CUSTOMER EXPERIENCE IN DIAGNOSTIC CENTRES: AN EMPIRICAL STUDY

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ABSTRACT

Purpose: This paper attempts to find out the factors affecting customers' experience in diagnostic centres and to measure the level of overall customers' experience with various health diagnostic centres to identify the major areas of concern for the service providers.

Design/methodology/approach:The nature of the research is descriptive. The data is collected fromprimary sources using structured questionnaire from the individuals who had already received diagnostic services from diagnostic centres. The customer was either the patient himself/herself or his/her attendant in case of minor and dependent person. Further, the customer database of at least three months was studied and judgement sampling was undertaken. The SPSS software was used to edit, code and analyse the primary data. Descriptive statistics along with inferential statistical tool was used for analysis. Factor analysis was done to club the components.

Findings: Thestudy showed moderately favourable level of customer experience among the customers of the diagnostic centres inGuwahati. The factors affecting customers' experience in a diagnostic centre are availability of requisite infrastructure, comfort of dealing, empathetic treatment to patients, ancillary services and accessibility and availability of services.

Originality: The present study opens new vistas from ethical and social angles apart from the managerial points raised. It also underlines how the analyses of customers' experience act as a road map for the improvement of healthcare services.

Research limitations/implications:Empirical evidenceof this research work will help the researchers to contribute further after exploring the future scope. Future researches in other organizations can be done for varied results. The customer experience can be tapped for future implications.

Practical implications: The findings of the research work will serve as a yardstick and guide for diagnostic centres and others in the same sector for incorporating analytical tools in customer experience management which can help the managers to look carefully into processes to assess evidence and yield proper results.

Social implications: A thorough understanding of the customers' experience is presented which will showcase their preferences. The managerial recommendations point towards better resource allocation for the improvement of customer experience. The research will serve for a better healthcare system with increased focus on customer experience. The patients will fare better when these implications are applied.

Keywords: Customer Experience, Diagnostic Centres, Healthcare.

INTRODUCTION

The timely diagnosis of diseases helps in prevention or in proper treatment of the illness. The patients or their caretakers who are the buyers of health care service screen the various available options to select the best possible diagnostic service. The aim of the health care system is to provide the service stimely, safely, efficiently with equity so that it can be patient centric and friendly (Worlu et al., 2016). In healthcare organizations, being customer centric is the need of the hour to improve customer experience which helps in redesigning and expanding the business processes (Schiavone et al., 2020). The delight of the customer along with their loyalty is linked to positive experience (Pine & Gilmore, 1999; Choudhury et al., 2016). The nature of healthcare services falls in credence good category because its utility is difficult to access. Thus, the patient is in a dilemma while determining the quality of treatment received (Arrow, 1978) in spite of being the target while implementing the services (Georgiadou & Maditinos, 2017). It also highlights a crucial factor which determines the health care system quality is the experience of the patient. Petersen (1988) opined that experiences of the patient are more important even though the patient might be right or wrong.

Farhana et al. (2021) says that healthcare service providers can no longer ignore to provide better customer experience because of the severe competition and globalization. These have provided various options to the customers and they are more aware of the issues relating to healthcare. This has created the demand for a better customer experience in this sector and thus, it has caught the attention of the service industry, particularly in developed countries (Worlu et al., 2016); Caru & Cova (2003); Choudhury et al. (2016) explore customer experience from a marketing perspective as the aim of the organization is to provide memorable experience to the customers. The customer experience is multidimensional because it includes in it many components like sensory, relational or cognitive etc. (Gentile et al., 2007). User-experience in healthcare diagnosis journey from parking to receiving diagnostic reports involves of number of different interactions and experiences (Garg et al., 2010; Berry et al., 2002).

