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Examining the nexus of relationship marketing and patient loyalty: The mediation and moderation analysis

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ABSTRACT

Studies on association amongst relationship marketing and loyalty of patients are still trying to establish its presence in the healthcare management. Also, the variables impacting this association are still in exploratory phases. The research is being carried out for determining the nature of that relationship and also examining mediating and moderating effect of different variables. Data collected through various Scopus and other online databases have been used for this study. Literature review has been carried out by dividing it into three parts, relationship marketing, patient loyalty and variables like patient satisfaction, age, gender, family size, health insurance, etc. Primary data was collected from 938 patients of private healthcare providers by administering questionnaire online as well as in person. PLS-SEM was applied to analyze the data, which was used after testing the instrument for reliability and validity. After Covid-19 pandemic everyone felt need of a good health insurance but in actual many people were not having a simple health insurance cover also. Hospitals will have a major role in promoting health insurance and in turn providing quality service, but their role is currently limited to processing of health insurance and nothing more. Model from the study will help understand organizations the strength and direction of relationship between patient loyalty and efforts taken for marketing along with impact of moderating and mediating variable on the same. Future research can look into the other variables that will moderate or mediate the relationship in turn will help not only healthcare organizations but insurance companies also to develop product or service according to requirement of relationship. Research focuses on impact of moderating effect of health insurance on association amongst marketing efforts taken for relationship marketing and loyalty of patients through patient satisfactions' mediation which was not studied before this. The study aims to test the conceptual model of moderating impact of health insurance on association between relationship marketing, patient loyalty and patient satisfaction using SEM.

Keywords: relationship marketing; patient satisfaction; patient loyalty; healthcare management

1. Introduction

The healthcare industry in India is one of the fastest growing sectors and is estimated to reach $280 billion between 2015 and 2020 with a CAGR of 22.87%[1]. Big boom in healthcare in India presents many opportunities for the growing healthcare industry. The health services in Indian are more economical; which

is also one of the reasons for the rise in India's medical tourism, drawing patients from various countries of the world. This flow in patients from across the world has increased the responsibility of private hospitals to provide international quality service and grow a long term relationship with customers.

The relationship marketing thus has gained a lot of attention in recent times from healthcare service providers. Understanding the bond between relationships marketing efforts and loyalty of patients is also important for clinicians and researchers. Patients may be satisfied due to relationship marketing efforts taken by healthcare organizations, but it cannot be the only reason for loyalty of patients[2]. Brand preferences, willingness to pay more and product loyalty are important factors in customer preferences, so it can be said that if loyalty is encouraged, it will ensure a better understanding of customer choice[3].

In this study researchers tried to identify the moderator variables that will impact the association between relationship marketing and patient loyalty.

Efforts toward making recommendations, repeat visits, and word-of-mouth can be considered loyalty. Verbal communication, which involves verbal, person-to-person communication between the recipient and the communicator, has proven to be the most effective of future behaviors[4].

Having health insurance is a financial protection measure in case a person gets sick, because it reduces the upfront cost of medical treatment, thus reducing the risk of falling into poverty[5]. Patients complain about receiving negative feedback from others about their hospitals, but they still seek treatment from these hospitals due to dependency on health insurance provider's tie-ups with specific private hospitals[6]. These challenges are becoming prominent after Covid pandemic for private hospitals, so the study focuses on understanding association between relationship marketing efforts and patient loyalty and what will be the nature of that association when level of patient satisfaction varies. Also does having health insurance make impact on the above association is what study emphasized to examine.

2. Literature review

Long-term relationships ensure patient loyalty to the hospital and enable the hospital to have a competitive advantage. It has been determined that especially when they increase patient satisfaction through relationship marketing efforts, there will be gain of trust in the hospital[7]. To examine the association between relationship marketing, patient satisfaction and patient loyalty become important for healthcare system as a whole, also to observe effect of having health insurance on the above said association seems next step towards identifying factors that are important for creating and designing marketing plans by healthcare providers. Keeping that in mind variables like relationship marketing, patient satisfaction, patient loyalty and health insurance are understood with help of existing literature as below.

2.1. Patient loyalty

Customer loyalty is surety of long term profits from customers. "Customer loyalty is defined as strong commitment to repurchase or re-patronize a preferred product or service consistently in the future and a resistance in switching brand, although having powerful situational influences and marketing efforts"[8]. Also, it is believed that true brand loyalty exists only when three phases of decision making: belief, affect and intention are the phases of decision making which when pointing towards a single brand preference, it is perceived as existence of brand loyalty[9]. Affective commitment and satisfaction are the drivers of customer retention[10] at the same time assurance is the major driver of customer loyalty[11]. In service industry, this affective commitment is affected by many service quality dimensions. The four major perceived service quality dimensions are doctor concern, staff's concern, convenience of care process, and tangibles which have impact on corporate image, customer satisfaction and loyalty[12]. When customers become loyal,

businesses run successfully. Loyal customers provide repetitive business and they rarely go to competitors for best deals or offers[13]. Patients are loyal if their actual experience is better than their expectations, but if there is a difference they switch to another hospital[14].

There are two types of approaches towards loyalty as attitudinal and behavioural[15]. Recommending to others, creating trust etc. constitute attitudinal loyalty and a desire to purchase the product or service, not switching to competitors etc. make up behavioral loyalty[16]. Cognitive loyalty is the third dimension appeared from various other studies and which refers to the assumption that truly loyal customers will not consider substitute products when making their next purchasing decision[6]. So, all the three constructs used for determining patient loyalty.

