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Research Article

**LEVEL OF SATISFACTION OF PATIENTS ATTENDING CARDIAC  
CARE UNIT OF BAHAWAL VICTORIA HOSPITAL, BAHAWALPUR****<sup>1</sup>Dr Muhammad Ali Sial, <sup>2</sup>Dr. Laiba Qamar Butt, <sup>3</sup>Dr Farkhanda Batool**<sup>1</sup>Quaid-E-Azam Medical College Bahawalpur<sup>2</sup>Services Hospital Lahore<sup>3</sup>Rawalpindi Medical College**Article Received:** November 2019 **Accepted:** December 2019 **Published:** January 2020**Abstract:**

**Background:** The level of satisfaction of patients who visit a medical facility is a relative phenomenon. It embodies the perspective needs of the patients, the level of fulfillment of their expectations from the health system and their respective experience of the health care. 'Patient Satisfaction' may be defined as, the measure of patient-reported outcome while the measurement of efficacy and proficiency of structures and processes of health care go hand in hand. **Objective:** The objective of the study is to determine the level of satisfaction of patients with respect to the services provided in the Cardiac Care Centre of Bahawal Victoria Hospital, Bahawalpur. **Study Design:** Descriptive cross sectional study. **Setting:** CCU, Bahawal Victoria hospital, Bahawalpur. **Study Period:** The study was conducted from 1st February, 2019 to 1st May, 2019. **Material and method:** A sample of 100 patients attending CCU of BVH was interviewed and answers were recorded in the form of questionnaire that employed Likert Scale. **Ethical issues:** Patient interview was conducted after taking informed consent from the patient and with proper permission from the related authorities. **Sampling Technique:** It was non-probability 'convenient sampling method'. **Inclusion Criteria:** Patients attending the CCU who have received some previous cardiac treatment elsewhere. **Data Analysis:** Data was entered in Microsoft Excel; frequencies and percentages were calculated. **Data presentation:** Data is presented in the form of tables, charts and graphs.

**Results:** The results of the study reveal that 99% of the patients were satisfied with the services provided at the Cardiac care unit of Bahawal Victoria Hospital whereas only 1% showed dissatisfaction. This result is based upon the questions asked related to the basic admission policy into the hospital, the professional attitude of the hospital the overall environment of the CCU building.

The limits applied to the study are also mentioned hereafter in the details.

**Conclusion:** The wide and vast majority of the respondents being satisfied with the overall functioning and health care services provided at the CCU reveals a high degree of professional adequacy and optimum functioning capability of the CCU, BVH. This is subject to multiple reasons which are discussed hereafter.

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## INTRODUCTION:

A measure of the performance of health system is patient's satisfaction which is a foundation of encouraging those who provide health care to allow them to be more responsible towards their patients<sup>13</sup>.. One of the important concerns in field of medical care is to evaluate the level of satisfaction of patients as well as their families with respect to the care provided in CCU, and it can identify the deficits of the cardiac care field and hence, helps to improve the level of satisfaction of the patients<sup>8</sup>.. Assessment of the quality of care provided at hospitals is based upon the surveys on patient's satisfaction. The importance lies in the validity of information gained via these studies about the correlation of hospital care quality with the patient's satisfaction [3]. In 1996, the evaluation of patient satisfaction was held a must for all French Hospitals. World Health Organization (W.H.O) has been putting stress to measure the level of patient satisfaction for all health care settings including cardiac care units, especially for the developing countries. In developed countries, there is a high percentage of patient satisfaction (90-95%) with the provision of basic services, whereas the data collected from developing countries varies the level of patient satisfaction between 50-95%<sup>3</sup>.

If patient satisfaction does not meet the standards, the patients may subside for elsewhere treatments leading to objectable health seeking behaviors that ultimately result in poor adherence, poor uptake and retention of services, leading to high levels of morbidity and mortality<sup>13</sup>..

