# Infrastructural Facilities and Patients' satisfaction in tertiary care hospitals in Peshawar, Khyber Pakhtunkhwa

Dr. Sareer Khan, Visiting Lecturer, Instituted of Peace and Conflict studies, University of

Peshawar, Email: Sareeerkhan@yahoo.com

Zahid Raza, M.Phil Scholar, Department of Criminology, University of Karachi,

## **Abstract**

The present study was conducted to probe the infrastructural facilities in the tertiary healthcare hospitals in Peshawar-Khyber Pakhtunkhwa. The data was collected through a structured questionnaire from 600 sampled respondents admitted in three tertiary healthcare hospitals in Peshawar i.e. Khyber teaching hospital, Hayatabad Medical Complex and Lady Reading Hospital through proportional allocation method. The patients were hardly satisfied from the healthcare and infrastructural facilities in the above three major hospitals of Khyber Pakhtunkhwa. The Bi-variate analysis was made and the results reveal that car parking facility (P=0.000), availability of information disk (P=0.000), Signboards/directions (P= 0.052), chairs for patients in the waiting areas (P=0.000), Availability of wheel chairs and statures (P=0.094) and (P=0.964) connotation was described between blood bank and patients satisfaction. The study recommended that hospital administration should keep focus on cleanliness in washroom, clean water and free car parking facilities to the patients.

Key words: Health care, Patients satisfaction, Tertiary hospitals, Infrastructural facilities

## Introduction

Patient satisfaction or (customer satisfaction) refers to psychological perception which is defined in several ways. Occasionally satisfaction is measured as a conclusion of individuals about anything or experience after meeting some practices over time (Hills and Kitchen, 2007). Satisfaction is an individual's feelings of will or dissatisfaction ensuing from a service's observed presentation or outcome in relation to his or her prospects. It is clear from the above definition that satisfaction is a function of professed performance along with prospects (Linder, 1982). Satisfaction is a countenance of an attitude, a real response, which is interrelated to both the belief that the care retains certain elements (Risser, et al., 1981).

Satisfaction is a complex conception that is influenced by elements including sociodemographic features, physical and psychological status, attitude and expectations about medical care (Bernhart, et al., 1999). Associated factors of Patients Satisfaction In healthcare system Patient expectations, perceptions and experiences are the main determinants of patient satisfaction all over the world. These determinants are interconnected as well as linked with each other and have impact on the patient pleasure. Patient prospects with healthcare workers as well as healthcare arrangement play a vital part in the perception of patient contentment. Patient links his capabilities of healthcare with expectations and this assessment help healthcare providers to measure patient satisfaction (Constantino, 2011). Patients' satisfaction is a complex concept which depends upon number of factors lifestyles, previous practices, forthcoming prospects as well as the importance of the individual along with society (Verma, 2000).

## **Literature Review**

Infrastructure is the major characteristic of the development of a society. It not only indicates the types of basic services to the people living in an area but also both the state of development and potential to go further. The basic infrastructure in hospital states that type of facilities where availability of health services describes the state and quality of health amenities in a hospital. The number of increase in health facilities also raises the capability of health centers to provide quality services. Many researches have mentioned infrastructure associated with patients' satisfaction. In hospital a common conclusion is that physical facilities are factor of patient healthcare assessments (Pita and Laric, 2004).

Physical infrastructure which has spacious rooms with ventilation system and availability of medical equipment's leads to patients' satisfaction (Donabedian, 1980). It has been described that physical characteristics/resources such as availability of labs, blood bank, Operation Theater and other resources have influence on patients' satisfaction (Campbell et al, 2000). It was mentioned in a study that hospital building, availability of medical equipment and availability of beds had high impacts on determining patients' satisfaction (Sultana, Et al, 2009). In a recently study it was showed that room appearance affects patients' perception and satisfaction (Swan, et al, 2003). A study was conducted in china and it was found that Physical infrastructure has high influence on patients' satisfaction (Liu Lijuan, 2004). Physical infrastructure was found associated with patients' satisfaction in in the previous study (Reidenbach and Sandifer Smallwood, 1990). Infrastructure of a hospital has a significant impact on patients' satisfaction in the hospital industry (Thompson, 1983). Physical infrastructure depends on ambient conditions and design of the hospital which can affect patients' perception at high level (Brady

and Cronin, 2001). It is stated by almost many of the researchers that physical infrastructure facilities play a major role and found associated with patients' satisfaction in many studies all over the world.

