

FACTORS AFFECTING PATIENTS' DECISION IN SELECTION OF HOSPITAL

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Abstract:

The study is aimed to identify the factors affecting patients' decision while selecting hospital. To serve the purpose descriptive research design is used and a structured questionnaire based on ordinal scale is applied to 142 public & 337 private hospital patients. These patients were chosen by stratified purposive sampling method from Udaipur division. The analysis highlighted the four important factors which affects the patients' decision while selecting the hospital are Qualified & experienced Doctors, 24X7 & Emergency Service, Past Experience with Hospital and Trained Nursing Staff respectively

Keywords: Hospital, Patients' Decision, Hospital Selection.

JEL Classification: M31, P36

Introduction:

Hospitals play an important role in health care services. In the beginning of this sector the hospitals were set up as charity institutions, especially for the poor and the weaker sections of the society, of late; the hospitals are set up with a motto to serve all sections of the society. The development of health care facilities is influenced not only by opening of hospitals and healthcare centers; but also by their administration and management. If hospitals and health care centers are managed properly, there is an expression in the medical care that all the facilities can be provided even at the least possible investment.

21st century is enhancing the complexities of life so customers are demanding more convenience from service industry & hospital sector is also not exception to it. Increasing competition is motivating hospital administrators to incorporate more and more services in the hospitals. On the counter side patients are also comparing services and facilities of various hospitals while availing medical services. This paper is an attempt to identify those factors which affects patient's decision of hospital selection.

Literature Review:

According to **Motwani & Shrimali (2014)**, with the growing importance of service marketing mix, hospital administrators are becoming increasingly marketing oriented. Hospital administrators are keen to identify the factors which may affect patients' decision in selection of hospital. They also identified that in hospital service price transparency, placing hospital services at convenient location of patients, behavior of medical staff, tangibility and process through technology plays important role in differentiating services from competitors.

Chen & Kao (2011) found that the top six marketing-related ways influencing consumers' choice of hospitals are: free medical consultation, referral by friends and relatives, free clinic treatments, the mailing of clinic schedules to potential customers, TV news exposure, and providing education in public health and hygiene. The top methods of promotion, yielding the highest consumer loyalty are (in order of importance): high incidence of referral by friends and relatives; TV exposure; free medical consultation; free clinic treatments; and providing education in public health and hygiene.

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Chao-Chan Wu (2011) studied the impact of hospital brand image on patient satisfaction & loyalty. He found direct relationship between these two variables it means positive hospital brand image not only increases patient loyalty directly, but it also improves patient satisfaction through the enhancing of perceived service quality, which in turn increases the re-visit intention of patients.

Miller (2010) said that in past, a hospital could rely on its location for a stable client base. Now, patients have new ways to evaluate alternatives. Apart from convenient location patients also want to club it with comfortable environment.

Vinodhini & Kumar (2010) identified five factors that influence the creation of brand equity through successful customer relationships: trust, customer satisfaction, relationship commitment, brand loyalty, and brand awareness. They suggested that hospitals can be successful in creating image and positive brand equity if they can manage their customer relationships well.

Consuegra, Molina and Esteban (2007) examined the relationship between price fairness, customer satisfaction, loyalty and price acceptance. They found that price acceptance is directly influenced by satisfaction judgments and loyalty. In addition, price fairness influences price acceptance indirectly through customer satisfaction and loyalty. They suggested keeping price transparency and reliability when prices are increased.

Evans (2006) suggested that social marketing practices can be useful in health care practices in many ways. During social marketing campaigns like antismoking, female feticides etc., practitioners can reinforce media messages through brief counseling. Practitioners can reinforce social marketing messages during their direct & indirect contact with patients that will enhance the credibility of doctor & hospital.

Objective

The proposed study is done to identify factors affecting patients' decision in selection of hospital

Research Methodology

(a) Research Design: - To serve the purpose of research paper descriptive research design was used. Primary data was collected with the help of close ended questionnaire.

(b) Sample Design: - Our target population involves the patients of public and private hospitals. 479 patients of Public (142) & Private (337) hospitals were selected through stratified purposive sampling from Udaipur division.

(c) Analysis: - The data collected was analyzed with the help of Weighted Arithmetic Mean and factor analysis.

