

Study on Patient Satisfaction Towards Health Services at Credihealth

By

Kanika Arya

*Dissertation submitted in partial fulfillment of the requirements of the degree
MBA Hospital and Health Management*

Academic year, 2017-2019



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TO WHOM SO EVER IT MAY CONCERN

This is to certify that Dr.Kanika Arya student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at Credihealth Pvt. Ltd. from 04th Feb 2019 to 3rd May 2019.

The candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The internship is in fulfilment of the course requirements.

I wish her success in all her future endeavours.

A handwritten signature in blue ink, appearing to read 'Ashok Kaushik'.

Dr: Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur

15 May 19.

A handwritten signature in blue ink, appearing to read 'Mohan Bairwa', with the date '15.5.19' written next to it.

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credihealth
Aapka Health Partner

The certificate is awarded to

Dr. Kanika Arya

In recognition of having successfully completed her
Internship in the department of

Medical Operations

and has successfully completed her Project on

A study on Patient Satisfaction Towards Health Services at Credihealth

4th February 2019 - 3rd May 2019

Credihealth Pvt. Ltd.

She comes across as a committed, sincere & diligent person who has a
strong drive and zeal for learning

We wish her all the best for future endeavors

Training & Development

Zonal Head-Human Resources

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **A Study on Patient Satisfaction Towards Health Services at Credihealth** submitted by Kanika Arya, MBA HM- 22, 0582 under the supervision of Dr. Mohan Bairwa for award of MBA in Hospital and Health/ Pharmaceutical / Rural Management in Health and Hospitals of the University carried out during the period from 4 February 2019 to 3 May 2019 embodies my original work and has not formed the basis for the award

of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.



Signature

Kanika Arya

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ABSTRACT

Title: A Study on Patient Satisfaction Towards Health Services at Credihealth

Author : Kanika Arya

Background: Patients are the foundation of health care system and expect certain level of services from the health care providers. Health needs of patients seeking care should be fulfilled in an effective manner every single time. It includes both aspects of health industry (medical or non-medical) which focuses on expectancy value theory, and health care quality theory proposing beliefs, values, prior expectations of patients along with interpersonal process of care plays a paramount role in ensuring patient satisfaction

Aim: The aim of the study is to assess overall patient satisfaction level and to identify areas of improvement to enhance patient delight towards the services provided by Credihealth

Objective: - To assess the level of satisfaction of patients

- To identify the factors associated with satisfaction level
- To provide suggestions for enhancing patient experience

Methodology: A convenience sampling technique utilised for 300 respondents from Credihealth and responses were collected from five major cities including Delhi, Mumbai, Bangalore, Kolkata and Hyderabad. A modified structured questionnaire was prepared on a rating scale of 1 to 4 where 1 signifies poor and 4 signifies excellent. The perceived satisfaction scores were calculated in percentage for the data collected. Excel 2016 is utilised for data analysis.

Results: The response rate for overall satisfaction was high (90%). The highest mean score established was for politeness of the medical expert (3.38) and lowest was scored for quote estimation for surgery with a total mean standard deviation of 0.66 was achieved. The patients in Delhi were highly satisfied followed by Hyderabad and Bangalore. The issues identified were mostly related to delayed appointments, non-availability of information regarding doctor's schedule.

Conclusion: The study concluded that certain factors for e.g. politeness and pleasant interactions with patients developed positive impact on satisfaction levels. Regular monitoring and providing patient centric care will help to increase patient engagement hence improving the overall experience thereby enhancing customer delight.

ACKNOWLEDGEMENT

Success is never gained through individual efforts of one person. It's achieved through equal contribution from members working together as a team which leads to pleasing outcomes. I am thankful to my parents for their unending love, support and blessings they show on me.

I would like to express my sincere gratitude to my guide Dr. Mohan Bairwa for constant encouragement and guidance given at each step right from inception of the study.

I would like to extend my heartfelt gratitude to Credihealth Private Limited for allowing me to become the part of their organisation and helping me to understand the work process and functioning of medical operations during the tenure of this study. I am thankful to my mentor Dr. Ashwanth for imparting his knowledge, support and sharing his experience gained in this field which became as a valuable resource to complete my study.

I would also like to acknowledge the contribution of my colleagues for giving their time and efforts by providing suggestions in order to conduct the study in effective manner. This would be impossible without their cooperation and generosity as it gave me a good exposure to learn and apply theoretical knowledge in the concerned department.