H$_1$. Patient satisfaction positively influences loyalty of patients.

2.2. Relationship marketing

Economics, political science, organizational science, law, sociology and social psychology are few fields on the basis of which relationship marketing concept can be built upon[17]. Relationship marketing can be defined for healthcare sector using constructs like satisfaction, service quality/performance, the level of job satisfaction, trust, communication/interactivity, working conditions, relationship quality, relational contact, affective conflict, commitment, value creation, benevolence, care and concern, recommendation, ethical profile, opportunism, organizational/firm performance, patient behavior, management/administration as depicted in **Table 1**[18]. It is important to understand the principles of relationship marketing like strategy, segments, personas, experience maps, promotional planning, communication touch points, measurement, and optimization for identifying and developing strategies of relationship marketing[19]. Also, the concepts of customer satisfaction, commitment, confidence benefits, and social benefits assist to considerably contribute to relationship marketing outcomes in services[20].

Table 1. RM definitions[21].

Sr. No.	Perspective	Definitions
1	Berry[22]	"Relationship marketing is attracting, maintaining and in multi service organizations-enhancing customer relationships."
2	Morgan and Hunt[23]	"Relationship marketing refers to all marketing activities directed at establishing, developing, and maintaining successful relational exchange in supplier, lateral, buyer, and integral partnerships."
3	Gronroos[24]	"Relationship marketing is about mutually beneficial exchanges and fulfillment of promises by both parties in a series of interactions over the lifetime of their relationship."
4	Evans and Laskin[25]	"Relationship marketing is the process whereby a firm builds long-term alliances with both prospective and current customers so that both seller and buyer work toward a common set of specified goals."
5	Berry[26]	"Relationship marketing allows service providers to become more knowledgeable about the customer's requirements and needs. Knowledge of the customer combined with social rapport built over a series of service encounters facilitate the tailoring or customizing of service to the customer's specifications."
6	Sheth and Parvatiyar[27]	"The willingness and ability of both consumers and marketers to engage in relational marketing will lead to greater marketing productivity, unless either consumers or marketers abuse the mutual interdependence and cooperation."
7	Mollah [28]	"The core function of relationship marketing is to providing high quality product and services, and committed in providing timely, trustworthy information to the customer which result in mutually benefits by remaining loyal to the organization."

The relationship marketing efforts and loyalty of patients have multifaceted relationship. Patient Engagement depends on the power of the healthcare provider's marketing strategy to build and maintain long-term relationships[6].

H2. Relationship marketing efforts influence patients' loyalty to hospitals.

H3. Relationship marketing efforts influence patients' satisfaction.

2.3. Patient satisfaction

The initial expectations patients have about care and front line services provider considered as foremost elements of satisfaction[29]. Customer satisfaction is defined in two different ways as transaction-specific and cumulative. The transaction-specific customer satisfaction is post-choice evaluative judgement on one specific purchase situation whereas cumulative customer satisfaction is an evaluation of total purchase and consumption experience of product or service over period of time[9]. Also, customer satisfaction has been defined from disconfirmation paradigm where it is believed that satisfaction gets altered by expectations and if perceived performance gets better in comparison to expected one, disconfirmation is considered to be positive and lesser the perceived performance than expectations leads to negative disconfirmation[12]. This disconfirmation is nothing but the indicator of level of customer satisfaction. There are two groups of researchers who either believe that there is a positive relationship between customer satisfaction and customer loyalty, or they think that there is no relationship between customer satisfaction and customer loyalty.

Research shows that the five measurements viz., hospitalization, medical services, general services, discharge and responsibility are characteristics of hospital services and each is related to patient satisfaction[30]. Empathy and satisfaction are the two dimensions of service quality that directly affect word of mouth[31]. Good service leads to better satisfaction of patients which has same pattern across dimensions like age, gender etc. but patient satisfaction level is different for different age groups or gender groups[32]. Also, it is believed that in some service sectors; responsiveness, communication and access are more important dimensions of service quality that determine customer satisfaction[33]. Patient satisfaction is affected by income, education, frequency of visits, quality of service, and accreditation of health care service providers[34].

Patient satisfaction has effect on bond between relationships marketing efforts and loyalty of patients. It can be said that patient satisfaction acts as a mediator when it comes to impact of relationship marketing on patient loyalty[7].

H4. Patient satisfaction positively mediates the influence of relationship marketing efforts loyalty to hospitals.

2.4. Health insurance

A moderator is qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable[35].

Health insurance is a useful tool to help people cope with financial stress. Only access to medical services through optimization of healthcare can lead to health benefits. Community health insurance reduces financial stress among outpatients, while private health insurance was found to be a positive predictor of stress finances among sick people in hospitals. Some researchers believe that health insurance can support medical care. The patient's awareness of health insurance policies, insurance plan needs, and the patient's understanding of the cost of insurance will increase patient satisfaction[36].

From moderator variables discussed having health insurance was tested for its effect on bond between relationship marketing efforts and loyalty of patients.

H_5. Having health insurance moderates the impact of relationship marketing efforts on loyalty when mediated by satisfaction level of patients.