Analysis & Interpretation

After thorough review of literature 18 factors were identified that can affect patients' decision in selection of hospital. Patients were asked to indicate the importance of these factors affecting their decision in selection of hospital on five point scale starting from most important (5) to not at all important (1). Final ranking is obtained with the help of weighted arithmetic mean. In order to calculate total weighted score, the numbers of respondents who have given importance from 5 to 1 are multiplied by 5 to 1 respectively. The mean score is calculated by dividing the total score by total number of weights (i.e. 15).

The table 1 shows that, the Qualified & Experienced Doctors was the most important factor affecting the patients' decision in selection of hospital with a weighted mean score of 151.27 followed by 24X7 and Emergency service (Weighted Mean score = 146.27). Trained Nursing Staff ranked 3rd with a Weighted Mean score of 142.07, followed by Explanation of health problem & treatment that ranked 4th with a weighted mean score of 139.13. Modern equipments & labs was the fifth important

factor to affect patients' decision in selection of hospital with weighted mean score of 137.73 trailed by Quick response system at 6th rank with a weighted mean score of 134.40.

Positive word of mouth graded at 7th place with a weighted mean score of 132.93, trailed by Past experience with hospital at 8th rank with a weighted mean score of 132.67. Courteous & friendly supportive staff ranked as 9th important factor affecting patients' decision in selection of hospital with a weighted mean score of 130.07. The weighted mean score of convenient location was 129.93 and ranked at 10th place followed by Infrastructure & physical environment (rank=11) with a weighted mean score of 127.87.

Affordable prices ranked at 12th position with a weighted mean score of 126.27 demonstrating it as a one of the most important factor affecting the patients' decision in selection of hospital. Inbuilt pharmacy facility ranked at 13th place with a weighted mean score of 123.80. Least waiting time placed at 14th position with a weighted mean score of 123.07 followed by convenient hours at 15th rank with a weighted mean score of 120.80.

Brand name of hospital ranked at 16th with a weighted mean score of 115.20 followed by coverage under insurance placed at 17th position with weighted mean score of 107.80 and Promotional campaign which was the least preferred factor by the patients with a weighted mean score of 91.87.

Table 1 - Factors Affecting Patients' Decision in Selection of Hospital

No.	Weights	5	4	3	2	1	Total (N)	Weighted Total	Weighted Average	Rank
	Importance	Most Important	Important	Moderate	Less Important	Not Important				
	Decisive Factor									
1	Affordable Prices	184	136	124	23	12	479	1894	126.27	12
2	Convenient Location	183	200	55	28	13	479	1949	129.93	10
3	24X7 & Emergency Service	332	99	42	6	0	479	2194	146.27	2
4	Promotional Campaign	37	109	160	104	69	479	1378	91.87	18
5	Brand Name of Hospital	109	178	109	61	22	479	1728	115.20	16
6	Past Experience With Hospital	191	211	52	10	15	479	1990	132.67	8
7	Positive word of mouth	181	227	46	18	7	479	1994	132.93	7
8	Qualified & experienced Doctors	375	84	18	2	0	479	2269	151.27	1
9	Trained Nursing Staff	271	160	40	8	0	479	2131	142.07	3
10	Explanation of health problem & treatment	230	199	41	9	0	479	2087	139.13	4
11	Courteous & friendly supportive staff	168	198	95	16	2	479	1951	130.07	9
12	Coverage Under Insurance	67	165	148	79	20	479	1617	107.80	17
13	Least Waiting Time	136	203	92	30	18	479	1846	123.07	14
14	Convenient Hours	93	217	144	22	3	479	1812	120.80	15
15	Quick response system	190	215	61	10	3	479	2016	134.40	6
16	Modern Equipments & Labs	237	182	39	15	6	479	2066	137.73	5
17	Infrastructure & Physical Environment	150	207	99	20	3	479	1918	127.87	11
18	Inbuilt Pharmacy Facility	149	174	107	46	3	479	1857	123.80	13

To reduce the number of variables in terms of relatively few new categories factor analysis is performed. These new categories are termed as factors, which also indicate the percentage of variance explained. The results are presented in table 2. Result shows that the total variance explained are 61.129%. This is appropriate for factor analysis. The 61.129% variance was explained by the 6 extracted components.