## **Methods & Materials**

Methods & Materials: The present study explores the health care and cleanliness in tertiary care hospitals in Peshawar, Khyber Pakhtunkhwa. The data was collected from three tertiary hospitals i-e. Khyber Teaching Hospital, Lady Reading hospital and Hayatabad Medical Complex, Peshawar. A sample size of 600 respondents was taken from three hospitals determined through proportional allocation method. The study was based on both the primary and secondary data. Primary data were obtained through a pretested questionnaire which was developed on the basis of study objectives, research questions, conceptual framework and other required information and secondary data was obtained through theses, books, research articles and daily reports in the news. After collecting the data it was edited and entered into SPSS software. The data was processed and explore through SPSS to know about the results through frequencies and percentages. Further, in order to assess the association between the dependent variable and independent variables, Chi –Square test was also used.

## **Results and Discussions**

This section describes the results after the analysis of data. It starts with the explanation of the perception of sampled respondents about the infrastructural facilities in the hospitals and followed by measuring the association between the dependent variable i-e Patients satisfaction with the independent variable i-e the Infrastructural facilities.

# Perception of the sampled respondents about infrastructure in the hospital

The results indicates that 81.3% of the respondents showed agreement that Car parking existed in the hospital, 12.5% the respondents thought that Car parking didn't exist, along with 6.2% of the respondents didn't respond to the above statement. The findings of Alsaqri (2016) were in contrast from the present study results because the patients reported that there was no car parking facility in Hail Hospital in Saudi Arabia. In Pakistan the car parking facility available in every tertiary hospital because it is given on yearly contract basis and it is also a source of income to the hospital. Likewise, 88.7% of the respondents accepted that there was information disk in the hospital while 6.2% of the respondents were found disagreed with it while 5.2% of the respondents had no idea about information disk in the hospital. The current findings were

supported by Merkouris, Et al, (2013) who had mentioned that information disk was available in the tertiary hospital, Cyprus but there was lack of information facilitated by the concerned person present at the information disk. In Pakistan same is the case because the people are selected on approach basis and even they will be illiterate or will have low education but will be designated at the information disk. Similarly, 96.0% of the respondents agreed about the signboards in the hospital, 2.9% of the respondents were not agreed and 1.2% of the respondents didn't respond to this statement. The results of (Kumari, Et al.,(2011) were in contrast with the results of present study because she reported that majority of the respondents were highly dissatisfied from the unavailability of sign boards in the tertiary care hospital, India. In Pakistan the sign boards are available everywhere either on roads, markets etc, so the patients in the present study were happy from the sign boards in the hospitals.

Moreover, 67.4% of the respondents reported that there were chairs in the waiting area while 26.7% of the respondents showed negative response and 6.0% of the respondents were uncertain. In Pakistani hospitals the chairs were present in the hospital but it was not enough for patients because the ratio of patients is increasing daily in the hospitals while the numbers of chairs are the same. So that's why the patients reported less number of chairs in the hospital and they were not satisfied from it. However, 55.8% of the respondents confirmed that there were wheel chairs and statures in the hospital, followed by 42.2% of the respondents rejected this statement and only 2.0% of the respondents had no idea about it. From the above findings, majority 92.2% of the respondents showed agreement about the laboratory in the hospital while 5.0% of the respondents showed negative response with it while 2.8% of the respondents had no idea about it. Laboratory is available in the hospitals but due to rude behavior of lab staff and unreliable lab reports in hospital laboratory. The patients perform their tests outside the hospital because the results of outside laboratories were accurate and reliable. Similarly, 91.8% of the respondents responded that there was blood bank in the hospital, followed by 4.5% of the respondents were not in favor of this statement while 3.7% of the respondents didn't reply to it. Correspondingly, majority 97.5% of the respondents were agreed related ICU in the hospital while a small proportion 1.1% of the respondents were found disagreed with the above statement while 1.3% of the respondents remain uncertain. However, 98.8% of the respondents accepted the operation theater facility in the hospital, 0.4% of the respondents refused from this statement and 0.8% of the respondents had no information about it. Moreover, 89.7% of the respondents