3. Material and methods

Sampling population considered for the exploration of information was patients receiving services offered by OPDs of healthcare providers. Convenience sampling technique has been implemented for gathering the required information from outpatients who were visiting the hospitals in Pune city for outpatient services from October 2022 to January 2023. City of Pune was selected for the survey because the population in it is very diverse at the same time private hospitals providing outpatient services are ranging from small scale to multispecialty corporate hospitals. Scale items were developed and used for the study after referring to various scales in existing literature for relationship marketing[6,37], satisfaction level of patients[38] and patient loyalty[16].

Data was collected by handing them physical questionnaire as well as for those who were unable to fill it questions were dictated to them and researcher noted their responses. Questionnaire was then disseminated from which 961 responses were received out of which 938 were used for the study after removing incomplete responses.

In this study, SPSS was used to conduct exploratory factor analysis (EFA). Of the two methods of EFA, principal components analysis and principal axis factoring (overall analysis) were then used. When EFA was used for item reduction with 37 items created from the data, 9 items were removed due to the correlation structure (below 0.3) and item loadings falling below 0.5. The final scale included 11 about relationship marketing, 6 about patient care, and 11 about patient loyalty of total 28 items. KMO's value index, which includes appropriate criteria for business relations, patient satisfaction and patient loyalty, has attained above 0.7, which is acceptable[39].

After EFA data reduction, the reliability of the scale was tested on the final scale consisting of a total of 28 items and three variables. In the context of this study, the feature of reliability is the estimation of the consistency of the scale, and the Cronbach Alpha statistic is suitable for measuring this reliability[40]. After the reliability analysis conducted in SPSS, it was found that the Cronbach Alpha value of all three variables exceeded 0.9, and this value was higher than the recommended value of 0.5[14]. Additionally, the item-total correlation was above the limit value of 0.40[41].

The data were analyzed to test the hypothesis in sequentially but allied phases by means of PLS-SEM i.e., partial least squares-structural equation modeling which will be referred here afterwards as P-SEM[42,43]. Researchers developed the measurement model also known as outer model to define reliability and validity of variables. Secondly, P-SEM has been established via development of inner model. After that another outer model was verified during which the interactions were assessed accordant with theoretic conventions drawn for exploration between latent variables. For examining the construct of hypothesis, inner structural model of latent variables' association was executed. Multiple regressions, PCA, discriminant analysis are some of the analytical tools compiled and instigated for purpose of generalization in process of structural modelling. Power or direction of moderator variables' influence on the association of efforts taken as relationship marketing and loyalty of patients under study has been used by path model exploration using P-SEM. In the study, the mediating variable (patient satisfaction), may make stronger or deteriorate the bond among variables which are pertaining to relationship marketing and loyalty of patients.

The external model was constructed using reliability, convergence, separation, Cronbach's α test, etc. The scale of an association amongst latent variables is investigative, the consistency of an item using standard loading factor through measures of CV. The loadings of the listed elements indicate that all elements have higher loadings in their constructs, between 0.65 and 0.96, and no element is heavier in the constructs for which they are not ready to be tested to confirm their effectiveness in terms of convergent validity. AVE of respective construct if observed superior compared to correlation square of the constructs, it is considered to be complying with criterion of discriminant validity. It is also considered to be attained when latent construct indicators have robust correlation for each construct itself compared to inter-correlation with other constructs. The acceptable value is >0.5[44]. Values greater than 0.6 for composite reliability indicate that the constructs in consideration are reliable. Cronbach's α is often used for evaluation of elements i.e., construct indicators for their consistency. Cronbach's α obtained when α is equal or larger than threshold of 0.5[6].

After the outer model being tested for convergent and discriminant validity, composite reliability, proceeding further to evaluate the inner model. Designing of model (inner) involves the assessment of relationship between the latent variables built on theoretic assumptions derived from the study.

4. Results and discussion

4.1. Moderated mediation of health insurance

Main purpose of the exploration is to study the relationship marketing effect on loyalty, moderating effect of health insurance and how satisfaction of patients plays mediating role with help of path analysis. As shown in **Figure 1**, conceptual model has been developed from the literature review and hypothesis to be tested for moderating effect of health insurance on patient satisfactions' mediation influence on association between relationship marketing and loyalty of patients.
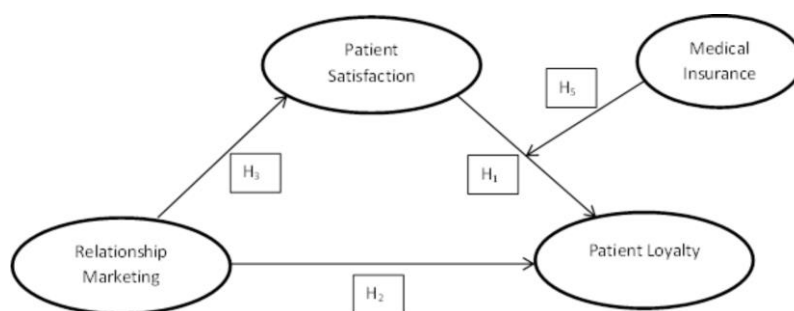

Figure 1. Conceptual model.