BACKGROUND

About the Organisation

Credihealth incepted in 2013, is a start-up organization based in Gurugram, Haryana. It is nurtured under the mentorship of Dr. Ravi Virmani ex COO of Max Health Care. It aims to be patient's trusted health partner during hospitalization process and focuses to provide online health solutions for the hospital needs of the patients. Gradually it emerged as a big player in health care market. The core business lies in providing detailed information regarding hospitals and health care providers to people seeking medical aid.

It facilitates end to end services to provide information to customers for various doctors, hospitals and all kind of pre and post treatment care needs – from searching for the right doctors, booking appointments with the doctors of their choice, quote estimation for the surgeries, diagnostics and home health care services. Presently active across 65 cities including Delhi- NCR, Mumbai, Kolkata, Hyderabad, Chennai Bangalore, Jaipur, Indore and Ranchi. It has extended the boundaries to provide health services to international patients- mainly from Africa, Afghanistan, Maldives, Bangladesh and Nepal.

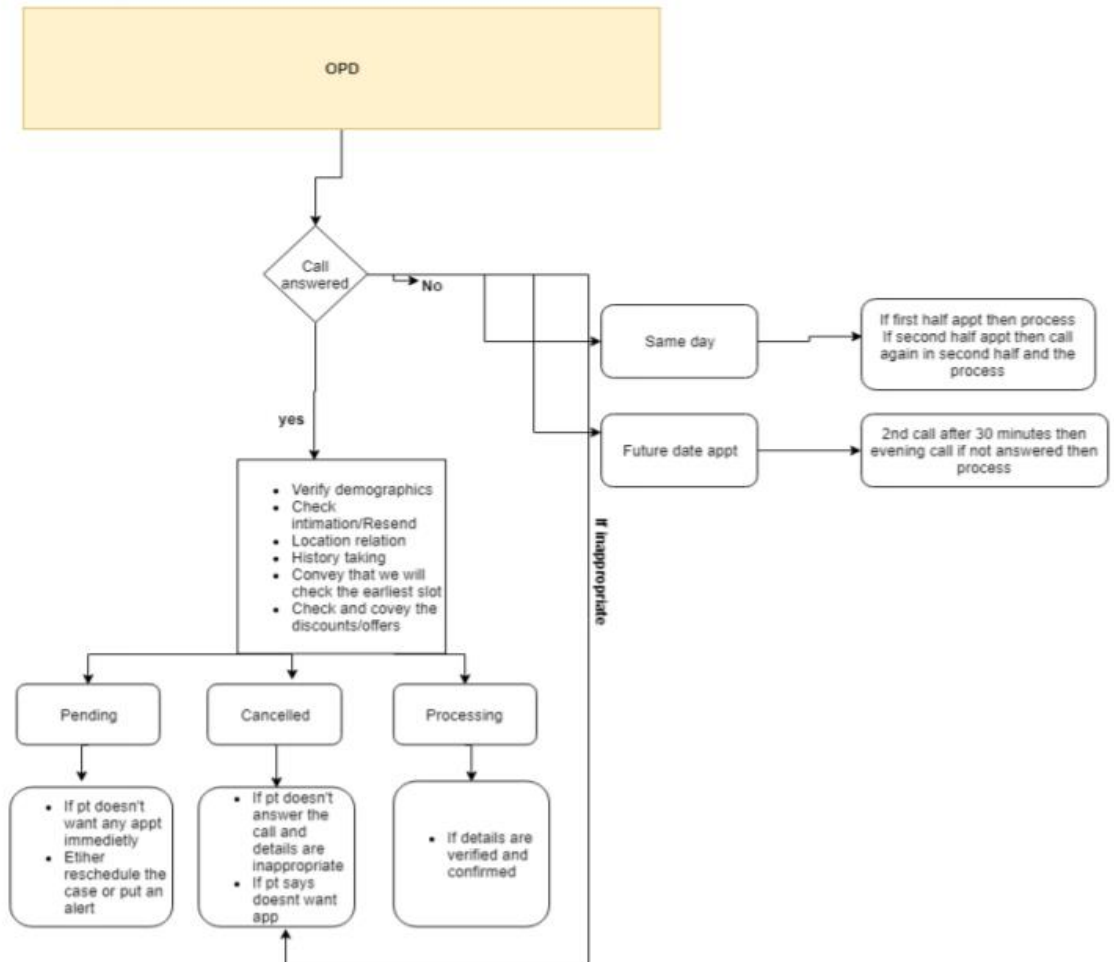
Vision

Envision a health care system where people from around the world can quickly find reliable answers along with easy access to best health care experts to guide them towards a healthier, happier and fulfilling life (1)

Milestones

- The organization has a proactive approach and launched its app for android users to have an interaction with customers in order to provide them a complete solution at one place.
- The payment gateways are well integrated to the credihealth platform to avail different online services which is easy and user friendly.
- Highest performing partner with hospitals, collaboratively working with more than 650 hospitals across the nation pioneer in health industry, including Medanta, Apollo, Manipal, Fortis, Kokilaben, Jaslok etc.
- It has a largest source of patients hence become a bench mark for other competitors in the health industry. The services provided by the company is free for the users.