Modern Day Healthcare and Diagnostics

The usage of big data analytics and many innovations especially in the healthcare industry such as digital health has opened up newer opportunities to gain insights (Holmlund et al., 2020; Zainuddin et al., 2013; Skaria et al., 2020). Usage of novel artificial intelligence technologies has been advocated for hospitals in creating experiential value. The modern medicine relies on clinical laboratory for patient diagnosis and care. Around 70% of the medical decisions are based on laboratory results. The reliance on diagnostics is ever increasing day by day for effective decisions. In the unprecedented COVID-19 scenario, the spread rate is quite high and so the reliance on diagnostics and testing is quite evident for making life saving recommendations (Hosseinifard et al., 2021). In healthcare industry, the gradual shift from customer care to customer experience needs to be tapped (Omachonu & Einspruch, 2010; Iyawa et al., 2016). Thus, the customer experience in the health care services, especially in diagnostics is one such lesser explored area and needs to be probed by the research community and institutions. This is evident by the dearth in literature related to patient experience in health care and diagnostics centres quality (Swain & Kar, 2018) as most of the researches miss one dimension or the other while studying and measuring customer experience in healthcare.

Thus, this research work attempts to lessen this gap by investigating the experiences of customers availing diagnostic services at various clinics and hospitals. It is therefore,

imperative to know the level of experience of the customers of diagnostic centres and the factors that influence it. Using the data collected from the customers of the diagnostic centres in Guwahati, the current study attempts to understand the various dimensions of customers' experience in the field of diagnostics. This will be important to understand the decision-making dynamics of customers with respect to their visit to the diagnostic labs. This study also helps the service providers to design their product as well as marketing strategy in such a way to provide most favourable customer experience.

The objectives of the current research are twofold. The first objective measures the customer experience level of healthcare service provider and secondly, to identify the factors affecting their experience in this respect. The present study aims to find answers to these research questions:

1. What is the degree of overall customer experience with respect to diagnostic services in the Guwahati?
2. What are the factors that affect their experiences?
3. Are these factors equally important?
4. How these factors collectively impact the customer experience?

Thus, the goal of this research work is to suggest the diagnostic centres. The suggestion will be in the line of analysing and reacting to the needs of the patients in a proactive manner. It is very crucial in the current times because it will lead to the development and proper implementation of marketing strategies. It is obvious that a positive customer perception formed by positive experience will lead to betterment in organizations.

The research work now onwards is organised as discussed here. The Section 2 lists the literature review done in this area till date. The methodology adopted is discussed in Section 3. In Section 4, the data analysis and result is described. The next section is about the Discussion followed by implications discussed in Section 6. The limitations of the research work are mentioned in Section 7 and finally Section 8 provides the conclusion.

LITERATURE REVIEW

The very difference of health services from other sectors is that the physical presence of the customer is a must as he or she is the consumer himself or herself. Therefore, the customer experience hugely depends on the service provider and customer interface (Garg et al., 2010). Health services fall in such category of services which are quite time taking and differ from one patient to other. But best health services should be provided to the patients and thus the customer experience is quite vital in this case (Farhana et al., 2021). The basic purpose of trying to understand the customer experience is to cater to the change evident from customer experience to experiential marketing which is a strategy for business growth and positioning (Garg et al., 2010). The ever rising expectation of consumers in the health care sector should be met by the service providers. The quality needs to be improved because the patients have either kind of experience, positive or negative (Carbone & Haeckel, 1994). Baranova (2016); Worlu et al. (2016) concluded that good and efficient delivery of customer experience acts as a benchmark and provides a competitive advantage leading to increased customer loyalty. Furthermore, understanding patient perceptions based on their experiences helps in improving the overall performance of the health care service providers and enhances the clinical outcome (Tajpour et al., 2020). The increasing rate of change in service delivery for consumers is forcing the organizations to think in this direction and implement by developing and strengthening their customer experience strategies. There can be mismatch between the expectations and judgment of the consumer with what is designed by the provider and so the seller's perspective shouldn't be considered as final and sufficient (Goldstein et al., 2002).

The literature in the area of customer experience showcases the 'customer journey' as the overall process the customer undergoes including the one to one encounter between the organization and the consumer (Voss et al., 2008). It is very evident that customer experience and interactions during the delivery of the service is very crucial while designing the service and delivering it after improvement (Baranova, 2016). Zolkiewski et al. (2017) proposed a consumer experience framework from a strategic point of view for healthcare organizations and Bolton et al. (2018) identified better customer experience for B2C and B2B markets.