In a cardiac care center, patients daily face the issues related to conditions, individuals and equipment which greatly influence their satisfaction According to different worldwide researches, it is clearly documented that patient satisfaction and the health care services quality can be measured through the structure, procedure and outcome of the health care facility and staff<sup>13</sup>.. The domains of structure include availability of staff, their expertise, hospital cleanliness, desk mannerism and affordability of services provided by the hospital. The domains of process include responsiveness, empathy and relevance, whereas the outcome depends upon the relationship and the level of confidentiality between the patient and the health service providers <sup>13</sup>. In Pakistan, numerous studies have been conducted in the past to measure the level of satisfaction of patients in different medical settings including ICUs, out-patient departments and emergency departments of hospitals. This study is conducted to evaluate another important area of services i.e. The Cardiac Care Unit of Bahawal Victoria Hospital,

BWP. The results and conclusions drawn from this study will be helpful for the administrative staff and management of health system at multiple levels to make useful and meaningful interventions in the future.

## OBJECTIVE

The objective of the study is to:

- determine the level of patient's satisfaction regarding services provided in the Cardiac Care Unit of Bahawal Victoria Hospital, Bahawalpur.

## OPERATIONAL DEFINITIONS

**Patient satisfaction:** The degree to which the individual perceives health care services being provided at B.V.H. as useful, effective or beneficial as measured by using a preformed questionnaire based on Likert Scale.

**Likert Scale:** It is a type of rating scale used to measure attitudes or opinions. With this scale, respondents are asked to rate items on a level of agreement.

## LITERATURE REVIEW

Patient's satisfaction is an indicator of how well the health system is providing its services and can be used to assess the efficiency as well as the competency of the health care system. Accordingly, changes can be made to improve the system and/or services to better facilitate the patients.<sup>1</sup>

For the purpose of comparison, researches carried out in Patient satisfaction in the US, Tanzania and Iran will be used for this review. All the researches conducted to assess patient satisfaction used questionnaires for a comprehensive survey. It seems the only effective and appropriate methodology in collecting data on patient satisfaction is through questionnaires. This is because patient satisfaction is opinion based and can only be assessed through survey. According to a cross-sectional study conducted in US in which clinical data on 6467 patients was collected from 25 US hospitals, the patient satisfaction was positively correlated with 13 of 14 acute myocardial infarction performance measures. Apart from this, data from satisfaction services was collected from 3652 patients that were cardiac admissions. These patients were being treated for with acute myocardial infarction in the 25 US hospitals that participated in the study. The duration of the study was from the year 2001 to 2006. The study found that the higher patient satisfaction scores the lower the risk-adjusted inpatient mortality

(P0.025). Satisfaction with nursing care was the most important determinant of overall patient satisfaction (P0.001). This study concluded that if the patient satisfaction was higher there was an improvement in adherence to guidelines and lower inpatient mortality rates.

In a descriptive study carried out in the ICU of Shahid Madani Hospital, Tabriz, Iran, the satisfaction of patients and their relatives from cardiac surgery was evaluated using Modified MISS questionnaire for patients and CCMFNA questionnaires for their relatives. Data from 200 patients was collected whose ages were between 19 and 86 years. The study took place over the course of one year. The data obtained was statistically analyzed using descriptive statistics. The majority of the patients expressed moderate to high satisfaction. The overall satisfaction of doctors was higher than nurses (27% vs. 22%). The lowest level of satisfaction was the possibility of meeting relatives (14.3%). Most of the relatives were spouses of patients who contributed to the highest rate of satisfaction; however, the location of the meeting and the meets expectations were less satisfactory. It was interesting to note that the study not only assessed family satisfaction which is considered and important evaluation of quality of service but also observed the level of education the patient was given about their condition and their satisfaction with the services. The more the patient was educated, the higher was their satisfaction highlighting the role of how important it is that patients be educated about their procedure so they themselves can have a predicted outcome with which they can compare the quality of care given. The study concluded that there was a need to improve the waiting room quality, increase the duration of family meetings and increase nursing attention so that patient satisfaction could be enhanced.