Work Flow Process



Flow chart for the work process in medical operations

CHAPTER 1

INTRODUCTION

According to Deloitte insights report 2018, care consumers were surveyed to identify the consumer-experience trends with health care system which shows that consumers of all ages are using technology in every aspect including health care. Adopting virtual health can increase the reach of physicians and other care providers. Providing easy to access, convenient and keeping patients out of waiting area along with hassle free appointments can result in better patient experience (2) .

Patient satisfaction is a relative phenomenon, symbolizing patients perceived needs, expectations from health delivery systems and experience of quality care. They are the foundation of health care system and expect certain level of services from the health care providers. Health needs of patients seeking care should be fulfilled in an effective manner every single time. A patient's expression of satisfaction or dissatisfaction is a judgment on the quality of health care services provided in all its aspects. Whatever its strengths and limitations, patient satisfaction is an indicator that should be indispensable to the assessment of the quality of care in health system (3)

Patient satisfaction is one of the important key indicators of providing quality care and is a primary means of measuring effectiveness of health care delivery and its assessment helps in improving the health care services. Low satisfaction level affects clinical outcomes, retention of patient, timely delivery of quality health care services. The purpose of this study is to serve as a useful resource to help Credihealth to enhance its patient satisfaction by identifying areas of improvement which would help in increasing patient engagement, hence, to make it community's first choice in seeking medical care through various platforms available digitally.

1.1 Research Question

What is the satisfaction level of patients towards services provided by Credihealth?

1.2 Aim

The aim of the study is to assess overall patient satisfaction level and to identify areas of improvement to enhance patient delight towards the services provided by Credihealth.

1.3 Objectives

- To assess the level of satisfaction of patients
- To identify the factors associated with satisfaction level
- To provide suggestions for enhancing patient experience

CHAPTER 2

REVIEW OF LITERATURE

2.1 Studies to Improve Patient Experience through Mobile Health Apps

Chuntao Lu et al., (2018) conducted a study in three public hospitals of China with a main aim to examine the impact of mobile apps along with to find out the difference between the experience of users and non-users on patient satisfaction. Chinese outpatient questionnaire was utilized for the survey and a sample of 300 respondents was collected randomly. Chi-square test, t-test were applied to compare the demographic characteristics between users and non-users and to check the level of significance present in between them. Regression analysis was conducted to check for the association of mobile app with patient experience. The results showed that the users and nonusers had a age differentiation ($\chi^2=12.2$, $P=.002$), education ($\chi^2=9.3$, $P=.03$), living surroundings ($\chi^2=7.7$, $P=.006$), and the need for specialists ($\chi^2_4=11.0$, $P=.03$) (4) . Most mobile app users as compared to non-users belong to young generation who are more educated and demanded for specialised doctors for health services. Multiple regression analysis revealed that use of mobile apps increased the patient satisfaction scores by 17.7%. The study concludes that the use of mobile apps to avail health services can improve patient experience which will result in positive health outcomes and ensuring transparency in the health system.

2.2 Studies on Patient Satisfaction in Health Care

A descriptive cross-sectional study was conducted by Dr. Fatima Mukhtar et al., (2013) with an aim of determining the patient satisfaction level with overall services in a tertiary care hospital in Lahore. A total number of 250 patients were selected through systematic randomized sampling technique. Patients interviews were taken, and data was collected through pretested questionnaire and was analysed in SPSS version 16. The results obtained in the study shows that 90% (232) patients were satisfied with the doctors and majority of patients (94%) agreed that the hospital was well ventilated and cleaned properly. Around 89% of the respondents agreed to revisit the hospital again. The study focuses on conducting similar studies in primary and secondary health facility.

Oyvind A Bjertnaes et al., (2012) in his study on overall patient satisfaction in hospitals related to patient experiences and expectations revealed that patient experiences and expectations are most prominent part of service quality but patient expectations plays a major role in quality assessments The study was conducted with the aim to estimate effects of different predictors on overall satisfaction in the hospitals including patient experiences, expectations and socio economic demographic variables(5).Data collection was done by using national patient experience survey for 63 hospitals in Norway in year 2006. The questionnaire was mailed to 241141 patients after the discharge from the

hospitals and a reminder was sent to the non-respondents after four weeks. Multivariate regression analysis was applied to evaluate the predictors of patient satisfaction. The results determine that thirteen variables were found to be significantly associated with overall level of patient satisfaction. Regression model revealed 59% of variation in overall patient satisfaction and the most important predictor was patient experience with the nursing services. The study confirmed that both patient experience and expectations are distinct but are related to overall patient satisfaction.

