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### AN EMPIRICAL STUDY OF PERCEPTION ABOUT THE SERVICE QUALITY IN SELECTED PUBLIC AND PRIVATE HOSPITALS OF THE RAIPUR CITY

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#### Abstract

When we talk about the service quality of any public and private hospital we mean to say the quality of the services provided by the hospitals. The quality of any hospital is directly proportional to the quality of the services provided. If the quality of the services provided in hospitals is good, the customers are happy and satisfied and if the quality of the services provided by the hospitals is unsatisfactory, the customers are unhappy. This results in retarded growth of an organization, less profitability, bad marketing, and poor treatment and care. This paper will discuss the analysis of the perception parameter on service quality (SQ) of selected public and private hospitals in Raipur city. The dimensions of the perception will be studied here, the reliability of the dimensions, followed by the exploratory factor analysis and then confirming or retaining the final factors by confirmatory factor analysis. The data used in the analysis is the primary data and it was collected from the three stakeholders i.e, in-patients, OPD patients (Follow-up patients), and the attendants of the patients.

**Key Words**: Perception, Service quality, Public and Private Hospitals,

#### Introduction

We all know how health is important and it is one of the basic rights of every individual. When it comes to hospitals both public and private have the responsibility to deliver the best services to the patients to build a healthy nation. The Perception of the patients and their attendants plays an important role as far as the services of the hospitals are concerned. The perception perceived by the patient or their attendants vary from individual to individual. In this study, the

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researcher has used the most common tool to study the perception of the patients and their attendants which is the SERVQUAL model proposed by Parsuraman, Zeithamal & Berry 1985, 1988. The major five dimensions of this model viz. Tangibility, Reliability, Responsiveness, Assurance & empathy were used. As per past researchers, this is the most common tool or scale to calculate the service quality of hospitals.

#### **Literature Review**

**Porkodi and Haque (2011)**, found that most Indian hospitals these days can provide the best of services, because of improved technology and trained human resources, because in India the overall transactions about health services have increased and it has led to the development of the economy positively. Various studies have shown that safety and protection related to medical services are good in most Indian hospitals.

**Sandhyaduhita** (2016) SERVQUAL tried to assess the service hospitals in Indonesia, which revealed that the quality levels were significantly on the higher side which can be explained that the service quality prevailing in Indonesia did not match with the perception

**Parthiban & Jothimurugan** (2016), attempted to analyze and perception of healthcare in Madurai City. It suggested that key elements of service quality function be enhanced where the gap is wider. The above study prevailed on the aspects of Premises and Employees of the hospital. This service quality gap could be reduced by improving the most technologically advanced equipment; and materials associated with the services according to the expectations of the patients.

**Nyandwe et al. (2017)** researched in the Republic of Congo about the service quality prevailing in public hospitals and revealed that the perceptions of people were varying depending on their socioeconomic status. Educated, enlightened and upper-class people were better satisfied than the other group of people.

#### **Research Methodology**

#### **Purpose**

The purpose of this paper is to study the perception of patients and attendants about the service quality in selected public and private hospitals of Raipur city.

#### **Objectives of the Study**

- 1.To identify the determinants/factors of perception in selected public and private hospitals in Raipur city.
- 2. To study the perception regarding the service quality of indoor patients in selected public and private hospitals in Raipur city.

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- 3.To study the perception regarding the service quality for OPD patients (Follow-ups) in selected public and private hospitals in Raipur city.
- 4.To study the perception regarding the service quality for attendants in selected public and private hospitals in Raipur city.

#### **Population**

The population of the study constitutes the indoor patients, attendants, and outdoor patients

(Follow-up patients) of two major public and two major private hospitals in Raipur city. Sample Area & Sample Size and Hospitals taken for study purposes

The study has been conducted at Raipur city of Chhattisgarh. The total sample size (N) is 500.

Hospitals	Name of the Hospital	Total
Public	Dr. Bhim Rao Ambedkar Memorial Hospital, Regional Cancer Centre, Raipur.	125
	AIIMS, Raipur.	125
	TOTAL (A)	250
	Ramakrishna Care Hospital, Raipur.	125
Private		
	Narayana Hridulaya, MMI hospital, Raipur.	125
	TOTAL (B)	250
	GRAND TOTAL (A+B)	500

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#### **Results & Discussion**

Table: 1 Reliability of Dimension of Perception

SI.NO	Perception factors	Items	Cronbach's alpha value
1.	Tangibility	7	.862
2.	Reliability	4	.894
3.	Assurance	3	.889
4.	Empathy	4	.892
5.	Responsiveness	3	.870

Cronbach's Alpha	N of items
.939	21

The reliability of is .939 for 21 items that are significant and fit for further analysis.

the perception variable

#### **FACTOR ANALYSES**

1. Exploratory Factor Analysis EFA

The KMO value is more than 0.6 suggesting that there is a considerable amount of intercorrelations among the variables and it is appropriate to run a factor analysis.

Table: 2 KMO values and Bartlett's test significance

	.869
Kaiser Meyer- Olkin Measure of Sampling Adequacy	
Bartlett's Test of Sphericity Approx. Chi-Square	4818.676
Df	91
Sig.	.000

Table:3 Communalities of Items of Perception

		<u> </u>
	Initial	Extraction
TAN 1	1,000	.816
TAN 2	1,000	.859
TAN 3	1,000	.771
RSD 8	1,000	.754
RSD 9	1,000	.812
RSD 10	1,000	.788
RSD 11	1,000	.714
ESD 15	1,000	.682
ESD 16	1,000	.841
ESD 17	1,000	.784
ESD 18	1,000	.731
RP 19	1,000	.792
RP 20	1,000	.847
RP 21	1,000	.784

Here, for 14 items of perception, the communalities are greater than .5 stating that all the 14items explain at least 50 percent of the variation in the final factor solution.