Another study conducted at Mawenzi Regional Referral Hospital, District Hospital and Huruma Designated District Hospital in Kilimanjaro, Tanzania used a cross-sectional study design to determine patient's level of satisfaction with the health care services received at outpatient departments in Kilimanjaro Region. 450 patients were selected using selective sampling technique. Data was collected using survey questionnaires. Data was analyzed using descriptive statistics. A p-value of <0.05 was considered statistically significant. The overall patient's level of satisfaction with health service provision at OPD in all three hospitals was found to be 20% which was considered unsatisfactory. The highest level of dissatisfaction in the five service dimensions tested was on empathy (-7.8). Seeing as the patients attending OPD in all three hospitals were in overall dissatisfied with quality of care it was suggested that

the hospital managements should focus on the improving the patient-provider relationship, make equipment available for use, make sure drugs are available and make the hospital bills affordable.

From the studies discussed above, it can be concluded that patient satisfaction plays an essential role in assessment of health care quality to the extent that mortality rates can significantly be reduced just by enhancing education to the patient about the procedures they're about to undergo, improving satisfaction of relatives by creating a proper system for meetings, by showing empathy and by improving any shortcomings in the healthcare system whether they be availability of drugs and equipment or affordability of hospital bills.

## RESEARCH METHODOLOGY

### Study Design:

Descriptive Cross Sectional Study

### Setting:

Cardiac Care Unit, Bahawal Victoria Hospital, Bahawalpur.

### Study Period:

1st February 2019 to 1st May 2019 (3 months)

## MATERIAL AND METHOD:

The sample size consists of 100 patients. Each subject was interviewed and answers were recorded in a questionnaire that employed Likert scale which consists of close-ended questions and uses 5 point Likert Scale including 1= strongly agree, 2= agree, 3=neutral, 4=disagree and 5=strongly disagree.(Attached as annexure).

To obtain exact percentage of satisfaction and to describe the results, the 'strongly agree' and 'agree' components were merged into 'satisfaction' and 'strongly disagree' and 'disagree' components were merged into 'dissatisfaction'.

### Ethical Issues:

Interview of the patient was conducted after taking proper Informed Consent from the patient and with the permission of the relevant competent authorities.

### Sampling Technique:

The sampling technique employed is 'Non-Probability, Convenient sampling method.'

### Data Analysis and Presentation:

Data was analyzed both manually and with the help of computer using SPSS version 20, in the department of Community Medicine, QAMC, BWP.

## RESULTS:

This study conducted on 100 patients showed that, 68% respondents were males AND 32% were

females (Table 1) About the marital status, 64% males were married and 28% females were married (Table 2). Analyzing the participant's area of residence, 37% respondents lived in urban areas while 63% lived in rural areas (Table 3). As far as the age is concerned, the total population of patients was divided into two groups of ages above and below 50 years 32% respondents were below the age of 50 years while 68% of respondents were above the age of 50 years (Table 4).

Regarding the basic admission policy of the cardiac center. 97% respondents were satisfied, 2% respondents were neutral while only 1% showed dissatisfaction related to the admission policy.

Regarding behaviour and professional attitude of the staff including those of the doctors, nurses and paramedics. 82% respondents were satisfied, 9% showed neutral responses whereas 9% were dissatisfied with the behaviour and professional attitude of the staff.

Regarding the environmental scenario of the cardiac center i.e. cleanliness, quietness and calmness. 99% respondents were satisfied, 1% remained neutral and 00% were dissatisfied.

Our study concluded that 99% of the respondents were satisfied with the level of functioning of the CCU of

BVH while 1% remained neutral. However, none of the respondents i.e. 00% showed dissatisfaction.

TABLE 1

Respondents' Gender		
	FREQUENCY	PERCENTAGE (%)
MALE	68	68
FEMALE	32	32
Total	100	100

Table 2

Respondents' Marital Status		
	FREQUENCY	
	Males	Females
Married	64	28
Unmarried	04	04
Total	68	32