Sub areas/ Dimensions and functions in Healthcare

There are certain researches which highlight the importance of functional capabilities such as behaviour of nurses, decoration, patient interaction, etc. in healthcare areas (Barnes & Mowatt, 1986; Crane & Lynch, 1988; Brown & Swartz, 1989). Worlu et al. (2016) presents three dimensions of Customer Experience Management (CEM) which are mechanic clues, humanic clues and functional clues. The significant relationship between customer experience and their satisfaction has been explored by Borishade et al. (2018) and found to be positively related. Santouridia & Trivellas (2010) confirmed this and found that these are very closely related. Adding to the research, Borishade (2017) added that buyers' psychological characteristics have a moderating effect on customer experience and their loyalty. In another research on hospital by Farhana et al. (2021), it was found that sensory experiences of the customer, their intellectual, affective and behavioural experiences have a positive impact on the equity dimensions of the customer like brand equity, value equity and relationship equity. To enhance this experience, employees have to cater to the unique needs of the patients and engage them. In a detailed study done by categories and sub-categories of experience quality in healthcare were identified and suggesting a relationship between quality of experience and customers loyalty behaviour. For the healthcare service design proposed a model which can lead to excellent service quality by value creation revealed that two dimensions namely moments of truth and peace of mind and discussed how their customers highly value them as part of their experience.

Literature Gap

Based on the review of literature, it is found that customers' experience in the context of healthcare industry have been studied extensively as standalone disciplines. However, the available literature in respect of healthcare industry is suffering from two limitations. One, the studies are old and customer experience is changing continuously with the changes in environment. Secondly, very few of the studies are conducted in India. Thirdly and most importantly, the studies are conducted on hospitals but not on diagnostic centres. In the healthcare sector, there is little study about the diagnostic centre. This study is expected to fill these gaps.

RESEARCH METHODOLOGY

The nature of the research is descriptive. The study is conducted using primary data collected using structured questionnaire from the individuals who had already received diagnostic services from diagnostic centres. Here the customer was either the patient himself/herself or his/her attendant in case of minor and dependent person. Further, on the basis of judgement sampling method (Ghauri & Gronhaug, 2010; Suri, 2011) we had not included all the customers in our study because it was considered to be logical as done similarly in certain researches on hospitals (Polater & Demirdogen, 2018). Only those customers who fit in the following three categories were taken into consideration: Repeat

customers; High value customers; High volume customers as done in few researches (Banasiewicz, 2004; Cui et al., 2015; Stangl et al., 2017). Repeat customers are those customers who had received at least three diagnostic services in the last three months. High value customers, for the purpose of our study, were those whose bill was more than Rs. 10,000. High volume customers were those who have got at least three diagnostic test in one go but the bill amount is less than Rs. 10,000. Moreover, seeing the unique nature of the industry, we anticipated that all the chosen customers would not be able to share the data with us; therefore, size of the sample was larger initially. The customer database of all the four centres of Apollo Clinic at Guwahati in the state of Assam, India for at least three months was studied. Guwahati was selected as the data collection centre because it's the biggest city and urban centre in North East India and the gateway to all other north-eastern states. It is well connected with the rest of India and a crucial business centre (Deka & Devi, 2017). Furthermore, only those customers were chosen who volunteered to participate in the survey after going through and understanding the information provided to them before commencement of study.

The initial section of the questionnaire asks for demographic information from the respondents while the latter part targets to capture and measure their experience. The respondents were asked to complete the questionnaires on a five-point scale indicating their levels of experience in respect of a particular aspect of diagnostic centre. Total 28 items were identified for scale construction for measuring customer experience level in diagnostic centres which were largely based on literature review, experts' opinion and own observation. The questionnaire was adopted from the work of Choudhury et al. (2016); Choudhury et al. (2016). The result of the pilot study was also considered. A copy of the questionnaire is given in appendix. The responses were taken on Likert scale where the responses had the range from '*very favourable experience*' to '*very unfavourable experience*'. A score of 5 was designated for the response of '*very favourable experience*'. Likewise, for the responses of '*favourable*', '*moderate*', '*unfavourable*', and '*very unfavourable experience*', the scores of 4, 3, 2, and 1 were assigned respectively.

