

## **Effectiveness of Medical Services in Outpatient and In-Patient Department in a Multi-Speciality Hospital**

**By**

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### **Abstract**

The focus of this research study is to assess the satisfaction and perception of the patients on the quality level of medical services provided in the IPD (In-Patient Department) and OPD (Outpatient Department). Medical Services here refer to the objective and subjective facilities available. The survey method is employed to collect the data from 102 patients (51 from IPD and 51 from OPD) by adopting a stratified random sampling technique. The tool which was constructed by the researcher and used for the present study is to assess the level of satisfaction of the in-patients and outpatients and to study the objective and subjective facilities which influence the level of satisfaction of the in-patients and outpatients. The major objectives of the study are to find out the significant difference among the various subgroups of the sample selected namely Gender, Native, Qualification, Occupation, Marital status, Family size, and Age with respect to the subjective and objective facilities of IPD and OPD. Secondly, the aim is to find out the relationship between subjective and objective facilities of IPD and OPD and the level of satisfaction of patients. The major findings of the study indicate that there is a significant relationship between subjective facilities of IPD and OPD and the satisfaction of patients and objective facilities of IPD and OPD and the satisfaction of patients. Further, there exists a significant difference among various subgroups of the sample selected namely Gender, Native, Qualification, Occupation, Marital status, Family size, and Age with respect to the subjective and objective facilities of IPD and OPD.

**Keywords:** Effectiveness, IPD, OPD, Subjective facilities, Objective facilities, and Patient satisfaction.

### **Introduction**

#### ***Background of Study***

Around the world, the healthcare scenario is rapidly changing. One of the well-established yardsticks for evaluating the success of hospital treatments is patient satisfaction. As a result of their better socioeconomic status and easier access to medical treatments, hospital customers have high expectations and demands. A patient is a hospital's ultimate consumer. As a result, monitoring the views of patients to analyze the effectiveness of various health care services is a simple but significant way. The present study has resulted in drawing the conclusions which may be utilized in improving the satisfaction of patients in IPD and OPD in a Multi Speciality Hospital.

### ***Patient Satisfaction***

The dimensions of patient satisfaction include Subjective facilities and Objective facilities. The Subjective facilities are performance of doctors, service of nurses, patient involvement, privacy and the Objective facilities are the admission procedure, infrastructure, cleanliness, supply of food, supply of medicine, process of discharge of IPD. The Subjective facilities selected in the study are service of nurses, patient involvement, privacy and the Objective facilities like the admission procedure, infrastructure, cleanliness, supply of food, supply of medicine, process of discharge of OPD are selected.

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

1. To understand the effectiveness of Medical Services in IPD & OPD
2. To determine the level of patient's satisfaction and the factors which influence the satisfaction of in-patient medical services in the selected hospital
3. To determine the level of patient's satisfaction and the factors which influence the satisfaction of outpatient medical services in the selected hospital
4. To explore the extent to which satisfaction is a meaningful indicator of a patient's experience of health care services.

## **Review of Literature**

Nerea González et al (2005), in their paper titled "A survey on the development and validation of an inpatient satisfaction questionnaire," found that a positive relation between the degree of patient satisfaction and general assessments of the quality of healthcare serve as a proof of the questionnaire's capacity to correlate with other ideas. A useful tool for evaluating the quality of care could be the in-patient satisfaction survey. Zhihua Yan and Dai Wanand Li (2011), in their paper entitled, "A survey on patient satisfaction in two Chinese provinces: rural and urban differences" have done a cross-sectional survey which was conducted to assess satisfaction among patients attending county-level hospitals in China. Patient satisfaction was measured with 15 questions. The Perceived convenience was significantly associated with patient satisfaction among all participants. The new rural cooperative medical insurance scheme (NRCMIS) was related with the overall satisfaction among the rural residents. Among the rural patients age and income were significantly related to satisfaction. Rural residents had a great advantage in the implementation of NRCMIS. Future reform could be more effective by catering to the needs of each specific group for example low-income population and rural population were identified in this study. Parasuraman A, Berry LL, Zeithaml VA. (1991), in their paper entitled, "Understanding customer expectations of services", have discussed that the key in providing service to the customer is understanding and responding to their expectations. Andaleeb SS. (2001), in their paper entitled, "Service quality perceptions and patient satisfaction: a study of hospitals in a developing country", have discussed that the patient's perception about health care services provided is ignored by the health care providers in developing countries. A field survey has been conducted on the dimensions of perceived service quality that include responsiveness, assurance, communication, discipline. Significant correlations between the five dimensions and patient satisfaction were found using factor analysis and multiple regression.