reported that there was XRay, ECG & Ultrasound facilities in the hospital, while small proportion 6.1% of the respondents showed negative response with it and along with 4.2% of the respondents were found uncertain about it. Similar conclusion from previous literature has been inferred by Ghosh (2014) indicating that there were all the facilities available in the tertiary level hospital, Dhubri as mentioned in the above statement. So, XRay, ECG & Ultrasound are the most important technology in the hospital because due to the presence of these technologies the physicians can identify different problems very easy. Moreover, 89.5% of the respondents reported that there was disable facilitation services in the hospital, 6.5% of the respondents showed negative response with this statement while 4.0% of the respondents were uncertain. Disable people are the special people of the society and they also have the right of everything for a better life. In health sector they are given special preference in the world and in Pakistan the wheels chairs, stature and left are made for the facilitation of disable people.

Similarly, majority 88.9% of the respondents showed agreement that there were private rooms in the hospital, while 8.1% of the respondents showed negative opinion about it along with 2.7% of the respondents had not idea about the private rooms in the hospital. For better care and special attention of the patients there are private rooms in the hospitals of Pakistan. The patients pay more fees as compared to the ward bed fee in the hospital because private rooms are special for treatment. Moreover, 83.5% of the respondents agreed that there were washrooms in the hospital, 10.6% of the respondents were not in favor of it while 5.8% of the respondents didn't respond to it. In addition 27.1% of the respondents reported that there was clean drinking water in the hospital, while 70.8% of the respondents refused from this statement and a small number, 2.0% of the respondents didn't give any answer to it. Likewise, a high number of the respondents 95.8% confirmed the availability of dustbins in the hospitals, 2.8% of the respondents didn't agree with it and 1.3% of the respondents had no opinion about this statement. From the above results, 85.0% of the respondents accepted the existence of air conditioned plant in the hospital while 9.3% of the respondents didn't accept this statement and 5.7% of the respondents had no information about air condition plant in the hospital. Similarly, 95.2% of the respondents reported that beds were well equipped and comfortable in the hospital while 4.0% of the respondents were against this statement and 0.8% of the respondents didn't reply to it. Almost, 78.5% of the respondents were agreed that hospital was up to date with modern technology, followed by small number 13.8% of the respondents refused from the above

statement and along with 7.7% of the respondents had no idea about it. Like other foreign countries Pakistani hospitals were also updated with modern technology steadily and majority of the patients were illiterate and have first time in the hospital so they don't have any information or idea about the updated technology in the hospitals.

Table No. 1 Perception of the sampled respondents about infrastructure in the hospital