The language in the questionnaire was kept easy and simple so that the respondents could read it easily, understand it quickly and fill the answers. The respondents were approached for their response irrespective of their gender. The secondary data was fetched from hospital service websites, journals and articles in newspaper. The sample size of the research was 321.

The primary data was then edited and coded in SPSS. The data analysis included descriptive and inferential statistics in which mean, median and frequency was computed. The reliability of the questionnaire was tested with the help of Cronbach's Alpha. Later, Factor analysis was performed for finding out the factors affecting customers' experience in diagnostic centres.

RESULTS

A reliability test of the scale was done and the Cronbach's Alpha coefficient was 0.908 for 28 items included in the research study. The high value of Cronbach's αindicates that the scale has a high reliability degree and there is a high correlation between the items and the items considered for the scale are actually measuring the latent variable (Field, 2009). The list of items considered in the scale along with their individual mean and standard deviation is depicted in Table 1.

Table 1 ITEM STATISTICS	Mean	Std. Deviation
Giving intimation about the time of next check up	3.75	0.967
Not disclosing your personal information to others	3.64	1.020
Convenience of paying the requisite fees	3.63	0.928
Comfort with the way some personal information are asked	3.57	0.912
Getting help while filling up some forms	3.53	0.926
Comfort with the type of document sought	3.52	0.904
Explaining the process of doing diagnosis	3.51	0.904
Sitting facility	3.5	1.010
Clarification of doubts raised related to the diagnosis	3.49	0.784
Availability of the personnel at the diagnostic centre	3.49	0.870
Giving information about the time of delivery of report	3.49	0.937
Giving individual attention	3.48	0.881
To suggest the most suitable type of diagnosis	3.47	0.744
Ambience	3.44	0.913
To tell exactly when the services will be performed	3.43	0.781
To provide necessary help after diagnosis is done	3.42	0.955
Eager to solve problems at an earliest.	3.38	0.992
To suggest the most affordable way of diagnosis	3.37	0.824
To keep accurate records of previous reports	3.37	0.883
Waiting area	3.37	1.011
Willingness to provide service do not vary with each counter	3.34	0.819
Time required to get the report	3.29	0.935
Timely delivery of report	3.29	0.945
To keep you informed about any regulatory aspect	3.25	1.018
Parking facility	3.13	1.116
Help in getting insurance settlement	3.04	1.014
Online delivery of report	2.91	1.035
To give occasional gifts like diaries, calendars etc.	2.78	1.168

Source: Compiled from questionnaire.

The scale consisted of 28 items and the maximum possible score in the scale computes to 140 (28×5), whereas it is 28 (28×1) in case of minimum score. So, the difference or interval in the range comes to be 112 [140(max)-28(min)]. If 112 are divided by 5, a result of 22.4 is obtained. This 22.4 is added to 28 (lowest possible score), then the range of 28-50.4 was achieved. In a similar way, rest of the intervals are obtained corresponding to many levels of customer experience. Singh (2012); Singh & Bhattacharjee (2019); Singh et al. (2020b); Singh et al. (2021) have also adopted similar kind of scaling to measure latent variables. The interpretations obtained are given in Table 2.

Table 2 CUSTOMER EXPERIENCE SCORE INTERPRETATION	
Customer experience score interval	**Interpretation**
28.0-50.4	Very unfavourable experience

50.4-72.8	Unfavourable experience
72.8-95.2	Moderate experience
95.2-117.6	Favourable experience
117.6-140.0	Very favourable experience

Source: Authors' compilation.

Overall level of customer experience in diagnostic centre is depicted in Table 3 below.