## **Methodology**

The study was conducted for a period of two months among patients in OPD and IPD admitted in various wards in the hospital. Out of several outpatients and in-patients in the hospital, 51 in-patients and 51 outpatients were selected for the study. A sample of 102 patients was taken into consideration. The sampling procedure involved in this study is stratified random sampling. Descriptive research was the method employed in this investigation.

## Results

### *Correlation between Subjective facilities and Satisfaction of Patients in IPD*

H1: There is no significant relationship between the Subjective facilities in IPD and Satisfaction level among the In-patients.

**Table 1.1** *Correlation between Subjective facilities and Satisfaction of Patients in IPD*

Variable	N (Number of Patients)	df = 1 (N-1)	Calculated 'r' value	Table 'r' value		Level of Significance
				0.05	0.01	
Subjective facilities Satisfaction	51	50	0.949**	0.279	0.361	Significant

**Source:** Primary data

Table 1.1 briefs that there is a high positive significant relationship between the subjective facilities in IPD and the satisfaction level among the In-patients which clearly indicates that the patients of IPD are highly satisfied with the subjective facilities available in the hospital. Hence null hypothesis is rejected.

### *Correlation between Objective facilities and Satisfaction of Patients in IPD*

H2: There is no significant relationship between the Objective facilities in IPD and satisfaction level among the In-patients.

**Table 1.2** *Correlation between Objective facilities and Satisfaction of Patients in IPD*

Variable	N (Number of Patients)	df = 1 (N-1)	Calculated 'r' value	Table 'r' value		Level of Significance
				0.05	0.01	
Objective facilities satisfaction	51	50	0.897**	0.279	0.361	Significant

**Source:** Primary data

Table 1.2 reveals that there is a high positive significant relationship between the objective facilities in IPD and the satisfaction level among the In-patients clearly indicate that the patients of IPD are highly satisfied with the objective facilities available in the hospital. Hence the null hypothesis is rejected.

### *Correlation between Subjective facilities and Satisfaction of Patients in OPD*

H3: There is no significant relationship between the Subjective facilities in OPD and Satisfaction level among the Outpatients.

**Table 1.3** *Correlation between Subjective facilities and Satisfaction of Patients in OPD*

Variable	N (Number of Patients)	df = 1 (N-1)	Calculated 'r' value	Table 'r' value		Level of Significance
				0.05	0.01	
Subjective facilities Satisfaction	51	50	0.905**	0.279	0.361	Significant

**Source:** Primary data

Table 1.3 shows that there is a high positive significant relationship between the subjective facilities in OPD and the satisfaction level among the Outpatients clearly indicate that the patients of OPD are highly satisfied with the subjective facilities available in the hospital. Hence the null hypothesis is rejected.

**Correlation between Objective facilities and Satisfaction of Patients in OPD**

H4: There is no significant relationship between the Objective facilities in OPD and Satisfaction level among the Outpatients.

**Table 1.4** *Correlation between Objective facilities and Satisfaction of Patients in IPD*

Variable	N (Number of Patients)	df = 1 (N-1)	Calculated 'r' value	Table 'r' value		Level of Significance
				0.05	0.01	
Objective Facilities	51	50	0.790**	0.279	0.361	Significant
Satisfaction						

**Source:** Primary data

Table 1.4 the figure reveals that there is a high positive significant relationship between the objective facilities in OPD and the satisfaction level among the Outpatients which clearly indicates that the patients of OPD are highly satisfied with the objective facilities available in the hospital. Hence the null hypothesis is rejected.

**Mean and Standard deviation Scores of the Sample Subgroups with respect to Subjective facilities offered in the IPD.**

H5: There is no significant difference among the sample subgroups with respect to subjective facilities offered in the IPD.