4.2. Descriptive statistics

Respondents' details like gender, marital status, occupation, education, monthly income, age, family size, etc. were presented in **Table 2**. Out of 961 respondents, 528 males (54.94%) were the most signified gender in the survey. 581 married participants (60.45%) were with marital status in the survey and 688 respondents selected occupation as salaried people (71.5%). Most signified income group number in the survey was 346 with a monthly income more than Rs. 50,000 (47.5%). In total, 734 respondents with 21–40 yrs. (76.38%) were the maximum represented age group and 604 respondents with 2–4 members (62.85%) have the uppermost family size in the survey. Also, 454 participants with post-graduation degree (47.5%) are with the uppermost qualification in academics along with 298 respondents who have visited the hospital thrice a year (31.0%). While 938 participants have preferred to visit private hospital (29.6) in the survey, 781 participants (81.2%) have a policy with them.

Table 2. Respondent characteristics.

Variable	Categories	Occurrence
Gender	Male	528
	Female	433
	Total	961
Marital status	Married	581
	Unmarried	380
	Total	961
Occupation	Salaried person	688
	Retired person	14
	Self employed	56
	Student	158
	Businessman	45
	Total	961
Age	16–20	55
	21–40	734
	41–60	157
	61 and above	15
	Total	961
Education	Under Graduate	22
	Graduate	353
	Post-Graduation and above	454
	PhD	132
	Total	961
Monthly education	Less than 15000	155
	15,001 to 30,000	210
	30,001 to 45,000	250
	More than 45,000	346
	Total	961
Visit to Hospital	Once in a year	282
	Twice in a year	194
	Thrice in a year	298
	Four times a year	129
	More than four times a year	58
	Total	961
Family size	Less than 2	53
	2 to 4	604
	4 to 6	277
	6 and above	27
	Total	961

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Table 2. (*Continued*).

Variable	Categories	Occurrence
Health insurance availed	Yes	781
	No	180
	Total	961
Type of Hospital	Private	938
	Government	23
	Total	961

4.3. Evaluation of model

PLS algorithm was applied to examine the congruity and reliability of variables in the measurement model assessment process. **Table 3** depicted measurement models' convergent validity. Whenever the factor loading of items is below the threshold 0.60, they are deleted from the items list[45]. The items from the study indicated the factor loadings starting with lowest as 0.633 and highest as 0.939 (**Table 3**) which surpassed the threshold. Each and every variable under consideration for the research must reach the AVE value which is over and above 0.5 to be valid. In this analysis it was observed all the variables have AVE value starting from 0.59 and attaining up to maximum of 0.697, thus are reflected as valid. Similarly, value of Cronbachs' alpha if observed higher compared to 0.7 then perceived to have greater consistency of measures internally, which is a benchmark for composite reliability too[46]. The result showed Cronbach's Alpha values are ending minimum at 0.912 and maximum up to 0.961, and CR outcomes have a fitting value going from 0.919 to 0.964 (**Table 3**) hence proving the better consistency of measures internally.

In research analysis for confirming discriminant validity when the square root of AVE had been examined, exogenous variance was observed at higher value compared to the collective value[47]. Therein it can be concluded that DV of measurement model was achieved. In **Figure 2**, the slanted lines values represent AVE square roots, whereas rest of the values in the said figure represent correlation of variables.

Table 3. Outer loadings, Cronbach Alpha, composite reliability and average variance extracted.

Constructs	Items	loadings	Cronbach's alpha	C.R.	A.V.E.
Patient loyalty	PL 1	0.806	0.961	0.964	0.697
	PL 2	0.825			
	PL 3	0.862			
	PL 4	0.661			
	PL 5	0.758			
	PL 6	0.845			
	PL 7	0.853			
	PL 8	0.939			
	PL 9	0.914			
	PL 10	0.834			
	PL 11	0.853			
Patient satisfaction	PS 1	0.747	0.912	0.919	0.639
	PS 2	0.748			
	PS 3	0.847			
	PS 4	0.863			

Table 3. (*Continued*).

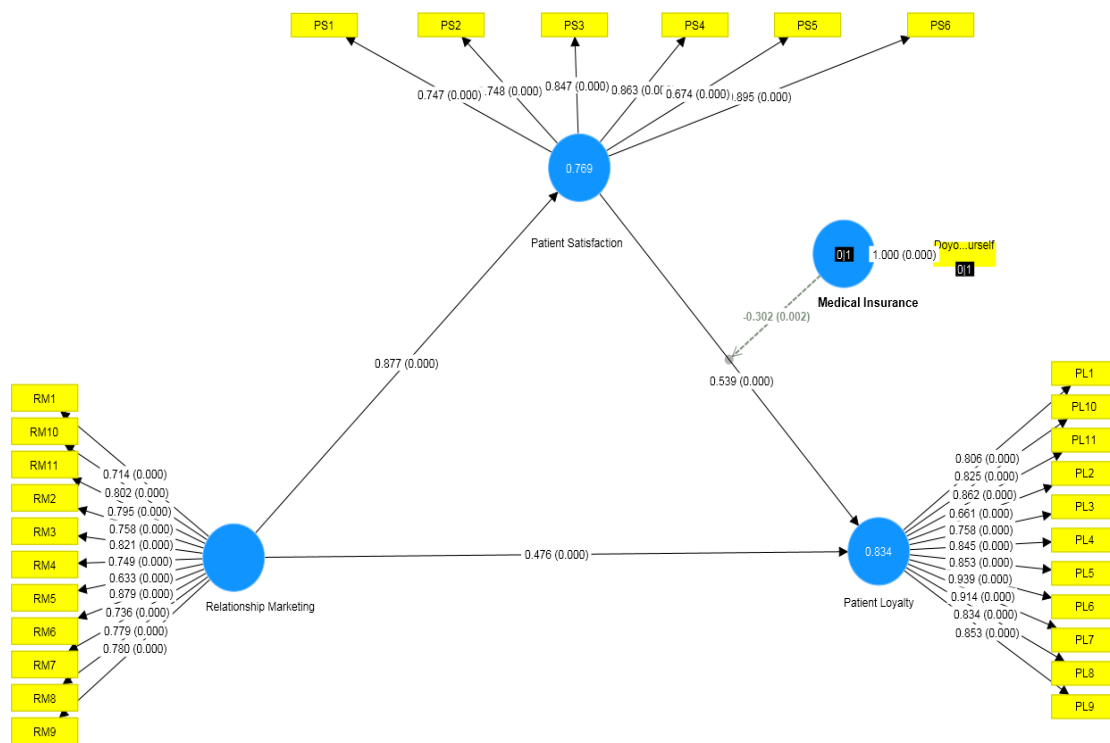| Constructs	Items	loadings	Cronbach's alpha	C.R.	A.V.E.
	PS 5	0.674			
	PS 6	0.895			
Relationship marketing	RM 1	0.714	0.941	0.943	0.593
	RM 2	0.802			
	RM 3	0.795			
	RM 4	0.758			
	RM 5	0.821			
	RM 6	0.749			
	RM 7	0.633			
	RM 8	0.879			
	RM 9	0.736			
	RM 10	0.779			
	RM 11	0.780			