C Jenkinson et al., (2002) conducted a study on patients aged 18 and above in five hospitals within NHS Trust at Scotland. The aim of the study was to determine what aspects of health care influence patient satisfaction to recommend hospitals to others along with an objective to explore the extent to which patient satisfaction is a meaningful indicator of patient experience of services provided in a health care setting. A total no. of 2249 respondents participated in the study and were asked to fill the Picker Inpatient Survey questionnaires which were mailed to them within 1 month after discharge from the hospitals. About 90% respondents were satisfied with the services provided within the period of inpatient care. The major determinants of patient satisfaction were found to be physical comfort, emotional support and respect for patient preferences (6). The detailed questions about specific aspects of patient's experience in the study were useful for detailed monitoring of the different departments of the hospital which will be helpful in improving the overall performance.

2.2 Studies on Factors Influencing Patient Satisfaction in Health Care

A cross-sectional study conducted by Saif Aldeen AlRyalat et al., (2019) in the outpatient department of University of Jordan revealed that focusing on overall attributes of providing care can increase the overall satisfaction and will help in improving patient's loyalty. A total number of 215 patients were included in the study and the factors which were directly influencing the patient satisfaction were interaction with the health care provider (doctors/nurses), food facilities, overall environment, time lapsed in providing services and cleanliness in the departments. All these factors had significant impact on the patient satisfaction score.

Xesfingi S and Vozikis A (2016) studied the impact of socio economic and health care related factors on patient satisfaction with the aim first, to assess the degree of patient satisfaction and second, to study the relationship between patient satisfaction with socio-economic and health care related indicators. It covered 31 countries, and the dependent variable taken was the patient satisfaction index, defining the patient satisfaction for health care system of these countries(7). The results showed positive association between the level of patient satisfaction and health care indicators like nurses and doctors, where doctors were found to be a major contributor for patient satisfaction meanwhile public health expenditure in the socio-economic variables, was found to be positively associated with patient satisfaction. Lastly in the study, it was found that the elderly people were the most

satisfied patients with the health care system and there was no evidence for private health spending and number of hospital beds on patient satisfaction.

Haiping Chen et al., (2016) conducted a cross-sectional study on factors influencing the patient satisfaction in public hospitals of Shanghai, with the aim to check the current status of patient satisfaction and determining possible factors which influences the patient satisfaction during hospitalization(8). Around 898 participants were included, and five-point Likert scale rating was utilized to analyse parameters associated to hospital care. The results specified that 89.5% of the respondents were satisfied with overall services provided by hospital during the stay where 0.57% were not satisfied. Demographic variables such as age, sex, residential area and occupation of the patient had positive association with the patient satisfaction whereas marital status and income of the patient had no influence on it. It was concluded that slight increase in satisfaction score related to doctors, nurses and services etc can improve overall levels of satisfaction. Attention payed by the authorities through constant monitoring and providing quality services can enhance the overall patient experience during hospitalization.

CHAPTER 3

MATERIALS AND METHODS

3.1 Study Area

The study was conducted in Credihealth organization located in Gurugram, Haryana.

3.2 Study Design

It is a type of descriptive study conducted on the population at a specific point in time using four-point rating scale. Patient satisfaction towards Credihealth services was measured and patients from five major cities (Delhi, Bangalore, Hyderabad, Mumbai and Kolkata) were asked to rate the service based on poor, fair, good and excellent.

3.3 Study Duration

The study was carried for 3 months from 4 February 2019 to 4 May 2019.

3.4 Sample Size

A total number of 300 respondents were taken as a sample based on average number of foot fall of cases converted through calls in last two months.

3.5 Study Population

Credihealth patients attended by medical operations team seeking services for medical assistance.

3.5.1 Inclusion Criteria

- i. All the patients of follow up cases, who had consulted with in the hospitals.
- ii. Patients who had age of 18 and above were included.
- iii. Patients who were willing to participate in the survey.

3.5.2 Exclusion Criteria

- i. Those patients who hadn't received the calls since beginning of the request.
- ii. Those patients who had disconnected the calls in between the survey.
- iii. Those patients who were speaking language other than English or Hindi.