**Table 1.5** *Comparison of Sample Subgroups with respect to Subjective facilities offered in the IPD.*

S.No	Sub Groups	Sample subgroups	N	Mean	Standard Deviation	'z' - value	Level of Significance
H5.1	Gender	Male	22	52.41	1.84	2.16**	0.05
		Female	29	51.62	3.13		
H5.2	Native	Rural	19	49.68	2.45	22.13**	0.05
		Urban	32	53.31	1.69		
H5.3	Qualification	Below School Level	13	49.12	1.04	2.84**	0.05
		Above School Level	38	51.74	3.00		
H5.4	Occupation	Employed	32	54.67	2.67	2.84**	0.05
		Unemployed	19	53.63	1.64		
H5.5	Marital Status	Married	40	51.80	2.98	5.11**	0.05
		Unmarried	11	52.54	0.52		
H5.6	Family Size	Less than 4 members	41	51.58	2.74	13.27**	0.05
		More than 4 members	10	50.50	1.58		
H5.7	Age	Below 45 Years	19	52.05	1.77	2.96**	0.05
		Above 45 Years	32	51.90	3.09		

**Source:** Primary data

Table 1.5 shows that there is a high positive significant relationship between the Subjective facilities in IPD with the subgroups which clearly indicates that the patients of IPD are highly satisfied with the Subjective facilities available in the hospital. Hence the null hypothesis is rejected.

***Mean and Standard deviation Scores of the Sample Subgroups with respect to Objective facilities offered in the IPD.***

H6 : There is no significant difference among the sample subgroups with respect to Objective facilities offered in the IPD.

**Table 1.6** Comparison of Sample Subgroups with respect to Objective facilities offered in the IPD.

S.No	Sub Groups	Sample subgroups	N	Mean	Standard Deviation	'z' – value	Level of Significance
H6.1	Gender	Male	22	55.57	3.44	17.29**	0.05
		Female	29	55.31	1.13		
H6.2	Native	Rural	19	54.42	1.26	3.57**	0.05
		Urban	32	54.44	3.15		
H6.3	Qualification	Below School Level	13	54.54	2.84	2.84**	0.05
		Above School Level	38	55.39	2.54		
H6.4	Occupation	Employed	32	55.16	1.78	20.44**	0.05
		Unemployed	19	53.21	3.28		
H6.5	Marital Status	Married	40	54.35	2.61	3.49**	0.05
		Unmarried	11	54.72	2.61		
H6.6	Family Size	Less than 4 members	41	54.65	2.75	11.88**	0.05
		More than 4 members	10	53.50	1.58		
H6.7	Age	Below 45 Years	19	54.74	2.07	2.17**	0.05
		Above 45 Years	32	54.25	2.87		

**Source:** Primary data

Table 1.6 reveals that there is a high positive significant relationship between the objective facilities in IPD with the subgroups which clearly indicates that the patients of IPD are highly satisfied with the objective facilities available in the hospital. Hence the null hypothesis is rejected.

***Mean and Standard deviation Scores of the Sample Subgroups with respect to Subjective facilities offered in the OPD.***

H7: There is no significant difference among the sample subgroups with respect to Subjective facilities offered in the OPD.

**Table 1.7** Comparison of Sample Subgroups with respect to Subjective facilities offered in the OPD

S.No	Sub Groups	Sample subgroups	N	Mean	Standard Deviation	'z' – value	Level of Significance
H7.1	Gender	Male	24	52.67	2.71	2.63**	0.05
		Female	27	51.19	2.45		
H7.2	Native	Rural	11	51.09	2.77	8.64**	0.05
		Urban	40	51.82	2.30		
H7.3	Qualification	Below School Level	16	52.94	1.73	6.47**	0.05
		Above School Level	35	53.40	2.88		
H7.4	Occupation	Employed	32	53.50	2.85	4.26**	0.05
		Unemployed	19	52.53	2.22		
H7.5	Marital Status	Married	38	51.63	2.74	7.87**	0.05
		Unmarried	13	52.61	2.33		
H7.6	Family Size	Less than 4 members	34	52.76	2.69	6.31**	0.05
		More than 4 members	17	52.18	2.64		
H7.7	Age	Below 45 Years	12	52.91	3.91	10.79**	0.05
		Above 45 Years	39	52.18	2.11		

**Source:** Primary data

Table 1.7 shows that there is a high positive significant relationship between the subjective facilities in OPD and the subgroups which clearly indicates that the patients of OPD are highly satisfied with the subjective facilities available in the hospital. Hence the null hypothesis is rejected.