Figure 2. Measurement model.

4.4. Evaluation of SEM

As this study includes all 3 reflective constructs, a consistent PLS algorithm was used to assess the measurement model. The PLS-SEM comprises measurement model (outer) and the structural model (inner). The collinearity of the estimators was evaluated and the results in **Table 4** show that collinearity is not an issue as all VIF values are below 5[48]. In **Figure 2**, the results show that the loyalty and satisfaction of patients' R^2 values are 0.834 and 0.769, according to the results provided by the high-power PLS algorithm.[46]. After PLS prediction, satisfaction and loyalty's Q^2 values are 0.666 and 0.696, both of which are greater than 0, which can confirm that the effect of the model is good enough[49].

Table 4. Results of discriminant validity (Fornell-Larcker method) and VIF.

Constructs	Patient loyalty	Patient satisfaction	Relationship marketing	VIF
Patient loyalty	0.835			1.154
Patient satisfaction	0.884	0.799		4.557
Relationship marketing	0.877	0.877	0.770	4.531

The path-coefficient estimation along with t-statistics examined for theorized interactions in the research, where a consistent bootstrapping method had been used with five thousand re-sampling. In **Figure 3** the analysis of the model (structural) has been specified. The **Figure 3** outcomes and **Table 5** numbers unveiled effect of RM on patient loyalty which is more significant (β is 0.476, t is 4.492, p-value is lesser compared to threshold of 0.00). Also, relationship marketing unveils an affirmative influence on patient satisfaction ($\beta = 0.877$, $t = 67.49$, $p < 0.00$), and patient satisfactions' implied effect on the loyalty of patients has been noteworthy as observed in **Table 5** ($\beta = 0.539$, $t = 4.326$, $p < 0.00$). Thus hypothesis no. 1, 2 and 3 are sustained. Precisely, the results showed that the indirect association of efforts taken for relationship marketing and loyalty of patients shown towards healthcare organizations has been stronger through patient satisfaction (β is 0.215, t value is 5.107, p-value is very low compared to threshold of 0.00), therefore H4 is supported[48]. Furthermore, the VAF (variance accounted for) applied to investigate the impact on RM and PL through mediation of PS. If the value is below 20% there is no presence of mediation, but if it has VAF value is vacillating from 20 till 80 percent, it suggests that there is existence of mediation but only partial. The full mediation can be ascertained only if the VAF value goes beyond 80%. The mediating effect observed is equal to 49.82%, thus it can be stated that RM-PL association is partially mediated by patient satisfaction[50].
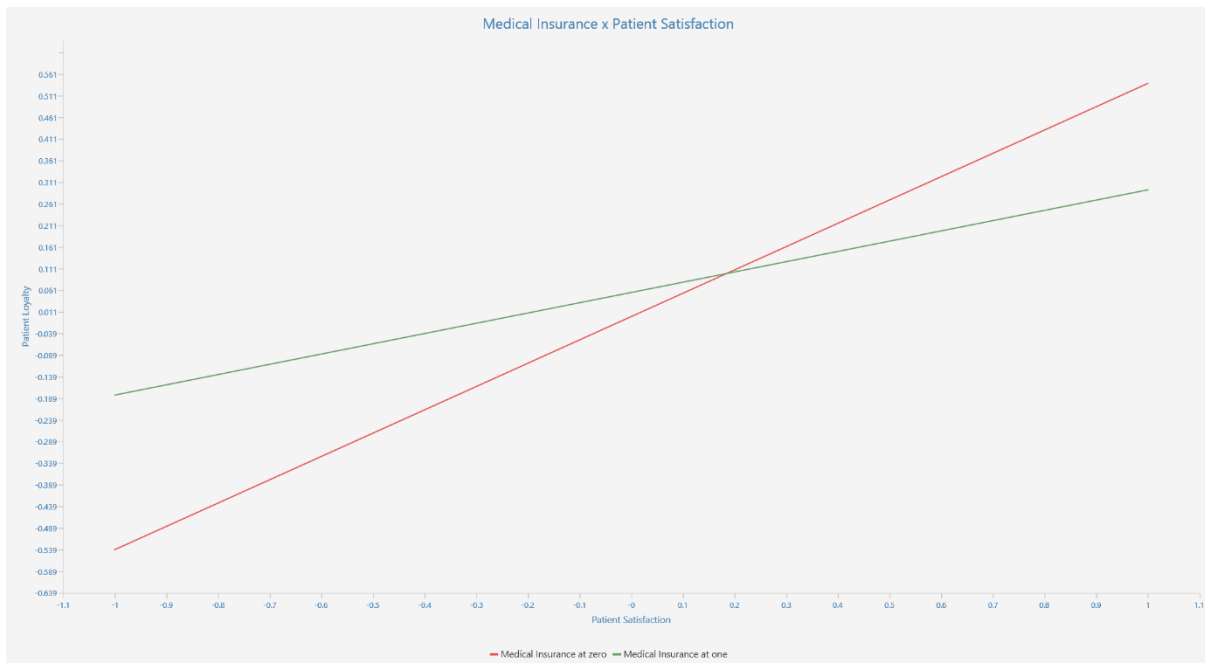