Table 2 - Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.257	23.649	23.649	4.257	23.649	23.649	2.827	15.703	15.703
2	1.717	9.541	33.190	1.717	9.541	33.190	2.179	12.108	27.811
3	1.473	8.183	41.372	1.473	8.183	41.372	1.786	9.923	37.734
4	1.308	7.265	48.637	1.308	7.265	48.637	1.510	8.391	46.126
5	1.144	6.357	54.994	1.144	6.357	54.994	1.417	7.874	54.000
6	1.104	6.134	61.129	1.104	6.134	61.129	1.283	7.129	61.129
7	.885	4.918	66.046						
8	.832	4.620	70.666						
9	.779	4.329	74.996						
10	.691	3.840	78.836						
11	.640	3.556	82.392						
12	.619	3.438	85.830						
13	.555	3.081	88.911						
14	.536	2.976	91.887						
15	.479	2.661	94.548						
16	.383	2.129	96.676						
17	.318	1.768	98.445						
18	.280	1.555	100.000						

The most important tool in interpreting factors is factor rotation. The term rotation means the reference axes of the factors are turned about the origin until some other position has been reached. Factor rotation assists in the interpretation of the factors by simplifying the structure through maximizing the significant loadings of a variable on a single factor. Table 3 explains that the factor analysis has grouped the 18 variables into six factors. The first two factors consist of 4 variables each, 3rd & 5th factors have 3 variables and 4th & 6th are made with the combination of two variables each.

Table 3 - Rotated Component Matrix

	Component					
	1	2	3	4	5	6
1						0.542485
2						0.800774
3		0.713069				
4					0.675	
5					0.790049	
6				0.795795		
7				0.733834		

	Component					
	1	2	3	4	5	6
8		0.740507				
9		0.693941				
10		0.502572				
11	0.587071					
12					0.526107	
13	0.736438					
14	0.778029					
15	0.598077					
16			0.511154			
17			0.547517			
18			0.734086			

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

On the basis of loading of the statements they are explained below in table 4. As the variables included in various factors are heterogeneous by nature so they are not renamed.

Table 4 - Factors Extracted

Factor	Variable	Loading
Factor 1	Convenient Hours	0.778
	Least Waiting Time	0.736
	Quick response system	0.598
	Courteous & friendly supportive staff	0.587
Factor 2	Qualified & experienced Doctors	0.741
	24X7 & Emergency Service	0.713
	Trained Nursing Staff	0.694
	Explanation of health problem & treatment	0.503
Factor 3	Inbuilt Pharmacy Facility	0.734
	Infrastructure & Physical Environment	0.548
	Modern Equipments & Labs	0.511
Factor 4	Past Experience With Hospital	0.796
	Positive word of mouth	0.734
Factor 5	Brand Name of Hospital	0.790
	Promotional Campaign	0.675
	Coverage Under Insurance	0.526
Factor 6	Convenient Location	0.801
	Affordable Prices	0.542

Factor 1:

This factor is responsible for 15.703% variance of total variance. Four variables are grouped in factor 1 out of which three variables are related to consumption of time. Patients need convenient operating hours of hospital with least waiting time & quick response. One more variable included in this factor is courteous & friendly staff.

Factor 2:

This factor is explaining 12.108% variance of total variance. Four variables are grouped in factor 2 out of which three variables are related to people mix of hospital. Patients are looking for qualified doctors & trained nursing staffs who can properly explain them about health problem & treatment, as well as they also need 24X7 hospital services.

Factor 3:

This factor is responsible for 9.923% variance of total variance. Three variables are grouped in factor 3 related to physical evidence of hospital. This factor says that while selecting hospital patients give importance to inbuilt pharmacy facility, Infrastructure and labs with modern equipments.

Factor 4:

This factor is explaining 8.391% variance of total variance. Two variables are grouped in factor 4 which are related to Patients own experience & others' experience with the hospital. Patients generally prefer that hospital from which they have received better services in past or they have received positive feedback about the hospital from other patients.

Factor 5:

This factor is responsible for 7.874% variance of total variance. Three variables are grouped in factor 3 named brand name of hospital, promotional campaign and coverage under insurance.

Factor 6:

This factor is explaining 7.129% variance of total variance. Two variables are grouped in factor 6 out of which one is related to place and other one is related to price of the hospital. Patients always select those hospitals which offer them services at convenient location with affordable prices.

Conclusions:

It can be concluded from the study that 4 important factors which affects the patients' decision while selecting the hospital are Qualified & experienced Doctors, 24X7 & Emergency Service, Past Experience With Hospital and Trained Nursing Staff respectively. From results of factor analysis these variables can be grouped into 6 factors, which are accounted for 61% variance.

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