Table 3

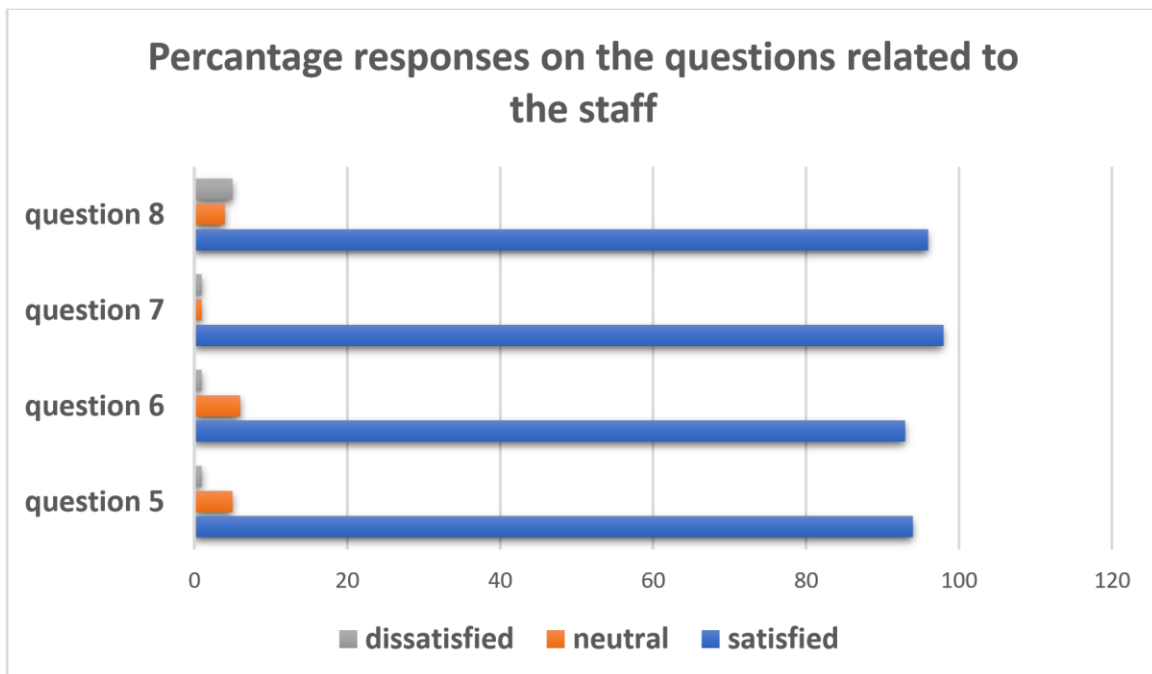
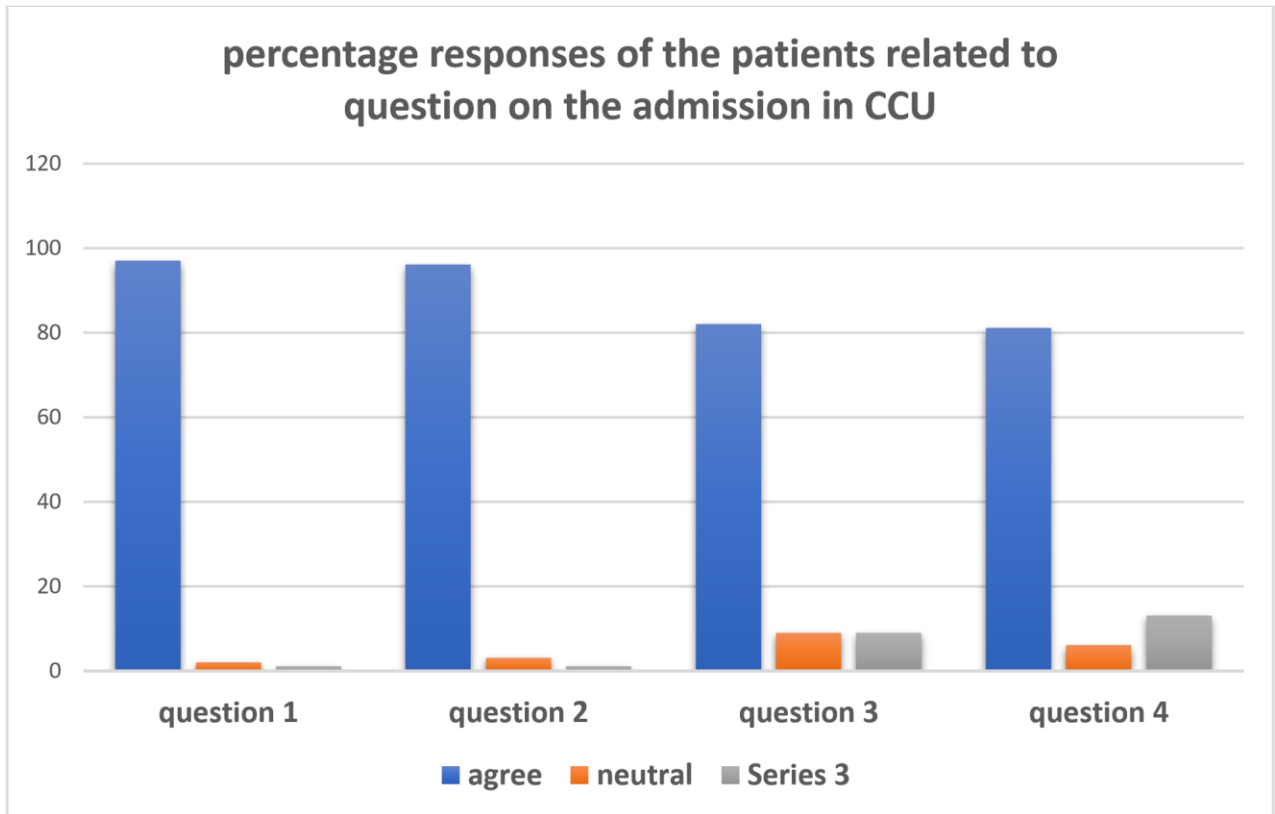
Respondents' Area of Residence		
	FREQUENCY	PERCENTAGE (%)
URBAN	37	37
RURAL	63	63
Total	100	100