Table 3
OVERALL EXPERIENCE

Levels of customer experience	Frequency	Percent
Very unfavourable Experience	3	1.0
Unfavourable Experience	35	11.0
Neutral	103	32.0
Favourable experience	157	49.0
Very Favourable experience	23	7.0
Total	321	100.0
Mean		94.8800
Standard Deviation		308.693

Source: Compiled from questionnaire.

It is observed above that the mean score is 94.88 which falls under moderate experience as explained in Table 2. Thus, it can be inferred that customers of the diagnostic centre have "*moderate experience*".

Having understood the overall customer experience, the next question was to discover and then understand the factors or variables which affect the experience of customers in diagnostic centres. To know the answer to this question, principal component analysis needs to be performed. The data suitability and sample size adequacy also need to be checked before proceeding for factor analysis. To achieve this, Keiser-Meyer-Olkin (KMO) and Bartlett tests (1954) are performed. This ensures that the results of factor analysis are reliable (Kaiser, 1974). The test values of KMO and Bartlett range from 0 to 1 (Field, 2009). According to Hutcheson & Sofroniou (1999) and Field (2009), the range and the sample adequacy along with the interpretation are - Below 0.5 is unacceptable, 05. to 0.7 is mediocre, 0.7 to 0.8 is good, 0.8 to 0.9 is great and above 0.9 is superb. The present research has the value of KMO to be above 0.5, thus it is adequate. Table 4 depicts the p-value to be 0.000 (>0.05). This can be a confirmation for the data appropriateness to proceed for factor analysis.

Table 4
KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.885
Bartlett's Test of Sphericity	Approx. Chi-Square	2025.404
	Df	378
	Sig.	0.000

Source: Compiled from questionnaire.

Table 5
TOTAL VARIANCE EXPLAINED

Compone nt	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Varianc e	Cumulative %	Total	% of Variance	Cumulative %
1	12.802	45.721	45.721	5.056	18.058	8.058
2	2.426	8.663	54.384	4.130	14.750	32.807

3	1.690	6.034	60.418	4.083	14.582	47.389
4	1.361	4.862	65.281	3.398	12.135	59.524
5	1.022	3.651	68.932	2.634	9.408	68.932
6	0.871	3.109	72.041			
7	0.841	3.002	75.043			
8	0.723	2.584	77.627			
9	0.681	2.432	80.059			
10	0.572	2.041	82.100			
11	0.550	1.964	84.064			
12	0.492	1.756	85.820			
13	0.438	1.565	87.385			
14	0.422	1.507	88.892			
15	.376	1.343	90.234			
16	0.354	1.264	91.499			
17	0.317	1.132	92.631			
18	0.309	1.103	93.733			
19	0.274	0.979	94.712			
20	0.265	0.948	95.660			
21	0.226	0.808	96.468			
22	0.204	0.727	97.195			
23	0.180	0.643	97.837			
24	0.158	0.563	98.400			
25	0.154	0.549	98.949			
26	0.116	0.416	99.365			
27	0.108	0.387	99.752			
28	0.070	0.248	100.000			
Extraction Method: Principal Component Analysis.						

Source: Compiled from questionnaire.

Table 5 depicts the extraction of the actual factors. The labelled "*Rotation Sums of Squared Loadings*" includes only such factors that meet the extraction method criteria. In the present research, the factors which have the Eigen value >1 are five in number. The *"% of variance"* column describes the overall variability. Here, 68.93% explanation of the total variability is done by the first 5 factors. This means that there are 5 components after the Principal Component Analysis.

Table 6 ROTATED COMPONENT MATRIX[A]					
	Component				
	1	2	3	4	5
Ambience	0.806	0.225	0.188	0.172	0.119
Waiting area	0.791	0.097	0.218	0.138	0.307
Sitting facility	0.733	0.069	0.252	0.112	0.282
Willingness to provide service do not vary with each counter	0.667	0.390	0.319	0.193	0-.030
Giving individual attention	0.637	0.302	0.250	.174	0.096
Parking facility	0.570	0.110	0.256	0.466	0.148