Figure 3. The moderating role of health insurance on the association between patient satisfaction and loyalty.

Table 5. Results of SEM.

Path	Beta	*T*-value	Decisions
H1: Patient satisfaction → patient loyalty	0.539	4.326*	Supported
H2: Relationship marketing → patient loyalty	0.476	4.492*	Supported
H3: Relationship marketing → patient satisfaction	0.877	6.749*	Supported
H4: Relationship marketing → patient satisfaction → patient loyalty	0.473	4.133*	Supported
H5: Health insurance x patient satisfaction → patient loyalty	-0.302	2.818*	Supported

* *p* value < 0.05.

Typically, the goodness of fit index is not commonly reported in case of PSEM. Nevertheless, certain scholars suggest utilizing the SRMR (standardized root mean square residual) as an indicator for assessing model fit. This measure serves to verify the absence of model misspecifications by comparing the actual correlation matrix derived from real observations with the predicted correlation matrix generated by the model. It is suggested that SRMR value should remain below 0.08[51]. The SRMR value for research model is 0.074, which is lower than the threshold value indicating that model fits well.

The **Figure 3** demonstrates a plot of the interaction for the patient loyalty and illustrates that the association between PS and PL is stronger for those patients who are not having any health insurance policies than those patients who are having some sorts of health insurance policies.

5. Conclusion

The study identifies the variable health insurance which can moderate the association of RM and patient loyalty when it is mediated through patient satisfaction. After Covid-19 pandemic everyone felt need of a good health insurance but in actual many people were not having a simple health insurance cover also[52]. And hospitals will have major role in promoting health insurance and in turn providing quality service[53], but their role is currently limited to processing of health insurance and nothing more. So, this study from PLS-SEM proved that there is an impact of health insurance on the association of RM and patient loyalty when mediated by patient satisfaction. It can be concluded from the study that health insurance holders will weaken the relationship amid satisfaction and loyalty of patients and in turn will be less affected by relationship marketing efforts taken by healthcare organizations. It can be predicted that health insurance holders will prefer the hospitals where their mediclaim will be approved rather than getting influenced by relationship marketing efforts undertaken.

Therefore, healthcare organizations should focus on identifying other important factors for improving patient care and loyalty[54]. Similarly, it can be said as the relationship marketing efforts unveils, it should focus on awareness related to health insurance which will lead to increase in loyalty independent of satisfaction. Studies need to be done to identify other factors impacting PS and PL[55] in a positive way, and also impact on bond among relationship marketing efforts & loyalty of patients be able to be study from financial returns perspective.

Author contributions

Conceptualization, AC and SJ; methodology, AC; software, AC and AM; validation, AC, AM and SJ; formal analysis, AC; investigation, AC; resources, AC and AM; data curation, AC; writing—original draft preparation, AC; writing—review and editing, AC and SJ; visualization, AC and AM; supervision, SJ; project administration, AC. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

