

Antecedents of Inpatient Complaining Behavior

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KEYWORDS Amenities. Dissatisfaction. Hospitality. Infrastructure. Patient Care

ABSTRACT The purpose of this paper is to identify the antecedents that lead to complaining and non-complaining behaviors of inpatients post dissatisfaction in hospitals. This is a study that aims to explore, by way of extensive literature review and empirical data, the post-purchase behavior of inpatients and their bystanders who had utilized the services of various private and cooperative hospitals in Kerala, one of the southern states of India. A self-administered, structured questionnaire was used to collect primary data. The paper successfully classified seventeen items covering various aspects of hospital services into four factors using exploratory factor analysis. These four factors were 'hospitality', 'patient care and concern', 'amenities' and 'infrastructure'. The results of this study are expected to be valuable to hospitals that are alert about revenue generation and goodwill, to establish better complaint management and service recovery strategies. Moreover, it is also hoped that this paper would add more inputs to the existing literature on Consumer Complaining Behavior in the service sector, especially in healthcare.

INTRODUCTION

Antecedent literally means 'a preceding occurrence, cause or event'. The current study has defined 'antecedents' as preceding causes or events that result in inpatient dissatisfaction thereby leading to behavioral responses such as overt and covert complaining behaviors. These behavioral manifestations are possible reactions of consumers to dissatisfaction with products or services. Yanamandram and White (2005) described antecedents as the determinants of Consumer Complaining Behavior (CCB). This study defines CCB as the complaining and non-complaining behaviors of inpatients post dissatisfaction with services of the hospitals where they were admitted. Though complaints are consumers' responses to marketplace dissatisfaction, all such episodes do not lead to complaining. Khadir and Swamynathan (2014) in their study on deterrents of complaining of 173 dissatisfied Indian inpatients, found that 78.6 percent were non-complainers who indulged in switching behavior, exiting, remaining silent

or engaging in negative word-of-mouth with friends, relatives or other inpatients. As these are more detrimental actions from the service provider's point of view than direct complaining, inpatients that indulged in such actions are also considered in this study. These actions are detrimental because the provider does not get a chance to rectify their service errors, as these episodes are not reported, either written or oral.

The starting point of any CCB is the dissatisfaction with a purchase episode as identified by Badghish et al. (2015). Michel (2002) argued that ninety percent of the angry customers do not complain and hence the provider loses the opportunity to attempt service recovery measures before the service failure gets to the next level. Homburg and Furst (2005) defined CCB as, the responses triggered by perceived dissatisfaction that is neither accepted psychologically nor forgotten quickly in product or service consumption. Tronvoll (2007) has correctly pointed that CCB is an important phenomenon for the industry and academics and must be understood by everyone who is in the business of providing service to their customers.

Objective of the Study

The objective of this study is to identify the antecedents of inpatient complaining behavior.

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In India, it is not only the patient who decides which healthcare provider to opt for, because people are culturally embedded in a system of collective consumption where family members or relatives or friends also influence their decision-making. Moreover, they do not usually raise their voice even though they are dissatisfied with the hospital services, chiefly due to their perceived relative inability, as observed by Khadir and Swamynathan (2014). Intense competition in this sector is an aspect that has been motivating hospitals to develop and implement quality improvement activities in order to excel in the marketplace and also to attract new patients as observed by Holmboe et al. (2000). Also the common man's awareness has increased vastly due to the advent of media, competition, better communication systems, lifestyle modifications, frequency of using hospital services and availability of wellness care.

The antecedents of inpatient complaining behavior were identified by referring to the constructs used in the patient satisfaction studies in extant literature. As patient dissatisfaction questionnaires were not available from literature, Patient Satisfaction Questionnaires (PSQ) developed by Mangelsdorff (1979), Larsen et al. (1979), Ware et al. (1983), Abramowitz et al. (1987), Marhsall and Hays (1994), and Gonzalez et al. (2005) and scales developed to measure patient perceptions of quality by Rao et al. (2006) were referred to before designing the final scale for measuring this construct. Items were measured using a 5-point Likert scale ranging from 'highly satisfactory' to 'highly unsatisfactory' asking the respondents to rate three major hospital services, namely 'patient care', 'hospital infrastructure' and 'formalities'. The first construct 'patient care,' was measured using five items, namely, quality of interaction of doctors, technical expertise, health instruction and dietary counseling, discussion of problem with patient or bystander and medicine availability and dispersal. The second construct, 'hospital infrastructure' was measured using six items, namely, technical adequacy of medical infrastructure (for example, scanning, surgery), cleanliness of rooms, toilets, corridors and common spaces, canteen facilities, quality of canteen food, medical insurance-related matters and vehicle parking facilities. The construct 'formalities' was measured using six items, namely, courtesy of the staff at various counters (for example, pharmacy, bill-