To tell exactly when the services will be performed	0.552	0.550	0.068	0.165	0.145
To keep accurate records of previous reports	0.537	0.253	0.135	0.351	0.196
To keep you informed about any regulatory aspect	0.496	0.392	0.224	0.339	0.198
Getting help while filling up some forms	0.323	0.718	0.176	0.120	0.179
Comfort with the type of document sought	0.247	0.708	0.237	0.223	0.316
Comfort with the way some personal information are asked	0.102	0.700	0.239	0.313	0.297
To provide necessary help after diagnosis is done	0.181	0.595	0.303	0.409	0.147
Giving Intimation about the time of next check up	0.212	0.563	0.394	-0.062	0.343
Eager to solve problems at an earliest.	0.445	0.485	0.230	0.371	-.0075
Clarification of doubts raised related to the diagnosis	0.210	0.123	0.798	-.004	0.209
Explaining the process of doing diagnosis	0.178	0.223	0.735	0.246	0.053
To suggest the most suitable type of diagnosis	0.205	0.217	0.715	0.076	0.066
To suggest the most affordable way of diagnosis	0.232	0.058	0.712	0.328	-0.182
Not disclosing your personal information to others	0.106	0.422	0.587	-.270	0.146
Availability of the personnel at the diagnostic center	0.377	0.149	0.543	0.004	0.338
Convenience of paying the requisite fees	0.341	0.446	0.495	-0.067	0.409
To give occasional gifts like diaries, calendars etc.	0.246	0.090	0.021	0.838	-0.051
Online delivery of report	0.159	0.139	0.053	0.772	0.295
Help in getting insurance settlement	0.233	0.275	0.054	0.696	0.308
Giving information about the time of delivery of report	0.233	0.367	-0.015	0.121	0.761
Timely delivery of report	0.251	0.238	0.284	0.343	0.677
Time required to get the report	0.281	0.260	0.152	0.387	0.585
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 8 iterations.					

Source: Compiled from questionnaire.

Table 6 shows the rotated factor loadings. It represents the weight of the variables foreach component along with the explanation of the correlation between the components and the variables. This also identifies the items that can be grouped under one group and for which one common nomenclature is to be used and thus, total factors can be reduced. At last, the final components located are presented in Table 7.

Table 7 **ITEMS INCLUDED**		
Component	**Items included**	**Name of Component**
1	• Ambience • Waiting area • Sitting facility • Willingness to provide service do not vary with each counter • Giving individual attention • Parking facility • Tell exactly when the services will be performed • Keep accurate records of previous reports • Keep you informed about regulatory aspect	Requisite infrastructure
2	• Getting help while filling up some forms • Comfort with the type of document sought • Comfort with the way some personal information are asked • Provide necessary help after diagnosis is done • Giving intimation about the time of next check-up • Eager to solve problems at an earliest	Comfort of dealing
	• Clarification of doubts raised related to the	

3	diagnosis • Explaining the process of diagnosis • Suggest the most suitable type of diagnosis • Suggest the most affordable way of diagnosis • Not disclosing your personal information to others • Availability of the personnel at the diagnostic centre • Convenience of paying the requisite fees	Empathetic treatment
4	• Give occasional gifts like diaries, calendars, etc. • Online delivery of report • Help in getting insurance settlement	Ancillary services
5	• Giving information about the time of delivery of report • Timely delivery of report • Time required to get the report	Accessibility and availability

Source: Compiled from questionnaire.

DISCUSSION

The study showed moderate level of customer experience among the customers of the diagnostic centres. It also unearths the top items contributing to favorable customer experience are identified as "*giving intimation about the time of next check up", "not disclosing personal information to others*", and "*convenience of paying the requisite fees*". Worlu et al. (2016) explains the behavior of the consumers in a health facility. The consumers are mostly unclear regarding their safety and well-beingleading to fear. Therefore, health seekers are very anxious to have their privacy protected (Fox, 2000). Patients look for supportive and helping behavior which includes being caring and attentive (Naidu, 2009). Tucker (2002) found that the degree, to which the patient is heard, provided with understandable and relevant information, given enough time during consultation are significant. The topmost reasons responsible for receiving unfavorable customer experience are "*help in getting insurance settlement*", "*online delivery of report*", and "*receiving occasional gifts like diaries, calendars, etc.*". From the consumers' perspective, it is very crucial to have clarity on some aspects of the service or product during the point of sale (Jain et al., 2014). Related to this is the role of insurers because they administer and carve a business based on the benefits plans to the customers who are patients (Vargas et al., 2012). Table 1 gives us the 5 topmost factors with mean value 3.5 and above impacting experience. It would be useful for the managers to focus on the areas of concern.