S.N	Availability of Infrastructure in	Agreed	Strongly	Uncertain	Disagreed	Strongly	
	the hospital		Agreed			Disagreed	
1	Car parking facility in the	296(49.3)	192(32.0)	37(6.2)	40(6.7)	35(5.8)	
	hospital						
2	Information disk/ counter	310(51.7)	249(41.5)	18(3.0)	15(2.5)	08(1.3)	
3	Sign boards/ Directions	368(61.3)	208(34.7)	7(1.2)	10(1.7)	7(1.2)	
4	Chairs in the waiting areas	286(47.7)	118(19.7)	36(6.0)	94(15.7)	66(11.0)	
5	Wheel chairs and statures	258(43.0)	77(12.8)	12(2.0)	156(26.0)	97(16.2)	
6	Availability of Laboratories	384(64.0)	169(28.2)	17(2.8)	10(1.7)	20(3.3)	
7	Blood bank	333(55.5)	218(36.3)	22(3.7)	14(2.3)	13(2.2)	
8	ICU in the hospital	241(40.2)	344(57.3)	8(1.3)	5(0.8)	2(0.3)	
9	Operation Theater	291(48.5)	302(50.3)	5(0.8)	1(0.2)	1(0.2)	
10	X-Ray, ECG & Ultrasound	318(53.0)	220(36.7)	25(4.2)	20(3.3)	17(2.8)	
	facilities						
11	Disable facilitation service	381(63.5)	156(26.0)	24(4.0)	14(2.3)	25(4.2)	
12	Washrooms and Dustbins	352(58.7)	149(24.8)	35(5.8)	20(3.3)	44(7.3)	
13	Clean drinking water	98(16.3)	65(10.8)	12(2.0)	164(27.3)	261(43.5)	
14	Beds are well equipped and	388(64.7)	183(30.5)	5(0.8)	9(1.5)	15(2.5)	
	comfortable						
15	Canteen/cafeteria in the hospital	324(54.0)	207(34.5)	22(3.7)	21(3.5)	26(4.3)	
16	Hospital is up to date with	373(62.2)	98(16.3)	47(7.7)	52(8.8)	30(5.0)	
	modern technology						

#### Association between Patients satisfaction and Infrastructural facilities

The below table indicates an association between Patients' satisfaction (dependent variable) with the various statements of the independent variable infrastructure. A noteworthy (P=0.000) connotation was initiated between car parking facility and patients' satisfaction. A noteworthy (P=0.000) relationship was established between availability of information disk and patients satisfaction. In addition, a non-significant (P= 0.052) connotation was described between signboards/directions and patients satisfaction. Moreover, a momentous (P=0.000) relationship was initiated between the convenience of chairs for patients in the waiting areas and patients satisfaction. The above results reveals a non-significant (P=0. 094) connotation between the wheel chairs and statures and patients satisfaction. Again a non-significant (P=0. 706) relationship was stated between laboratory and patients satisfaction. Once again a non-significant (P=0. 964) connotation was described between blood bank and patients satisfaction. The above results illustrates that a non-significant (P=0. 530) relationship was created between Intensive Care Unit (ICU) and patients satisfaction. A non-significant (P=0. 260) connotation was established between operation theater and patients satisfaction. However, a momentous (P=0. 000) association was stated between XRay, ECG & Ultrasound facilities and patients satisfaction.

A non-significant (P= 0.703) relationship was created between disable facilitation amenities and patients satisfaction. The results again depicts a momentous (P= 0.009) connotation between Private rooms in the hospital and patients satisfaction. Again a noteworthy (P= 0.000) relationship was initiated between toilets/ washrooms and patients satisfaction. Moreover, a momentous (P= 0.000) relationship was established between availability of clean drinking water and patients satisfaction. The above results again describes a noteworthy (P=0.000) connotation between air conditioned plant in the hospital and patients satisfaction. In adding, a momentous (P=0.000) relationship was created between dustbins in the surroundings of hospital and patients satisfaction. Though, an important (P=0.000) relationship was found between doctors and other staff use particular uniform and patients satisfaction. Furthermore, the results reveals a noteworthy (P=0.000) connotation between beds are well equipped and patients satisfaction and patients satisfaction related to modern technology (P=0.000).