ing), courtesy of nurses, registration and other formalities, casualty, operation theatre and ICU services (if applicable), waiting time for getting services (for example, X-ray, scanning, lab tests) and visitors' policy. The Cronbach alpha (0.826) confirmed a reasonably high level of scale reliability.

It can be expected that inpatients engage in some form of complaining behavior that might result from the dissatisfaction of the antecedents discussed above. Hence the objective set for this paper is "to identify the antecedents of inpatient complaining behavior". This paper has in the following pages, outlined the methodology, results, discussion, conclusion and recommendations.

METHODOLOGY

The population of the study consisted of patients admitted and discharged from private or co-operative hospitals belonging to the three zones of Kerala, that is, north, central and south Kerala. Only those hospitals with at least 100 beds were considered. An equal representation of samples was sought from the three zones, comprising three districts each. This survey made use of the retrospective recall technique to extract reliable and genuine responses regarding actual service experiences during hospital stay.

Due to the rapid economic and social development of the state in the past fifty years, with state-of-art hospitals, caring patients from outside the state and the country, the choice of the area of this particular study is justified. Moreover, the state has witnessed considerable gender equality in health and education (Kerala Human Development Report 2005). The sampling frame was the inpatient record maintained by the randomly selected private and cooperative hospitals from the nine districts of Kerala. The first stage, in the multistage sampling technique was identification of three zones to which the entire state was divided. In the second stage, the districts in each of these zones were identified, namely, Kannur, Kozhikode and Wayanad in the north, Thrissur, Ernakulam and Kottayam in the central state and Alappuzha, Kollam and Thiruvananthapuram in the south. The third stage was identification of the private and cooperative hospitals in these districts having a minimum of 100 beds.

The hospitals were randomly selected from each of these classification using random sam-

pling and the patient data was accessed from the database maintained by the selected hospitals. Unbiased data was ensured by performing systematic random sampling (every 10th patient) from the inpatient list admitted and discharged during the period March, 2014 to August, 2014, from each of the selected hospitals till the required sample size was reached. Sufficient data was collected so that around 40-45 samples from each of the districts could be finally used for the study. Patients were contacted through personal and mail surveys.

The sample size was 405, with almost equal distribution from the three zones. Out of the 405 questionnaires distributed, only 353 were found useful as the rest 52 were returned because those respondents were either not dissatisfied with any of the hospital services or not available (death, not able to locate or outstation) or non-response after a maximum of three reminder calls. Out of the 353 questionnaires, only 312 were finally used for data analysis, as the rest 41 were found to be unsuitable (missing responses, non-cooperation, inability to recollect or judge services). Hence, the response rate was seventy-eight percent. Primary data was collected through the survey method using the self-report questionnaire. Factor analysis was performed to extract the antecedents of CCB.

RESULTS

Out of the total 312 samples, data obtained from 311 respondents (that is, 99.7 percent) were used for doing factor analysis. Table 1 presents the reliability statistics of the scale. Cronbach's alpha, the coefficient of reliability, used as a measure of internal consistency, was 0.826 for this 17-item Likert scale. The score indicates that the scale is a reliable one.