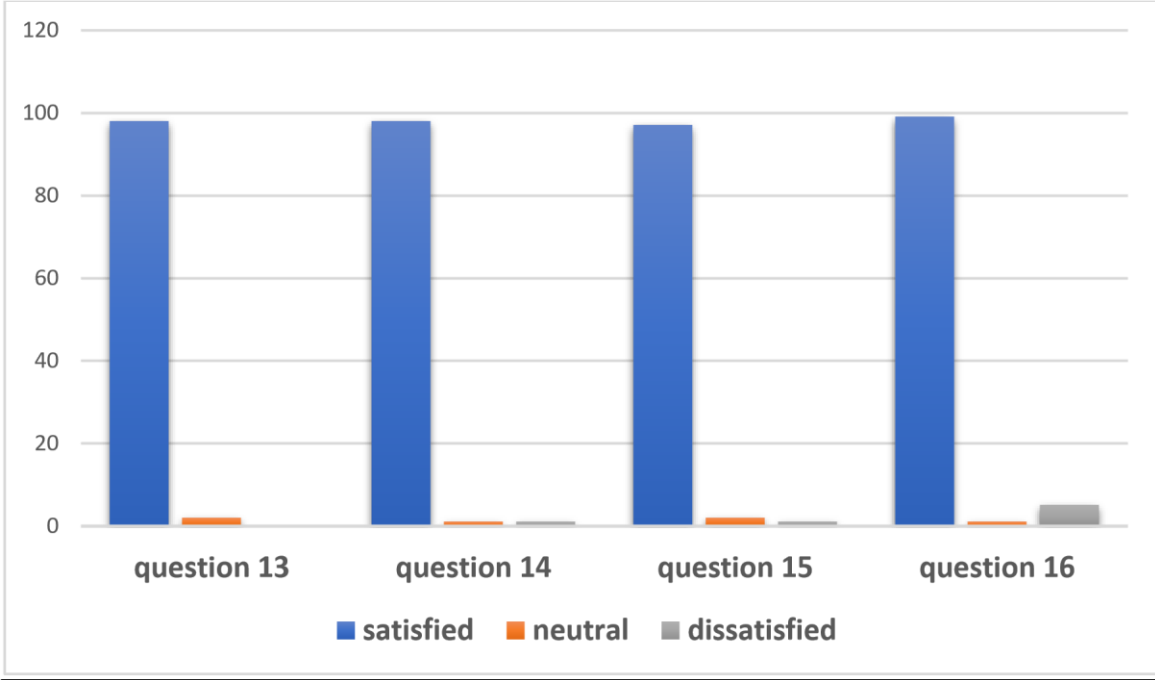
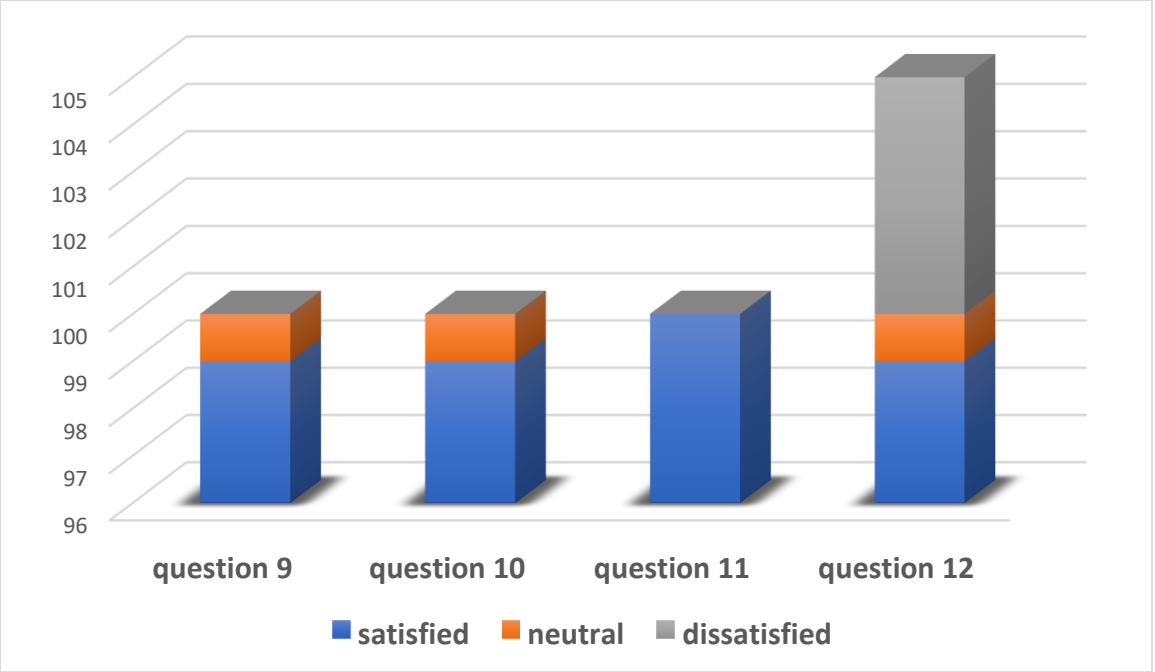
Table 4