Table No. 02 Association between Patients satisfaction and Infrastructural facilities

S. No	Statement		Perception		Chi-Square				
1	Car parking fac	cility		Agreed	Strongly	Neutral	Disagreed	Strongly	(P-Value)
		-			Agreed			Disagreed	
ļ			Agreed	47(15.9)	30(10.1)	43(14.5)	100(33.8)	76(25.7)	$x^2 = 85.374$
			Strongly	26(10.0)	27(10.2)	7(2.6)	(9/25.4)	44(22.0)	(P=0.000)
			Agreed	36(18.8)	37(19.3)	7(3.6)	68(35.4)	44(22.9)	
ļ			Neutral	9(24.3)	0(0.0)	7(18.9)	16(43.2)	5(13.5)	
			Disagree	13(32.5)	11(27.5)	3(7.5)	1(2.5)	12(30.3)	
			Strongly	5(14.3)	4(11.4)	1(2.9)	14(40.0)	11(31.4)	
			Disagreed	3(14.3)	7(11.7)	1(2.7)	14(40.0)	11(31.4)	
2	Information	disk/	Agreed	50(28.7)	36(11.6)	33(6.5)	98(30.6)	93(22.6)	$x^2 = 33.167$
ļ	counter		Strongly	56(29.3)	44(17.7)	25(8.4)	76(29.7)	48(14.9)	(P=0.007)
			Agreed				, ,	, , ,	
			Neutral	2(38.9)	1(5.6)	3(11.1)	6(33.3)	6(11.1)	
ļ			Disagree	2(28.6)	0(0.0)	0(0.0)	11(42.9)	2(28.6)	
			Strongly	0(0.0)	1(6.2)	0(0.0)	5(81.2)	2(12.2)	
			Disagreed			ì			_
3	Sign	boards/	Agreed	63(26.4)	45(12.2)	43(9.0)	123(32.9)	94(19.6)	$x^2 = 26.143$
ļ	Directions		Strongly	45(34.1)	36(17.3)	17(4.8)	60(27.4)	50(16.3)	(P=0.052)
ļ			Agreed						
ļ			Neutral	0(9.1)	1(9.1)	1(0.0)	5(45.5)	0(36.4)	
			Disagree	1(16.7)	0(0.0)	0(0.0)	3(50.0)	6(33.3)	
			Strongly	1(14.3)	0(0.0)	0(0.0)	5(71.4)	1(14.3)	
			Disagreed						2
4			Agreed	38(13.3)	23(8.0)	30(10.5)	107(37.4)	88(30.8)	$x^2 = 78.796$
	Chairs in the waiting areas	Strongly	30(25.4)	28(23.7)	9(7.6)	31(26.3)	20(16.9)	(P=0.000)	
		Agreed	0.40.)	- (0.0)	744.5.0		12/22 2		
			Neutral	0(0.)	3(8.3)	5(13.9)	16(44.4)	12(33.3)	
			Disagree	24(25.5)	20(21.3)	2(2.1)	23(24.5)	25(26.6)	
			Strongly	18(27.3)	8(12.1)	15(22.7)	19(28.8)	6(9.1)	
			Disagreed	<b></b>		10000	4.40.225.53	404/22 -:	2
5			Agreed Strongly	71(16.8)	64(15.2)	46(10.9)	140(33.2)	101(23.9)	$x^2 = 23.807$
	Wheel chair	Wheel chairs and		16(20.8)	8(10.4)	9(11.7)	27(35.1)	17(22.1)	(P=0.094)
	statures		Agreed						
			Neutral	4(33.3)	3(25.0)	3(25.0)	1(8.3)	1(8.3)	