Table 1: Reliability statistics

<i>Cronbach's Alpha</i>	<i>N of items</i>
.826	17

Table 2: KMO and Bartlett's test for factor analysis

<i>Test</i>	<i>Measures</i>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.815	
Bartlett's Test of Sphericity	Approx. Chi-square	2140.761
	Degrees of Freedom	136
	Significance	.000

Identifying Antecedents Using Factor Analysis

The prime objective of this study, 'to identify the antecedents of inpatient complaining behavior during hospitalization', was achieved by performing factor analysis, the results of which are presented in the Tables 1 through 8. To ensure the feasibility of factor analysis on the data collected for this study, two tests were performed, namely, Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of sphericity measure of sampling adequacy. In order to determine the appropriateness of factor analysis, the Bartlett test of sphericity, a statistical test for the presence of correlations among the variables is used. The Kaiser-Meyer-Olkin (KMO) test measures sampling adequacy. Table 2 explains results of these two tests used to determine the suitability of data to factor analysis. As literature on previous studies which have identified and established factors are lacking, an exploratory factor analysis was performed on the data using principal component analysis. Extraction was done on the basis of Cattell's scree plot as well as occurrence of Eigen value above 1. Varimax rotation was performed on the extracted factor structure. Table 3 shows communalities, which represent the amount of variance a variable shares with all the other variables considered in this study. Figure 1 illustrates, the scree plot for determining the number of factors. In this case, the scree is seen to begin at 4 and hence it was decided to extract four factors based on the criteria discussed.

The Principal Components Method, which is the most commonly used method, is applied here. The results of the factor extraction are provided in the Table 4. The Eigen values represent the total variance explained by each factor. The 1st factor has an Eigen value of 5.248. Since this is greater than 1.0, it explains more variance than a single variable. The percent of variance explained is 30.869. The second factor has an Eigen value of 1.702 and the percent of variance explained is 10.012. It is also greater than 1.0, and

Table 3: Communalities

Items	Initial	Extraction
Quality of interaction of doctors	1.000	.680
Technical expertise	1.000	.620
Health instructions and dietary counseling	1.000	.659
Discussion of problem with patient/ bystander	1.000	.576
Medicine availability and dispersal	1.000	.401
Technical adequacy of medical infrastructure (for example,; scanning, surgery etc.)	1.000	.554
Cleanliness of room, toilet, corridors and common spaces	1.000	.524
Canteen facilities	1.000	.742
Quality of canteen food	1.000	.775
Medical insurance-related matters	1.000	.347
Vehicle parking facilities	1.000	.448
Courtesy of staff at various counters (for example,; pharmacy, billing etc.)	1.000	.636
Courtesy of nurses	1.000	.665
Registration and other formalities	1.000	.585
Casualty, Operation theatre and ICU services (if applicable)	1.000	.465
Waiting time for getting services (for example,; X-ray, scanning, lab tests etc.)	1.000	.543
Visitors' policy	1.000	.380

therefore explains more variance than a single variable. The third factor has an Eigen value of 1.547. Similar to factors one and two, it is greater than 1.0, and therefore explains more variance than a single variable. The percent of variance explained is 9.103. The fourth factor has an Eigen value of 1.104 and the percent of variance explained is 6.493. Factors 5 through 17 have Eigen values less than 1, and therefore explain less variance than a single variable. This initial solution suggests that in the final solution, not more than 4 factors should be extracted.

The component matrix indicates the correlation of each variable with each factor. Table 5 gives the component matrix. Since identification of the factors that summarize the sets of related variables is the primary goal of factor analysis, rotation is a method that can be used to transform the initial matrix into one that is easier to interpret. The factor matrix is transformed into a more interpretable form by the process of rotation.

Table 6 shows the results of rotated component matrix, in order to reduce the number of factors on which the variables under investiga-

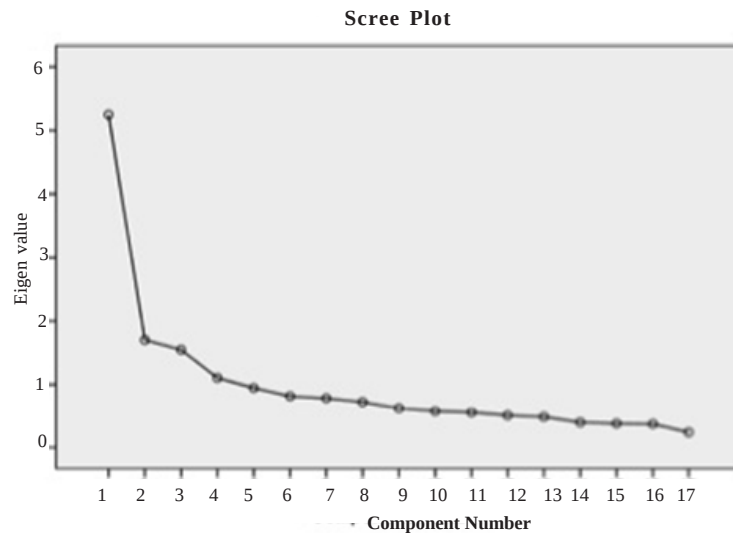
**Fig. 1. Scree Plot for determining the number of factors**