Finally, our research has also helped us to discover the factors which affect the experience of customers in diagnostic centres which are broadly classified as '*requisite infrastructure*', '*comfort of dealing*', '*empathetic treatment*', '*Ancillary services*', '*Accessibility and availability*' (Table 7). This categorization would further make the task of experience management convenient and effective. Johnston & Kong (2011) emphasized that among the factors such as value for money, reliability, problem solving etc., reliability is the most important. The emotional aspects include assurance, trust and care. The access to diagnostic facilities relates to its availability at the time of requirement and the meetings between patient and physician (Turner & Pol, 1995). Organizations need to gain novel insights from analysis of such experiences along with prior managers' knowledge (Lam et al., 2017).

IMPLICATION

The contribution of this research to the pre-existing knowledge in the domain of customer experience is by looking into the level of experiences of customers in diagnostic centers, as well as the factors affecting customer experience in diagnostic center. This research also sought to address existing research gaps. The findings of this study can be used by various stakeholders in multiple numbers of ways. The results have a number of managerial, policy and theoretical implications.

Managerial Implication

The delivery of an extraordinary and exceptional experience creates a competitive edge for an organization (Pine & Gilmore, 1999). There is an opportunity to convert the negative experience of the customers into positive ones adding to the overall productivity (Berry et al., 2002). So, it's quite obvious for the marketers to think in the direction of improving the customer experience (Garg et al., 2010) in this ever-increasing competition. So, identifying these factors and implementing them is very crucial in transforming the healthcare delivery system (Tajpour et al., 2020). The process to improve quality can use the customer experience management combined with technology (Tarmizi et al., 2021). So far as giving occasional gift to customers is concerned as one of the sources of unfavorable experience, the managers have to see that this would increase the cost to the organization which needs to be critically analyzed by the top management before taking final decision. A diagnostic centre should use modern technology to keep the data base of the customers and keep the customers informed about its various procedures and considering the fact that people are gradually becoming familiar with the use of Smart Phone and other devices (Singh et al., 2020a), this step will help in building better understanding among the customers about the diagnostic center.

Policy Implications

It is very evident that the policy makers need to frame and redesign the health financing reforms to target socio-economic population (Wasike, 2020). However, in this health care sector, the financial problem of expenditure is an issue for the households working in informal sector without insurance (Gumber & Kulkarni, 2000; Roy et al., 2017). This is important because one of the sources of generating unfavourable customer experience is the help extended in getting insurance claim. The policy makers should also frame regulations where requirement of having minimum tangible facilities (Choudhury et al., 2016) has to be ensured by any organization intending to run a diagnostic center.

This study opens up new vistas of empirical research in other geographic regions which, consequently, would facilitate retaining and building customer base in extremely sensitive service sectors such as health care. Drosos et al. (2015) discusses how patients contribute in qualitative improvement by providing data. This data needs to be evaluated in an efficient manner for patterns and insights.

Academic Contributions

This research has undertaken a systematic and comprehensive evaluation of a customer experience of the service. There are numerous researchers which have worked on the application in different industries for enhancement and assessment of the customers' experiences but not in diagnostic centres. This paper has attempted to help diagnostic centres to understand and apply the customer experiences to improve their revenues. The intent was

to make thorough investigation of customer experience which would further provide guidelines for improvement. The research work provides valuable contributions and adds to the ever-growing literature in this area. It has identified factors influencing customer experience with respect to diagnostic centres. Secondly, it has provided consistent and reliable results arising out of empirical analysis to be followed in upcoming researches in the area of customer experience Baranova (2016). Thirdly, a model has been developed to measure the customer experience with respect to the services of a diagnostic centre, which is first of its kind. In addition to the academic contributions, there are also certain contributions for practitioners as this study identifies the importance of customer experience. Secondly, it provides a blueprint or road map to be used by organisations as a base for customer experiences improvement. This will lead to a better and increased customer base (Garg et al., 2010).