Respondents' Age		
	FREQUENCY	PERCENTAGE
BELOW 50 (years)	32	32
ABOVE 50 (years)	68	68
Total	100	100

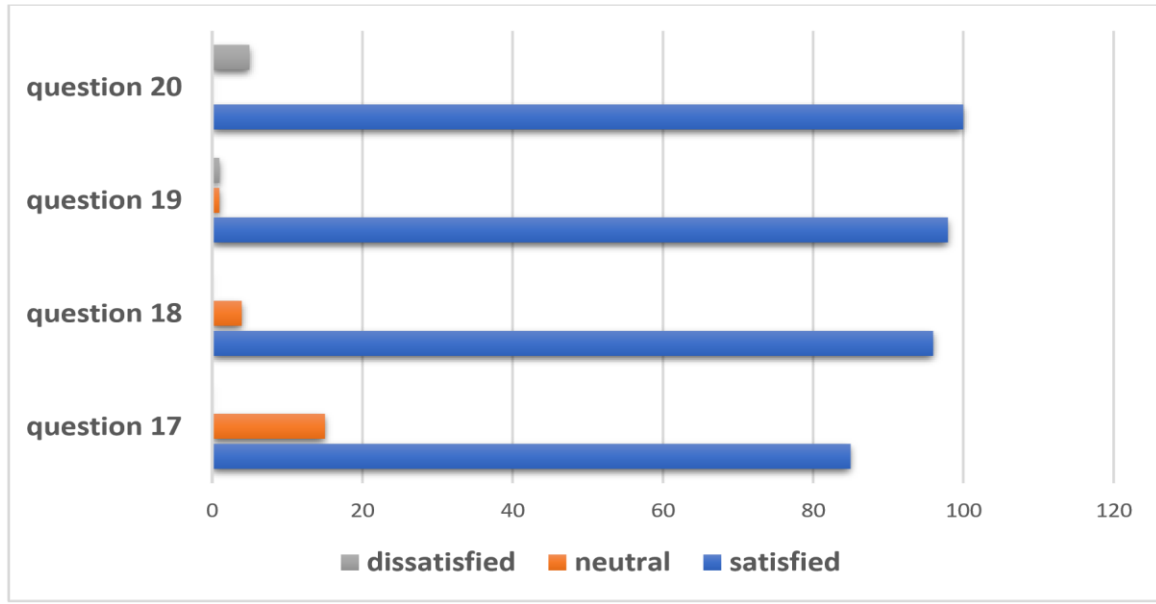
Patients' Response to Questions											
Sr.#	Questions	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1.	Do you think you got admission easily?	00	00	01	01	02	02	07	07	90	90
2.	Was it easy to find a bed in Cardiac Center?	00	00	01	01	03	03	11	11	85	85
3.	Did doctor provide you with detailed information about disease, duration of stay and treatment?	01	01	08	08	09	09	50	50	32	32
4.	Did doctor involve you in making decision about your treatment?	01	01	12	12	06	06	55	55	26	26
5.	Do you think your personal information was kept confidential?	00	00	01	01	05	05	28	28	66	66
6.	Did the doctor and paramedical staff take care of privacy during your examination?	00	00	01	01	06	06	25	25	68	68
7.	Was the time provided by doctor to you on his each visit satisfactory?	00	00	01	01	01	01	52	52	46	46
8.	Did the doctor answer your questions about your disease?	00	00	00	00	04	04	29	29	67	67
9.	Do you think level of cleanliness is upto mark?	00	00	00	00	01	01	13	13	86	86
10.	Do you think facilities available at Cardiac Center are upto mark?	00	00	00	00	01	01	21	21	78	78

Patients' Response to Questions											
Sr.#	QUESTIONS	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
11.	Do you think that the environment of Cardiac Centre is calm and quiet?	00	00	00	00	00	00	16	16	84	84
12.	Are the nurses and paramedical staff available all the time?	00	00	00	00	01	01	15	15	84	84
13.	Do you think nurses and paramedics are expert in their fields?	00	00	00	00	02	02	34	34	64	64
14.	Are the doctors easily available all the time?	00	00	00	00	02	02	35	35	63	63
15.	Did the doctors listen to your problem properly?	00	00	00	00	02	02	43	43	55	55
16.	Are you satisfied with the treatment/care provided at Cardiac Centre?	00	00	00	00	01	01	28	28	71	71
17.	Do you think that your duration of stay is according to your health condition?	00	00	00	00	15	15	39	39	46	46
18.	Do you think that by visiting Cardiac Centre your health condition got better?	00	00	00	00	04	04	37	37	59	59
19.	Would you like to prefer this Cardiac Centre for further treatment in life?	00	00	00	00	01	01	14	14	85	85
20.	Would you like to recommend the services available at Cardiac Centre to your friends and family?	00	00	00	00	00	00	09	09	91	91