Table 4: Total variance explained by the factor solution

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	5.248	30.869	30.869	5.248	30.869	30.869	2.663	15.664	15.664
2	1.702	10.012	40.881	1.702	10.012	40.881	2.608	15.339	31.004
3	1.547	9.103	49.984	1.547	9.103	49.984	2.186	12.859	43.862
4	1.104	6.493	56.477	1.104	6.493	56.477	2.144	12.615	56.477
5	.944	5.553	62.029						
6	.813	4.784	66.813						
7	.781	4.595	71.408						
8	.721	4.242	75.650						
9	.623	3.665	79.315						
10	.576	3.385	82.701						
11	.557	3.275	85.976						
12	.509	2.994	88.970						
13	.485	2.855	91.825						
14	.397	2.337	94.162						
15	.380	2.234	96.395						
16	.371	2.183	98.578						
17	.242	1.422	100.000						

Table 5: Component matrix

Item	Component			
	1	2	3	4
Quality of interaction of doctors	.659	-.329	-.213	-.304
Health instructions and dietary counseling	.626	-.434	-.275	-.056
Discussion of problem with patient/ bystander	.623	-.381	-.138	-.154
Courtesy of nurses	.598	.439	-.330	-.074
Canteen facilities	.589	.216	.548	-.222
Courtesy of staff at various counters (for example,; pharmacy, billing etc.)	.571	.498	-.232	-.093
Waiting time for getting services (for example,; X-ray, scanning, lab tests etc.)	.569	.107	-.165	.425
Cleanliness of room, toilet, corridors and common spaces	.550	-.052	.320	.341
Technical adequacy of medical infrastructure (for example,; scanning, surgery etc.)	.547	-.296	.289	.289
Casualty, Operation theatre and ICU services (if applicable)	.541	.063	-.090	.401
Technical expertise	.537	-.469	-.230	-.242
Registration and other formalities	.520	.421	-.371	.010
Medical insurance-related matters	.514	-.015	.281	-.066
Visitors' policy	.501	.242	-.189	.187
Medicine availability and dispersal	.464	-.334	.178	.204
Quality of canteen food	.566	.263	.606	-.137
Vehicle parking facilities	.420	.177	.135	-.471

tion have high loadings. The rotated component matrix yields a four-factor solution, where most of the variables are correlated with separate factors. From the table, it can be found that the variables 'courtesy of nurses' (0.771), 'registration and other formalities' (0.748), 'courtesy of staff at various counters' (0.740) and 'visitors' policy' (0.546) load on factor 1.

The variables 'technical expertise' (0.773), 'quality of interaction of doctors' (0.765), 'health instructions and dietary counseling' (0.740) and

'discussion of problem with patient or bystander' (0.694) load on factor II, 'quality of canteen food (0.814), canteen facilities (0.812) and vehicle parking facilities (0.561)' load on factor III and 'technical adequacy of medical infrastructure (for example, scanning, surgery)' (0.658), 'cleanliness of room, toilet, corridors and common spaces' (0.647), 'medicine availability and dispersal' (0.525), 'casualty, operation theatre and ICU services' (0.520) and 'waiting time for getting services' (0.516) load on factor IV. The vari-

Table 6: Rotated component matrix

Variable	Factor			
	1	2	3	4
Courtesy of nurses	.771			
Registration and other formalities	.748			
Courtesy of staff at various counters (for example,: pharmacy, billing etc.)	.740			
Visitors' policy	.546			
Technical expertise		.773		
Quality of interaction of doctors		.765		
Health instructions and dietary counseling		.740		
Discussion of problem with patient/ bystander		.694		
Quality of canteen food			.814	
Canteen facilities			.812	
Vehicle parking facilities			.561	
Medical insurance-related matters				
Technical adequacy of medical infrastructure (for example,: scanning, surgery etc.)				.658
Cleanliness of room, toilet, corridors and common spaces				.647
Medicine availability and dispersal				.525
Casualty, Operation theatre and ICU services (if applicable)				.520
Waiting time for getting services (for example,: X-ray, scanning, lab tests etc.)				.516

able, 'medical insurance-related matters' did not show substantial loading on any factor and as such the same was dropped from the model. Table 7 depicts, the component score co-efficient matrix.