A competitive advantage can be gained if this is worked upon efficiently and effectively. This study stresses upon the shift to focussing on service delivery system designs rather than on traditional issues of service.

Limitations of the Study

This study can be used as a base for researching in the area customer experience. Depending on the study, specific models can be developed as per the conditions. The findings can be tested in more organizations.

Secondly, the research looked at the problem from the Indian users' perspective. Thirdly, the study has been conducted by taking only 28 factors into consideration with respect to customers' experience. There are other factors not included in the present study that could have significant impacts on the customers' experience. Future research can consider carrying out a comparative study that investigates the customers' experience for different types and localities of customers. The authors have used the cross-sectional data whereas longitudinal study could be done for analysing the same problem using data from time frames. The study has not included mediation and moderation effect of factors. Authors encourage aspiring researchers to analyze mediation and moderation effect of factors in the future research. Lastly, many related topics like role of service engineers or other stakeholders in the process can be explored in Appendix A.

CONCLUSION

The intent was to understand the customer experience during service encounter. This will provide valuable insights regarding customer experience. Adding to the research by where the customer interaction with the organization was studied in the light of the services offered, this research explores similar avenues and brings forth conclusion in the form of factors to be applied for better customer experience. Future research can use these specific results and to accurately evaluate in more detail the customer experience in all areas of the medical and health services and other research areas of customer experience.

The scientific methodology used can help other studies to apply it to various organizations and expand the work in the area of customer experience. Finally, diagnostic centres should start seeing the unfavourable experiences of customers, if any, as a service issue and try to convert them into positive experiences because most of the customer experiences may not be falling in the category of legal issue and customer may not be taking legal recourse but as a marketer this is very important to win customers' loyalty and remain competitive in this competitive world.

APPENDIX

1. Please give your response on a five-point scale with respect to the experience you have with your diagnostic centre that you visited last time. [5] indicate very good experience, [4] indicate good experience, [3] indicate moderate experience, [2] is bad experience and [1] is very bad experience. Please (√) the appropriate option.

Sl. No.	Particulars					
	Explaining the process of doing diagnosis	5	4	3	2	1
	Clarification of doubts raised related to the diagnosis	5	4	3	2	1
	To suggest the most affordable way of diagnosis	5	4	3	2	1
	To suggest the most suitable type of diagnosis					
	Availability of the personnel at the diagnostic centre	5	4	3	2	1
	Not disclosing your personal information to others	5	4	3	2	1
	Convenience of paying the requisite fees	5	4	3	2	1
	Time required to get the report	5	4	3	2	1
	To provide necessary help after diagnosis is done	5	4	3	2	1
	Comfort with the way some personal information are asked	5	4	3	2	1
	Comfort with the type of document sought	5	4	3	2	1
	Getting help while filling up some forms	5	4	3	2	1
	Giving Intimation about the time of next check up	5	4	3	2	1
	Giving information about the time of delivery of report	5	4	3	2	1
	Online delivery of report	5	4	3	2	1
	Help in getting insurance settlement	5	4	3	2	1
	Timely delivery of report	5	4	3	2	1
	To keep you informed about any regulatory aspect	5	4	3	2	1
	Eager to solve problems at an earliest.	5	4	3	2	1
	To give occasional gifts like diaries, calendars etc.	5	4	3	2	1
	To keep accurate records of previous reports	5	4	3	2	1
	To tell exactly when the services will be performed	5	4	3	2	1
	Willingness to provide service do not vary with each counter	5	4	3	2	1
	giving individual attention	5	4	3	2	1
	Parking facility	5	4	3	2	1
	Waiting area	5	4	3	2	1
	Sitting facility	5	4	3	2	1
	Ambience	5	4	3	2	1

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