		Disagree	9(22.5)	2(5.0)	1(2.5)	12(30.0)	16(40.0)	
		Strongly	10(20.4)	5(10.2)	2(4.1)	16(32.7)	16(32.7)	_
		Disagreed						
6	Laboratory	Agreed	67(17.4)	57(14.8)	40(10.4)	127(33.1)	93(24.2)	$x^2 = 12.540$
		Strongly	32(18.9)	21(12.4)	20(11.8)	54(32.0)	42(24.9)	(P=0.706)
		Agreed						
		Neutral	2(11.8)	2(11.8)	1(5.9)	7(41.2)	5(29.4)	-
		Disagree	4(40.0)	0(0.0)	0(0.0)	2(20.0)	4(40.0)	-
		Strongly	5(25.0)	2(10.0)	0	6(30.0)	7(35.0)	-
		Disagreed						
7		Agreed	56(16.8)	46(13.8)	30(9.0)	88(26.4)	113(33.9)	$x^2 = 7.421$
	Blood bank	Strongly	46(21.1)	28(12.8)	26(11.9)	70(32.1)	48(22.)	(P=0.964)
		Agreed						
		Neutral	3(13.6)	3(13.6)	2(9.1)	7(31.8)	7(31.8)	
		Disagree	3(21.4)	2(14.3)	1(7.1)	4(28.6)	4(28.6)	
		Strongly	2(15.4)	3(23.1)	2(15.4)	2(15.4)	4(30.8)	
		Disagreed						
8		Agreed	38(28.2)	34(14.1)	21(6.2)	80(31.1)	68(20.3)	$x^2 = 14.927$
	ICU	Strongly	70(29.4)	46(13.4)	38(7.6)	112(32.6)	78(17.2)	(P=0.530)
		Agreed						
		Neutral	2(25.0)	1(12.5)	2(25.0)	1(12.5)	2(25.0)	
		Disagree	0(0.0)	0(0.0)	0(0.0)	2(40.0)	3(60.0)	
		Strongly	0(0.0)	1(50.0)	0(0.0)	1(50.0)	0(0.0)	
		Disagreed						
9		Agreed	47(25.4)	40(13.7)	40(10.7)	89(29.2)	75(21.0)	$x^2 = 19.176$
	Operation Theater	Strongly	62(31.8)	42(13.9)	21(4.0)	103(33.8)	74(16.6)	(P=0.260)
		Agreed						_
		Neutral	0(0.0)	0(0.0)	0(0.0)	3(60.0)	2(40.0)	-
		Disagree	0(0.0)	0(0.0)	0(0.0)	1(100)	0(0.0)	-
		Strongly	1(100)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	
		Disagreed			20/0.4	0.1/25 0)	0.4/20.2)	2 12 777
10		Agreed	61(19.2)	45(14.2)	30(9.4)	86(27.0)	96(30.2)	$x^2 = 42.555$
	X-Ray, ECG &	Strongly	36(16.4)	30(13.6)	28(12.7)	84(38.2)	42(19.1)	(P=0.000)
	Ultrasound facilities	Agreed	0/0.0	1/4.63	1/4.0	14/550	0(25.0)	_
		Neutral	0(0.0)	1(4.0)	1(4.0)	14(56.0)	9(36.0)	
		Disagree	5(25.0)	7(35.0)	0(0.0)	8(40.0)	0(0.0)	