References

1. India Brand Equity Foundation. Healthcare Sector in India 2017 January. New Delhi: IBEF; 2017.
2. Weng RH, Huang JA, Huang CY, et al. Exploring the impact of customer relational benefit on relationship commitment in health service sectors. Health Care Management Review. 2010, 35(4): 312-323. doi: 10.1097/hmr.0b013e3181dc8257
3. Mohammad Shafiee M, Rahmatabadi Y, Soleymanzadeh O. The impact of social networks marketing communication on brand equity, relationship equity and customer responses. Consumer Behavior Studies Journal. 2019, 6(1): 105-124.
4. Fatima T, Malik SA, Shabbir A. Hospital healthcare service quality, patient satisfaction and loyalty. International Journal of Quality & Reliability Management. 2018, 35(6): 1195-1214. doi: 10.1108/ijqrm-02-2017-0031
5. Hernández-Vásquez A, Rojas-Roque C, Barrenechea-Pulache A, et al. Measuring the Protective Effect of Health Insurance Coverage on Out-of-Pocket Expenditures During the COVID-19 Pandemic in the Peruvian Population. International Journal of Health Policy and Management. 2021. doi: 10.34172/ijhpm.2021.154
6. Astuti HJ, Nagase K. Patient Loyalty to Healthcare Organizations: Relationship Marketing and Satisfaction. International Journal of Management and Marketing Research. 2014, 7(2): 39-56.
7. Yıldırım Y, Amarat M, Akbolat M. Effect of relationship marketing on hospital loyalty: the mediating role of patient satisfaction. International Journal of Pharmaceutical and Healthcare Marketing. 2022, 16(3): 337-353. doi: 10.1108/ijphm-01-2021-0010
8. Oliver RL. Whence Consumer Loyalty? Journal of Marketing. 1999, 63(4_suppl1): 33-44. doi: 10.1177/00222429990634s105
9. Wang Y, Po Lo H, Chi R, et al. An integrated framework for customer value and customer-relationship-management performance: a customer-based perspective from China. Managing Service Quality: An International Journal. 2004, 14(2/3): 169-182. doi: 10.1108/09604520410528590
10. Verhoef PC. Understanding the Effect of Customer Relationship Management Efforts on Customer Retention and Customer Share Development. Journal of Marketing. 2003, 67(4): 30-45. doi: 10.1509/jmkg.67.4.30.18685
11. Tweneboah-Koduah E, Yuty Duweh Farley A. Relationship between Customer Satisfaction and Customer Loyalty in the Retail Banking Sector of Ghana. International Journal of Business and Management. 2015, 11(1): 249. doi: 10.5539/ijbm.v11n1p249
12. Laohasirichaikul B, Chaipoopirutana S, Combs H. Effective customer relationship management of health care: a study of hospitals in Thailand. Journal of Management and Marketing Research. 2011, 17(1): 1-12.
13. Bowen JT, Chen S. The relationship between customer loyalty and customer satisfaction. International Journal of Contemporary Hospitality Management. 2001, 13(5): 213-217. doi: 10.1108/09596110110395893
14. Astuti HJ, Nagase K. Patient loyalty to health care organizations: Strengthening and weakening (satisfaction and provider switching). Journal of Medical Marketing: Device, Diagnostic and Pharmaceutical Marketing. 2014, 14(4): 191-200. doi: 10.1177/1745790415578311
15. Mohammad Shafiee M, Es-Haghi SMS. Mall image, shopping well-being and mall loyalty. International Journal of Retail & Distribution Management. 2017, 45(10): 1114-1134. doi: 10.1108/ijrdm-10-2016-0193
16. Kumari N, Patyal S. Customer to consumer: attitudinal and behavioural loyalty. International Journal of Management Studies. 2017, 4(1): 115-121.
17. Eiriz V, Wilson D. Research in relationship marketing: antecedents, traditions and integration. European Journal of Marketing. 2006, 40(3/4): 275-291. doi: 10.1108/03090560610648057
18. Agariya AK, Singh D. What Really Defines Relationship Marketing? A Review of Definitions and General and Sector-Specific Defining Constructs. Journal of Relationship Marketing. 2011, 10(4): 203-237. doi: 10.1080/15332667.2011.624905
19. Haimowitz IJ. Healthcare Relationship Marketing. Routledge; 2016. doi: 10.4324/9781315586380
20. Hennig-Thurau T, Gwinner KP, Gremler DD. Understanding Relationship Marketing Outcomes. Journal of Service Research. 2002, 4(3): 230-247. doi: 10.1177/1094670502004003006
21. Abhijeet C, Sujata J. Relationship Marketing in Healthcare: A Literature review Analysis of Past, Present & Future in Private Hospitals. Indian Journal of Public Health Research & Development. 2019, 10(5): 668. doi: 10.5958/0976-5506.2019.01086.6
22. Berry LL. Relationship Marketing. Emerging Perspectives on Services Marketing. 1983, 66(3): 33-47.
23. Morgan RM, Hunt SD. The Commitment-Trust Theory of Relationship Marketing. Journal of Marketing. 1994, 58(3): 20-38. doi: 10.1177/002224299405800302
24. Gronroos C. From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing. Asia-

Australia Marketing Journal. 1994, 2(1): 9-29. doi: 10.1016/s1320-1646(94)70275-6

25. Evans JR, Laskin RL. The relationship marketing process: A conceptualization and application. Industrial Marketing Management. 1994, 23(5): 439-452. doi: 10.1016/0019-8501(94)90007-8

26. Berry LL. Relationship Marketing of Services—Growing Interest, Emerging Perspectives. Journal of the Academy of Marketing Science. 1995, 23(4): 236-245. doi: 10.1177/009207039502300402

27. Sheth JN, Parvatiyar A. The evolution of relationship marketing. International Business Review. 1995, 4(4): 397-418. doi: 10.1016/0969-5931(95)00018-6

28. Mollah AS. The impact of relationship marketing on customer loyalty at Tesco Plc.UK. European Journal of Business and Management. 2014, 6(3): 21-55.

29. Ajarmah BS, Hashem TN. Patient satisfaction evaluation on hospitals; comparison study between accredited and non-accredited hospitals in Jordan. European Scientific Journal. 2015, 11(32): 298-314.