The final part of the output is the component transformation matrix as depicted in Table 8. This matrix provides information about the degree to which the factors were rotated to obtain a solution. Hence, from factor analysis, it is obvious that the variables can be grouped into four factors, which are more or less independent of each other.

Table 8: Component transformation matrix

Component	1	2	3	4
1	.534	.536	.445	.479
2	.649	-.657	.287	-.255
3	-.529	-.352	.694	.340
4	.116	-.397	-.489	.768

DISCUSSION

Interpretation of Factors

The next step was to identify the variables that have high loadings on the same factor. The

Table 7: Component score coefficient matrix

Item	Component			
	1	2	3	4
Quality of interaction of doctors	-.017	.352	.039	-.149
Technical expertise	-.071	.375	-.029	-.100
Health instructions and dietary counseling	-.014	.314	-.118	.022
Discussion of problem with patient/ bystander	-.051	.297	-.005	-.023
Medicine availability and dispersal	-.120	.063	-.028	.274
Technical adequacy of medical infrastructure (for example,: scanning, surgery etc.)	-.126	.001	-.002	.359
Cleanliness of room, toilet, corridors and common spaces	-.037	-.119	.030	.365
Canteen facilities	-.068	-.068	.430	-.012
Quality of canteen food	-.064	-.132	.425	.050
Medical insurance-related matters	-.056	.018	.196	.065
Vehicle parking facilities	.014	.113	.334	-.286
Courtesy of staff at various counters (for example,: pharmacy, billing etc.)	.318	-.048	.069	-.138
Courtesy of nurses	.333	-.007	.009	-.135
Registration and other formalities	.341	-.028	-.056	-.090
Casualty, Operation theatre and ICU services (if applicable)	.152	-.092	-.161	.299
Waiting time for getting services (for example,: X-ray, scanning, lab tests etc.)	.200	-.098	-.196	.296
Visitors' policy	.227	-.066	-.084	.098

factor may then be interpreted in terms of the variables that load high on it. As the first factors had variables pertaining to courtesy and formality, it was named '*hospitality*'. The second factor had variables relating to patient's health and care-giving aspects and was labeled '*patient care and concern*'. The third factor was all about the facilities that patients required and was labeled '*amenities*'. The fourth factor related to the basic features of an organization and hence, labeled as '*infrastructure*'. Hence, with the application of factor analysis, 17 variables were reduced into 4 factors, which accounted for 56.477 percent of the total variability.

Healthcare is a mix of credence and experience qualities. Healthcare services are different from other services due to the abundance of credence properties possessed by this industry. Patients cannot test the product before consuming it and often have difficulty gauging the quality of care even after experiencing it. This sector has a strong credence property consumer complaining behavior in hospitals is different from that of other sectors. Data with regard to negative patient experiences would enable the providers to identify problems in their existing systemic services. Binder (2013) identified the various problems encountered in healthcare services as treatment done incorrectly, long waiting times, repeated visits necessary to have the problems corrected, time and inconvenience, billing for treatment not done, dishonesty, incompetence, error, difference of opinions, lack of patient knowledge and poor communication between patients and health care personnel.

The four reasons behind inpatient behavior of avoiding complaints post dissatisfaction, in descending order of rating, have been identified by Khadir and Swamynathan (2014) as perceived relative inability, perceived negative consequences, personal factors and environmental factors. This paper provides information about the causes of dissatisfaction and reasons behind the non-complaining behavior of inpatients. Like any other sector, the hospital industry should also look for ways of relationship management with visitors and train staff to be more courteous in their dealings with each other and with outsiders. For decades, hospitals have served as a cornerstone of the Indian healthcare sector. Patients have considered it as a sacred place, seeking panacea to all their health issues. The results of the factor analysis are very re-

markable for this sector, as there is evidence that patients possess the awareness to assess and rate the various aspects of care, in addition to the very purpose of seeking healthcare services. Hospitals, especially in the private and co-operative sector that have revenue generation as one of their objectives, should give adequate importance to their infrastructure, amenities and hospitality. Any individual who visits a hospital need not be a patient, but a proactive consumer seeking preventive healthcare to avert a health problem. Hence, a sound awareness about the requirements of patients has become inevitable to be a market leader in one of the most upcoming sectors of the country.