		Strongly	6(35.3)	1(5.9)	2(11.8)	4(23.5)	4(23.5)	
		Disagreed	(22.2)			(==:=)	(==:0)	
11	Disable facilitation	Agreed	69(18.1)	54(14.2)	43(11.3)	123(32.3)	92(24.1)	$x^2 = 12.582$
		Strongly	28(17.9)	22(14.1)	17(10.9)	46(29.5)	43(27.6)	(P=0.703)
	services	Agreed	20(17.5)	22(1.11)	17(1015)	10(2)10)	15(2715)	(1 01,00)
		Neutral	5(20.8)	3(12.5)	0(0.0)	8(33.3)	8(33.3)	1
		Disagree	3(21.4)	1(7.1)	0(0.0)	8(57.1)	2(14.3)	_
		Strongly	5(20.0)	2(8.0)	1(4.0)	11(44.0)	6(24.0)	_
		Disagreed						
12		Agreed	45(12.0)	44(11.7)	42(11.2)	134(35.7)	110(29.3)	
	Private Rooms	Strongly	39(24.4)	28(17.5)	9(5.6)	49(30.6)	35(21.9)	_
	Tivate Rooms	Agreed						$x^2 = 80.830$
		Neutral	10(62.5)	2(12.5)	0(0.)	3(18.8)	1(6.2)	(P=0.009)
		Disagree	13(44.8)	4(13.8)	2(6.9)	6(20.7)	4(13.8)	=
		Strongly	3(15.0)	4(20.2)	8(40.0)	4(20.0)	1(5.0)	-
		Disagreed						
13	Washrooms/ Toilets	Agreed	63(17.9)	41(11.6)	31(8.8)	117(33.2)	100(28.4)	$x^2 = 57.141$
		Strongly	41(27.5)	22(14.8)	8(5.4)	46(30.9)	32(21.5)	(P=0.000)
		Agreed						
		Neutral	0(0.0)	8(22.9)	6(17.1)	10(28.6)	11(31.4)	
		Disagree	2(10.0)	3(15.0)	2(10.0)	7(35.0)	6(30.0)	
		Strongly	4(9.1)	8(18.2)	14(31.8)	16(36.4)	2(4.2)	
		Disagreed						
14		Agreed	12(12.2)	12(12.2)	10(10.2)	35(35.7)	29(29.6)	$x^2 = 32.430$
	Clean drinking water	Strongly	20(30.8)	6(9.2)	2(3.1)	22(33.8)	15(23.1)	(P=0.009)
		Agreed						
		Neutral	0(0.0)	3(25.0)	1(8.3)	5(41.7)	3(25.0)	
		Disagree	40(24.4)	21(12.8)	13(7.9)	60(36.6)	30(18.3)	
		Strongly	38(14.6)	40(15.3)	35(13.4)	74(28.4)	74(28.4)	
		Disagreed						2
15		Agreed	66(27.4)	43(11.6)	30(6.7)	122(32.0)	111(22.3)	$x^2 = 32.529$
	Dustbins	Strongly	39(30.5)	33(16.3)	28(7.4)	65(32.0)	38(13.8)	(P=0.009)
		Agreed	2/25.03	0(0.0)	1/10.5	7(60.7)	0/0.03	_
		Neutral	2(25.0)	0(0.0)	1(12.5)	5(62.5)	0(0.0)	
		Disagree	2(44.4)	2(22.2)	2(22.2)	3(11.1)	0(0.0)	_
		Strongly	1(12.5)	4(50.0)	0(0.0)	1(12.5)	2(25.0)	

		Disagreed						
16		Agreed	69(18.5)	61(16.4)	18(4.8)	124(33.2)	101(27.1)	$x^2 = 63.230$
	Hospital is up to date	Strongly	16(16.3)	12(12.2)	22(22.4)	27(27.6)	21(21.4)	(P=0.000)
	with modern	Agreed						
		Neutral	10(21.3)	2(4.3)	6(12.8)	19(40.4)	10(21.3)	
	technology	Disagree	8(15.4)	7(13.5)	4(7.7)	17(32.7)	16(30.8)	
		Strongly	7(23.3)	0(0.0)	11(36.7)	9(30.0)	3(10.0)	
		Disagreed						

# **Conclusion:**

From the results it was concluded that the patients were satisfied from hospital infrastructure facilities like, Car parking facilities, information desk, registration location, Availability of Chairs in waiting areas, Availability of washrooms and dustbins. The patients and their relatives were not happy from the sign boards, blood banks, wheel chairs and statures, cleanliness in the washrooms and no availability of clean drinking water in the hospitals.

# **Recommendations:**

From the results of the study the researcher put some recommendation for the improvement of infrastructural facilities in the hospitals which are the following.

- 1. From the cultural point of view it was suggested by large number of people that there should be separate hospital for females along with female staff.
- 2. There should be separate registration counters for male and female if the healthcare providers at tertiary level want to gain the patients' satisfaction.
- 3. The number of registration counters should be increased to over-come the crowd at registration counters.
- 4. The number of chairs should be increased in the waiting areas of the patients' because number of patients is increasing on daily basis in the hospitals.
- 5. The number of wheel chairs and statures should be increased in the hospitals because the quantity of both wheel chairs and statures was very low.
- 6. The facility of clean drinking water should be provided to the patients' because the water was not fit for drinking.
- 7. The hospital management should give preference to cleanliness of the washrooms in the hospitals.

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