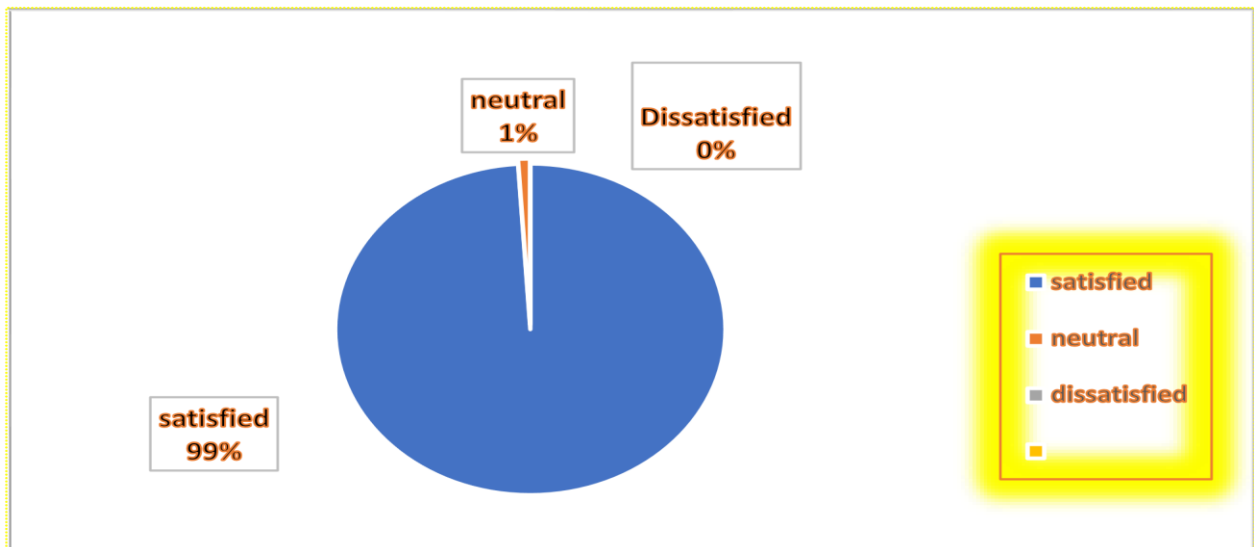








**Patient’s response on questions related to ‘Overall Satisfaction’ regarding the functioning of CCU, BVH.**



**DISCUSSION:**

This study was conducted to evaluate the patient’s level of satisfaction with the health care services received at the CCU department in BVH, BWP. In general, it was found that patients were satisfied with the services provided particularly in the CCU, (and not the cardiac emergency department). The over-all gap in health service provision in the CCU was found to be only 1%, signifying overall satisfaction among patients with health services provision.

In multiple studies, including a research conducted in the cardiac emergency department of Imam Reza Hospital, Tabriz, Iran, it was found out that patient satisfaction can be attracted by paying great

attention to the needs of medical care, nursing care, the behavior of hospital personnel and the time period of providing the services<sup>8</sup>.

Our study conducted in CCU Bahawalpur showed that 99% of patients were satisfied with the service, these results were similar to another study conducted in a Cardiac Surgery ICU model of Tabriz, Iran where patient satisfaction in most of the cases was high. However, this is highly contrary to the study conducted in the Emergency Department of the Bahawal Victoria Hospital, Bahawalpur, whereby a higher proportion of patients were not satisfied with the functioning and quality of services in the Emergency Department of BVH, BWP.

To gain a deeper insight, about the experiences of the patients when responding about their satisfaction, we found that the CCU scored high on the questions asked about the, 'privacy of examination by the doctors', 'confidentiality of personal information', 'cleanliness of the Cardiac care unit', 'provision of detail information about the disease, duration of stay and treatment by the doctor' and 'recommendation of the services available at the CCU to friends and family', CCU of BVH, BWP scored high.

Despite the applicability of the information gained via this study, our results and conclusions are likely to have some limitations. Our study was limited to the information obtained by the patients present in the CCU only during the period of data collection. Hence, the subjective feelings of the patients off the ground could not be recorded. Our study also does not account for the registration-waiting time and the procedure of obtaining the hospital file.

The high degree of satisfaction among the patients of CCU is observed due to the fact that the building of Cardiac Care Unit is recently constructed and well equipped with all the machinery, tools and infrastructure of a modern Health Care facility. This is also the very reason for a great incidence of patient satisfaction in the correlation of hospital cleanliness and calm poise of the CCU facility.

#### ONCLUSION:

It can be concluded that the wide majority of the respondents were satisfied with the administrative staff and its professional attitude towards their job, that includes the doctors, nurses and the paramedical staff. When asked categorically about the overall satisfaction, the vast majority was found to be satisfied with the functioning and the quality of services provided by the CCU, BVH, BWP.

#### RECOMMENDATIONS

It is to be recommended that further studies regarding the satisfaction of patients in other health care facilities should also be conducted throughout Pakistan. Efforts should be made to gain regular feedback from patients, their relatives and health care teams in order to manipulate and intervene for the best interest of health care services provided.

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