Powers and Bendall-Lyon (2002) quoted, the studies of Donabedian (1980) to mention the three main healthcare delivery elements, namely structure, process and outcomes. Structure refers to the tangible aspects of the service like physical environment and physical facilities of the service, billing procedures, food and parking. Fottler et al. (2000) added other factors like comfort of resting areas, layout and comfort of rooms, overall cleanliness, decor, cheerfulness of the facilities, convenient locations and modern equipment, those which can be judged before the purchase. According to Hutton and Richardson (1995), the physical environment delivers a message about an organization, its products and quality much before the direct provider-customer interaction happens. They used the term 'healthscapes' to describe the components of atmospherics concerning healthcare. They also added that this aspect, was more important to services when compared to physical goods. Bowers et al. (1994) and Singh (1990) concluded physical environment to be a significant determinant of patient satisfaction, which often was rated lowest in most satisfaction surveys.

On the other hand, process describes the interaction between consumer and service personnel within the service environment. This includes characteristics such as friendliness, courtesy, responsiveness, competence, access, communication and availability of physician and other hospital staff. Reidenbach and Smallwood (1990) added other factors like interpersonal relation between patient and caregivers and caregivers' expressions of empathy. Among these, the actual healthcare delivery happens during the interpersonal communication between patient and physician and hence has a vital role in the de-

velopment of patient satisfaction as identified by Powers and Bendall-Lyon (2002).

According to Cohen (1996), Ross et al. (1993) and Williams and Calnan (1991), the ranking given by patients in surveys pertaining to communication and interpersonal aspects of their healthcare experience were often highest in importance. Studies by various researchers like John (1990), MacStravic (1994) and Nelson et al. (1998) found that quality perceptions of consumers were characterized by the 'process' elements namely, communication and understanding of physicians, nurses and other medical staff, which they observed to be very important in influencing consumer satisfaction. This was more strengthened by the studies of Lytle and Mokwa (1992), Mullan (2001) and Zifko-Baliga and Krampf (1997) who noted interpersonal relations to play a very important role in deciding patient satisfaction and perceived quality as they were capable of judging the quality of their healthcare experience from the emotional aspects of their encounter rather than clinical aspects. To add to these findings, Bell et al. (1997) noted that the quality of interaction between hospital staff and the patient was reflected in their level of satisfaction with different aspects of care. The last element, *outcomes*, according to Zifko-Baliga and Krampf (1997), could be consumer satisfaction or quality perceptions resulting from service interactions or processes and included their physical and emotional wellbeing.

Gronroos (1984) studied technical and functional quality as the important elements of perceived service quality. Technical quality means *what* the consumer receives. In the healthcare scenario, these can be the primary care attributes, like the treatment provided and infrastructure. The second one, the functional quality means *how* the consumer receives the service. These can be secondary care attributes, like friendliness of service personnel or timely delivery of services in healthcare. A third aspect called the image of the service provider acts as a filter in consumers' perception of quality. Carman (2000) in a similar study identified two components of hospital services, that is, technical and interpersonal aspects. Whereas the former included physician care, nursing care and outcome, the latter aspects were food, noise, privacy, cleanliness and parking.

According to Blanchard et al. (1990), the interpersonal aspect was found to be the most important element of patient satisfaction. Moo-

rey (1988) and McIver (1991), observed communication and empathy as its key elements. Non-verbal communication like leaning forward and nodding of the head by doctors gave warmth to patients (LaCrosse 1997) and higher patient satisfaction (Larsen and Smith 1981). Lack of eye contact from the doctors was perceived as formal, impersonal and brief as studied by Kendon (1970). As far as the technical aspects are concerned, John and Neil (1997) found that patients complained when medical procedures were perceived to be deficient, which was an obvious indicator of patient dissatisfaction.