30. Amin M, Zahora Nasharuddin S. Hospital service quality and its effects on patient satisfaction and behavioural intention. Clinical Governance: An International Journal. 2013, 18(3): 238-254. doi: 10.1108/cgij-05-2012-0016

31. Chaniotakis IE, Lymperopoulos C. Service quality effect on satisfaction and word of mouth in the health care industry. Managing Service Quality: An International Journal. 2009, 19(2): 229-242. doi: 10.1108/09604520910943206

32. Choi K, Lee H, Kim C, et al. The service quality dimensions and patient satisfaction relationships in South Korea: comparisons across gender, age and types of service. Journal of Services Marketing. 2005, 19(3): 140-149. doi: 10.1108/08876040510596812

33. Douglas J, McClelland R, Davies J. The development of a conceptual model of student satisfaction with their experience in higher education. Quality Assurance in Education. 2008, 16(1): 19-35. doi: 10.1108/09684880810848396

34. Widayati MY, Tamtomo D, Adriani RB. Factors Affecting Quality of Health Service and Patient Satisfaction in Community Health Centers in North Lampung, Sumatera. Journal of Health Policy and Management. 2017, 2(2): 165-175. doi: 10.26911/thejhpm.2017.02.02.08

35. Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology. 1986, 51(6): 1173-1182. doi: 10.1037/0022-3514.51.6.1173

36. Li D, Su M, Guo X, et al. The association between chronic disease and depression in middle-aged and elderly people: The moderating effect of health insurance and health service quality. Frontiers in Public Health. 2023, 11. doi: 10.3389/fpubh.2023.935969

37. Ndubisi NO. Relationship marketing and customer loyalty. Marketing Intelligence & Planning. 2007, 25(1): 98-106. doi: 10.1108/02634500710722425

38. Otani K, Kurz RS, Harris LE. Managing Primary Care Using Patient Satisfaction Measures. Journal of Healthcare Management. 2005, 50(5): 311-324. doi: 10.1097/00115514-200509000-00007

39. Chahal H, Mehta S. Modeling patient satisfaction construct in the Indian health care context. International Journal of Pharmaceutical and Healthcare Marketing. 2013, 7(1): 75-92. doi: 10.1108/17506121311315445

40. Carey RG, Seibert JH. A Patient Survey System to Measure Quality Improvement. Medical Care. 1993, 31(9): 834-845. doi: 10.1097/00005650-199309000-00008

41. Moliner MA. Loyalty, perceived value and relationship quality in healthcare services. Journal of Service Management. 2009, 20(1): 76-97. doi: 10.1108/09564230910936869

42. Rigdon EE, Sarstedt M, Ringle CM. On Comparing Results from CB-SEM and PLS-SEM: Five Perspectives and Five Recommendations. Marketing ZFP. 2017, 39(3): 4-16. doi: 10.15358/0344-1369-2017-3-4

43. Rejali SMJ, Sanayei A, Shafiee MM. Value proposition in the buyer-seller relationship quality: a mixed method approach. International Journal of Procurement Management. 2023, 18(3): 357-386. doi: 10.1504/ijpm.2023.134195

44. Huang MH. Examining the Direct and Moderating Effects of Relational Exchange and Innovation Characteristics on New Product Adoption. 2015 9th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing; July 2015. doi: 10.1109/imis.2015.74

45. Hair JF, Ringle CM, Sarstedt M. PLS-SEM: Indeed a Silver Bullet. Journal of Marketing Theory and Practice. 2011, 19(2): 139-152. doi: 10.2753/mtp1069-6679190202

46. Hair JF Jr, Sarstedt M, Matthews LM, Ringle CM. Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I – method. European Business Review. 2016, 28(1): 63-76. doi: 10.1108/ebr-09-2015-0094

47. Fornell C, Larcker DF. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research. 1981, 18(1): 39-50. doi: 10.1177/002224378101800104

48. Abdullahi MS, Raman K, Solarin SA, et al. Employee engagement as a mediating variable on the relationship between employee relation practice and employee performance in a developing economy. Journal of Applied Research in Higher Education. 2021, 15(1): 83-97. doi: 10.1108/jarhe-06-2021-0222

49. Hair JF, Sarstedt M, Pieper TM, et al. The Use of Partial Least Squares Structural Equation Modeling in Strategic

Management Research: A Review of Past Practices and Recommendations for Future Applications. Long Range Planning. 2012, 45(5-6): 320-340. doi: 10.1016/j.lrp.2012.09.008

50. Rehman SU, Samad S, Singh S, et al. Tourist's satisfaction with local food effect behavioral intention in COVID-19 pandemic: a moderated-mediated perspective. British Food Journal. 2021, 124(10): 3133-3151. doi: 10.1108/bfj-08-2021-0869

51. Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal. 1999, 6(1): 1-55. doi: 10.1080/10705519909540118

52. Biancalana D, Baione F. A quantitative analysis on the effect of COVID-19 in a private health insurance plan expenditure. Quality & Quantity. 2022, 57(S2): 173-187. doi: 10.1007/s11135-022-01603-6

53. Walsh G, Evanschitzky H, Wunderlich M. Identification and analysis of moderator variables. European Journal of Marketing. 2008, 42(9/10): 977-1004. doi: 10.1108/03090560810891109

54. Yang Y. Using Bibliometric Analysis to Explore Research Trend of Electronic Word-of-Mouth from 1999 to 2011. International Journal of Innovation, Management and Technology. 2012. doi: 10.7763/ijimt.2012.v3.250

55. Yeo SF, Tan CL, Goh YN. Obstetrics services in Malaysia: factors influencing patient loyalty. International Journal of Pharmaceutical and Healthcare Marketing. 2021, 15(3): 389-409. doi: 10.1108/ijphm-08-2020-0070