loyalty.

Table 4: Testing the mediating effect of patient satisfaction.

No.	Hypothesis	Indirect Effect	T-Value	P-value	Confidence Interval		Decision
					95% LL	95% UL	
H4	PT→PS→PL	0.153	2.531	0.011	0.020	0.255	Supported

6. Discussion

The market for medical services is steadily opening up, as well as medical facilities are experiencing increasingly harsh competition on the market as Jordan's medical and health system reform continues to deepen. Only by supplying adequate patients' medical services, earning patients' trust in a medical service market that is competitive, and collecting huge numbers of devoted patients can help public hospitals get on the right track for

long-term growth. The current research looks into whether patients' trust and patients' satisfaction influence patients' loyalty. This contributes to the formation of loyalty in public hospitals. This investigation proved that the effect was beneficial between patients' trust, patients' satisfaction and patients' loyalty (H1, H2), the positive impact of patients' satisfaction on patients' loyalty (H3), and patients' satisfaction mediate the relation between patients' trust and patients' loyalty (H4).

First, we see that it is a positive number based on the results, patients' trust is in a positive way to patients' loyalty, and this suggests that patients' trust has a statistically significant effect on patients' loyalty. The findings demonstrate conclusively that patient loyalty attachment to the hospital grows and deepens as their participation in the hospital increases. Patients develop strong and profound relationships with the hospital once they have gained their trust, as evidenced by their comprehension, affection, as well as a behavioral reliance on it. Patients who believe the hospital and its employees are honest and trustworthy are more likely to keep in touch with them, indicating a greater inclination to return [19]. These findings are in line with prior study, which revealed that patients' trust has become a crucial prerequisite for patients' loyalty, and that the only way to enhance loyalty is to gain customer trust [6, 22]. The likely explanation is that the hospital has a solid reputation among patients and has helped them feel at ease while seeing physicians because it has a high level of medical technology, a high level of medical expertise, and advanced equipment.

The second finding of this study is that patient trust and patient satisfaction have a substantial positive association. It demonstrates that the higher the patient's trust, the higher the patient's satisfaction. Patient trust has a beneficial effect on patient satisfaction, and in medical services, patients' trust is the determinant of patient satisfaction. The medical setting, ancillary services, and medical services all contributed to the revised patient satisfaction scale used in this study.

Patients' satisfaction has a beneficial impact on patients' loyalty, according to the third finding. The possibility is that each hospital has various specialties due to the high level of specialization in the medical business, as a result, patients will evaluate multiple hospitals when making their decision, and will ultimately choose the hospital that is best at treating their disease, and will become loyal hospital customers. The sense of satisfied consumers emerges when customers' perceptions of service performance exceed their expectations [29]. Patient satisfaction with the service interaction process, quality health care, cost, and price decrease tend to increase patient loyalty. If a patient is content with hospital services, the patient's trust and belief that the hospital will continue to provide them with excellent care will grow, and the patient will continue to use the hospital's services in the future.

Finally, patients' satisfaction acts as a mediator between patients' trust and patients' loyalty. The healthcare industry requires a high level of trust. The doctor-patient connection is built on trust, and the most important factor in the relationship is the patient's faith in the physician. It is critical for public hospitals to develop "trust" among patients, hospitals, and medical personnel, especially doctors. Doctors must be trustworthy and provide the highest quality of care in order to win their patients' trust. Patients should be able to trust public hospitals if they provide services as promoted on television, in periodicals, and on the Internet.

7. Conclusion

The current study investigated the relationship between patient trust and patient loyalty mediated by patient satisfaction in Jordanian public hospitals. The study used PLS-SEM path coefficients to test the research hypotheses. The results of the analysis confirmed that patient trust had a positive and significant impact on patient satisfaction and patient loyalty. Also, the result showed that patient satisfaction had a positive and significant impact on patient loyalty. The final result showed that patient satisfaction played a mediating role in the relationship between patient trust and patient loyalty in public hospitals. According to the previous literature, satisfaction was found to act as a mediator in a number of previous studies. In [32] customer satisfaction mediates the relationship between trust and loyalty. Similarly, [34] examined the role of customer satisfaction as a mediator and showed a significant relationship between satisfaction, trust, and loyalty. The result of this study showed agreed with other studies in that satisfaction was found to act as a mediator. In order to create highly satisfied and loyal customers, especially in the service sector, the customers must first develop trust. The result of the study is in line with studies that conceptualized that trust precedes satisfaction after which loyalty can be enhanced [28, 31].

Finally, the current study made several contributions in terms of theoretical and practical. The results of these endeavours provide insight into hospitals in Jordan from the perspective of patient trust in patient satisfaction aspects. By using the findings reported in this study, managers may be able to develop the processes to enhance their hospital's satisfaction and loyalty and thereby guarantee their hospital's continued existence in what is a highly competitive marketplace. The study attempted to provide hospitals in Jordan with practical advice on how to implement service quality on patient loyalty by activating each of them separately. Thus, hospital managers should recognize, first, that to carry out service quality and patient trust successfully they need to change the organizational structure, strategy, and business approach of their organization. They must also pay more attention to their employees through the provision of training, and motivation, to introduce excellent services to the patients.

8. Limitations And Future Studies

Even though this research yielded some results, it still has significant limitations that must be addressed. Although this study solely looks at public hospitals, there are notable variances in the characteristics that influence patients' loyalty to different types of hospitals. Future research could replicate these findings in other sectors of the healthcare business, such as private or community hospitals, to improve the data's generalizability.

The findings of this study were limited to public hospitals in Jordan. Another drawback is that the concept model is based on assumptions utilized is a rather straightforward model, and we have not considered the impact of demographic characteristics like the distinction between inpatients and outpatients. Future studies could focus on using inpatients or/and as moderator variables, inpatients and outpatients to uncover disparities between the two in healthcare institutions. Finally, customer loyalty is a time-axis variable that needs long-term monitoring to properly assess patterns and reasons for customer loyalty. As a result, future research expects to identify a number of hospitals as monitoring stations for regular customer loyalty monitoring, reflecting the dynamic shifting concept of customer loyalty.

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