Table: 4 Eigenvalue and Total Variance Explained

Co mponent	Initial Eigenvalues			_				Rotation Sums of Squared Loadings		
	T otal	% of Varia nce	Cu mulative %	T otal	% of Varia nce	Cu mulative %	T otal	% of Varia nce	Cu mulative %	
1	6 .862	4 9.013	49.0 13	6 .862	4 9.013	49.0 13	3 .047	2 1.767	21.7 67	
2	1 .917	1 3.695	62.7 08	1 .917	1 3.695	62.7 08	3 .029	2 1.638	43.4 05	
3	.157	8 .262	70.9 70	.157	8 .262	70.9 70	.540	1 8.144	61.5 50	
4	.040	7 .425	78.3 96	.040	7 .425	78.3 96	.358	1 6.846	78.3 96	
5	555	3 .968	82.3 64							
6	408	.916	85.2 80							
7	347	2 .476	87.7 56							
8		.240	89.9 96							
9	286	2 .044	92.0 40							
10	266	1 .900	93.9 40							

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11	261	.866	95.8 06			
12	216	.545	97.3 51			
13	197	.405	98.7 57			
14	174	.243	100. 000			

Figuren:1 Scree Plot for Perception

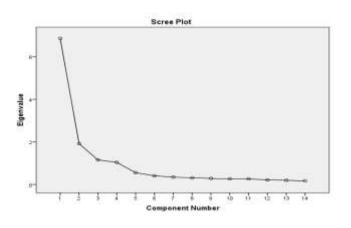


Table: 5 Rotated Component Matrix of Perception

	Component					
	1	2	3	4		
ESD 16	.856					
ESD 17	.807					
ESD 18	.798					
ESD 15	.721					

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i i	i i		i i	1
RSD 9		.847		
RSD 10		.804		
RSD 8		.779		
RSD 11		.758		
TAN 2			.891	
TAN 1			.832	
TAN 3			.814	
RP 20				.837
RP 19				.806
RP 21				.781

After applying EFA to the collected data, the results were achieved where items got reduced to 14 and got distributed in the following four factors.

#### 2. Confirmatory factor analysis (CFA)

The construct presented values that were within acceptable limits.Chi- square= 328.327, Degree of freedom= 71, Probability level= .000

Model	CMIN/DF	GFI	AGFI	NFI	TLI	RMSEA
Default model	4.624	.909	.866	.933	.931	.085
Independence model	53.543	.258	,144	.000	.000	.324

Table: 6 Fit indices of Perception variable

Note: "default model refers to the hypothesized model under testing while the independence model also known as the null model, is a model in which all correlations among variables are zero" (Bryne, 2009)

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Table: 7 Model Fit Measures

Measure	Estimate	Threshold	Interpretation
CMIN	328.327		
DF	DF 71.000		
CMIN/DF	4.624	Between 1 and 3	Acceptable
CFI	0.946	>0.95	Acceptable
SRMR	0.049	<0.08	Excellent
RMSEA	0.085	< 0.06	Excellent
PGFI	0.615	>0.8	Acceptable
PClose	0.610	>0.05	Excellent

\*Note: Hu and Bentler (1999, "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives") recommend combinations of measures. I prefer a combination of CFI>0.95 and SRMR<0.08. To further solidify evidence, add the RMSEA<0.06.

Figure: 2 Final Confirmatory factor Analysis (CFA) construct of perception.

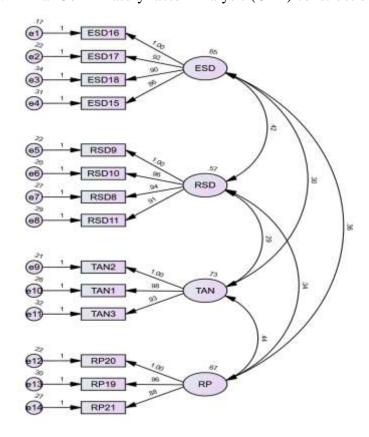


Table:8 Estimates and Significance Values of Customer Satisfaction Construct CFA output

			Estimate	S.E.	C.R.	P	Label
ESD16	<- 	1	1.000				
ESD17	<-	1	.919	.037	24.548	***	
ESD18	<-	1	.899	.042	21.486	***	
ESD15	<- 	1	.863	.040	21.475	***	

					V Oldfile 20 1554e 21 500		
			Estimate	S.E.	C.R.	P	Label
RSD9	<- 	2	1.000				
RSD10	<- 	2	.960	.042	23.081	***	
RSD8	<- 	2	.942	.044	21.482	***	
RSD11	<- 	2	.907	.044	20.619	***	
TAN2	<- 	3	1.000				
TAN1	<- 	3	.977	.042	23.419	***	
TAN3	<- 	3	.934	.042	22.065	***	
RP20	<- 	4	1.000				
RP19	<- 	4	.958	.045	21.267	***	
RP21	<-	4	.879	.042	21.077	***	

#### **Conclusion**

The perception perceived by the patients and their attendants is important as far as the quality of the services offered by the hospitals. If the services are met the patient or their attendants will be satisfied with the services and if the services are more than expected, the patients or their attendants will be delighted simultaneously, if the perceived service quality is poor the patient or their attendants will be dissatisfied. One of the important aspects is that the

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organization or the management of the hospitals should try to know or evaluate what are the needs of the patient or their attendants or what they want as far as services in the hospital are concerned. That can be done by taking regular feedback from them and evaluating the service quality using the SERVQUAL instrument.

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