***Mean and Standard deviation Scores of the Sample Subgroups with respect to Objective facilities offered in the OPD.***

H8 : There is no significant difference between the sample subgroups with respect to Objective facilities offered in the OPD

Table 1.8 shows that there is a high positive significant relationship between the objective facilities in OPD with the subgroups which clearly indicates that the patients of OPD are highly satisfied with the objective facilities available in the hospital. Hence the null hypothesis is rejected.



**Table 1.8** Comparison of Sample Subgroups with respect to Objective facilities offered in the OPD.

S.No	Sub Groups	Sample subgroups	N	Mean	Standard Deviation	'z' - value	Level of Significance
H8.1	Gender	Male	24	52.92	2.08	2.74**	0.05
		Female	27	51.19	2.45		
H8.2	Native	Rural	11	54.23	1.57	2.10**	0.05
		Urban	40	55.55	2.24		
H8.3	Qualification	Below School Level	16	53.19	2.10	2.15**	0.05
		Above School Level	35	54.20	2.15		
H8.4	Occupation	Employed	32	53.31	2.32	2.44**	0.05
		Unemployed	19	52.84	1.89		
H8.5	Marital Status	Married	38	52.31	2.30	2.38**	0.05
		Unmarried	13	53.08	1.66		
H8.6	Family Size	Less than 4 members	34	52.55	2.22	2.17**	0.05
		More than 4 members	17	52.41	2.12		
H8.7	Age	Below 45 Years	12	53.25	3.05	2.44**	0.05
		Above 45 Years	39	52.89	1.68		

Source: Primary data

## Discussion

There is a high positive significant relationship between the subjective and objective facilities in IPD & OPD and the satisfaction level among the In-patients and outpatients which clearly indicates that the patients are highly satisfied with the subjective and objective facilities available in the hospital, and also there is a significant difference among the sample subgroups with respect to the subjective and objective facilities offered in the IPD and the OPD. The recommendations given by the patients to increase their satisfaction level is the manpower required for shifting the patients using a wheelchair in OPD; therefore, the number of staff may be increased. The Patients expect more number of specialists for specific diseases like thyroid, diabetes, etc than available now. Waiting time in the Master Health Checkup is too lengthy. To reduce the hours of waiting time, the number of doctors required in the MHC may be increased. Most of the patients feel that the cost is high in the hospital; they will be very much satisfied if this is reduced. Further, the doctors should check the availability of prescribed medicines in the hospital pharmacy before writing the prescription for the patients. MHC patients feel that there should be a separate washroom. In general cases, sufficient time should be given to the patients to decide on the operations. Some of the doctors and their attitudes are highly appreciated by the patients. Some of the valuable suggestions obtained from the inpatients are that the quality of the rice provided should be enhanced because the patients feel that they have

digestion problems, availability of bread and milk during the nighttime, coffee and tea should be provided hot when being served, the quality of Tiffin items should be improved.

## **Conclusion**

Assessing the satisfaction of patients is a simple and cost-effective way for the evaluation of hospital services. The findings of the present study carried out for assessing the satisfaction of patients in the IPD and OPD reveal patients were more satisfied with respect to the subjective and objective facilities of IPD and OPD in the hospital. The result obtained at the end of the research clearly indicates that both inpatients and outpatients are satisfied with respect to the selected objective and subjective elements in the medical service.

## **References**

- Nerea González et al (2005), "A survey on the development and validation of an inpatient satisfaction questionnaire" *IntJ Qual Health Care* doi: 10.1093/intqhc/mzi067. Epub 2005 Aug 12.
- Zhihua Yan and Dai Wanand Li (2011), "A survey on patient satisfaction in two Chinese provinces: rural and urban differences" *Int J Qual Health Care* 2011 Aug;23(4):384-9. doi: 10.1093/intqhc/mzr034. Epub 2011 Jul 8.
- Parasuraman A, Berry LL, Zeithaml VA. (1991) Understanding customer expectations of services. *Sloan Manage Rev.* 1991;32:39–48.
- Andaleeb SS. (2001) Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Social Science & Medicine* 2001, 52:1359–1370.