Duggirala et al. (2008), found the dimensions of patient-perceived total quality service in healthcare as infrastructure, personnel quality (doctor's care, nursing care, paramedical and support staff quality and quality of communication), process of clinical care, administrative procedures, safety indicators, overall experience of medical care received and social responsibility. Similarly, Padma et al. (2009) identified the eight dimensions of hospital service quality as infrastructure, personnel quality, process of clinical care, administrative procedures, safety indicators, corporate image, social responsibility and trustworthiness of the hospital. Gronroos (1990) pointed professionalism and skills, attitudes and behavior, accessibility and flexibility, reliability and trustworthiness, recovery, reputation and credibility as the integrated list of six criteria of good perceived service quality. Doctor's care is a very important dimension to measure the quality of care delivered by the doctors. According to Zifko-Baliga and Krampf (1997), out of the five factors, namely, professional expertise, validation of patient beliefs, interactive communication, image and antithetical performance, three are doctor-related service quality perception attributes. On the other hand, Edwardsson et al. (1994) found experience, knowledge, competence of hospital personnel, commitment and willingness to serve the customer, reliability, trust, empathy and handling of critical factors as some of the factors that influence customers' perception of services received.

In studies by Ware et al. (1983), much emphasis was given to salient characteristics of doctors and medical care services, technical and interpersonal skills of providers, waiting time for appointments, office waits, emergency care, costs of care, insurance coverage, availability of hospitals, and other resources as well as gen-

eral satisfaction with care. The results of the factor analysis show that factor 1, coincides well with the construct 'formalities' identified before the survey. Factor 2, conforms well to the construct identified before the survey, namely 'patient care'. Factors 3 and 4 coincide with the construct 'hospital infrastructure' formed before the survey. The results are in accordance with studies of Gonzalez et al. (2005) and Marshall and Hays (1994). Overall patient satisfaction according to Abramowitz et al. (1987) was dependent on overall patient expectations and satisfaction with nursing care. For Ndibusi and Ling (2006), dissatisfaction was a result of discrepancy between expected and realized performance. These might explain why the results of this study are similar to those of the earlier studies with respect to antecedents. Moreover, it is also hoped that this paper would add more inputs to the existing CCB literature on healthcare sector in general and hospitals in particular.

According to Prakash (2010), patient satisfaction is dependent on office appearance, waiting time, doctor-patient interaction and patient education. Waiting time, in the study, depended on factors like doctor's style of working, type of patients, the locality of practice and the efficacy of the supporting staff. Doctor-patient interaction was referred to as the most important indicator to determine patient satisfaction. This could be strengthened by improving the doctor's interpersonal skills, which has a positive effect on treatment adherence and health outcomes because doctors mostly ended up prescribing more and describing less to the patient. Zirwas and Holder (2009), observed that physicians could use verbal education, written information (for example, handouts, magazine articles), group-based learning, audio and video tapes, computer-assisted education and the Internet to educate patients about diseases.

CONCLUSION

The data pertaining to 17 (Seventeen) items of the antecedents scale were reduced using exploratory factor analysis, which resulted in grouping these variables into four factors, namely 'hospitality', 'patient care and concern', 'amenities' and 'infrastructure'. The variables that grouped under each factor were as follows:

Factor 1

Hospitality and Cordiality: Courtesy of nurses, registration and other formalities, courtesy of staff at various counters and visitors' policy

Factor 2

Patient Care and Concern: Health instructions and dietary counseling, quality of interaction of doctors, discussion of problem with patient or bystander and technical expertise.

Factor 3

Amenities: Quality of canteen food, canteen facilities and vehicle parking facilities

Factor 4

Technical Competence: Technical adequacy of medical infrastructure, for example, scanning, surgery, cleanliness of room, toilet, corridors and common spaces, medicine availability and dispersal, casualty (emergency room), operation theatre and ICU services (if applicable) and waiting time for getting services, for example, X-ray, scanning, lab tests.

RECOMMENDATIONS

Hospitals looking for better patient satisfaction should motivate inpatients and bystanders to express their dissatisfaction, so that there are enough opportunities to recognize the flaws in their service. As a matter of future research, findings of this paper may be applied in various other service sectors, especially those with higher credence properties. Other than the antecedents pertaining to the hospital setting studied here, future research may also include variables pertaining to personal and social factors of inpatients.

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Paper received for publication on April 2015

Paper accepted for publication on July 2016