3.6 Sampling Technique

Patients attended by the operations team during study period and who fulfilled the inclusion criteria were collected as a sample by convenient sampling technique.

3.7 Data Collection Method

A modified questionnaire was prepared for Credihealth services covering the attributes related to patient satisfaction. The research tool was finalized and utilised with due permission from higher authorities. In this study a four-point rating scale which is a psychometric scale was used.

The format for rating scale was as follows: -

- 1- Poor
- 2- Fair
- 3 -Good
- 4- Excellent

The questionnaire was asked over the call for each patient and was divided into two sections firstly, the demographic variables of patients including name, age, sex followed by personal details of the patients. The second part included the questionnaire related to patient satisfaction for the services provided with in the organisation. The patients from five different cities were asked to give responses according to the ratings provided. Before collection of data the purpose of the study was briefly explained to the respondents over the call and it took 15 minutes with every patient to answer the questions.

3.7.1 Data Type

The research study was carried on primary data.

3.7.2 Data Analysis

The tool used for data analysis is Microsoft Excel 2016. The quantitative data obtained through patient satisfaction questionnaire was analysed using descriptive statistics. Normal distribution data has been calculated and presented through mean scores and standard deviation. Other categorized data related to the questionnaire is presented in the form of percentages. Chi square test was utilized to evaluate the significance between categorical values. The chi -square test has been calculated at 5% significance level ($p = 0.05$) therefore, a relationship is significant if the p value < 0.05 .

CHAPTER 4

RESULTS AND INTERPRETATION

Based on the questionnaire prepared to analyse the satisfaction level of the patients towards various health services provided, the survey was conducted on the sample of 300 respondents and results are as follows:-

4.1: Sample distribution according to demographic variables

Table 4.1.1 Age group wise distribution of sample

Age Group	Frequency	Percentage
18-35	117	39%
36-45	52	17%
46-55	42	14%
56-65	58	19%
Above 65	31	10%
Total	300	100%

Table 4.1.1 shows the age of the respondents ranges from 18 to 65 and above and majority of the samples (39%) are from age group of 18-35, while (10%) were from above 65 age group.

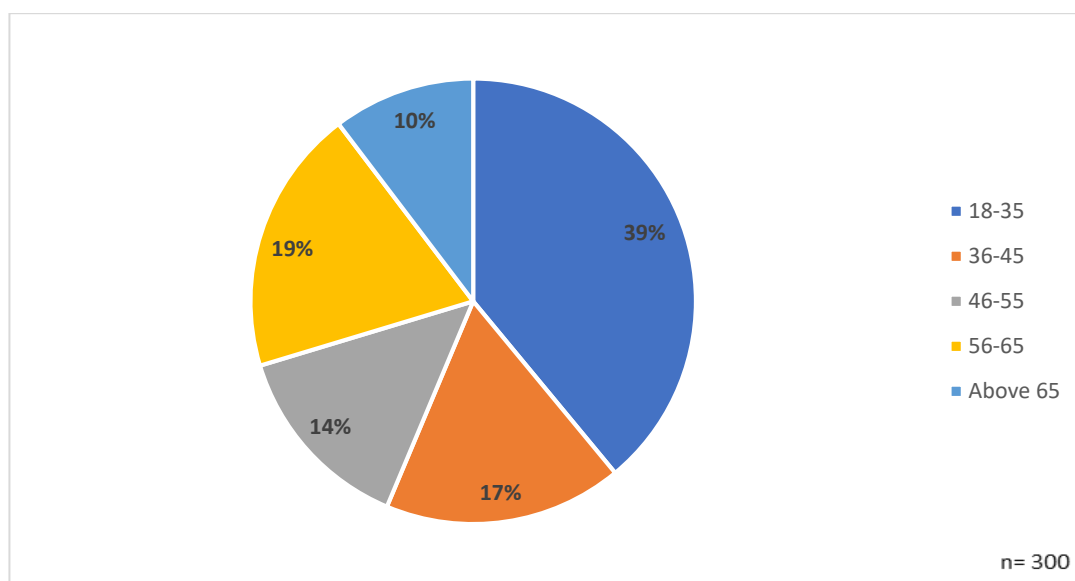


Fig. 4.1.1 Pie chart diagram of respondents for age group in percentage.

4.1.2: Sample distribution based on gender

Table 4.1.2 Gender wise distribution

Gender	Respondents	Percentage
Male	172	57%
Female	128	43%
Total	300	100%

Table 4.1.2 depicts the data in which out of 300 respondents, 172 (57%) of the them are male and rest 128 (43%) are female.

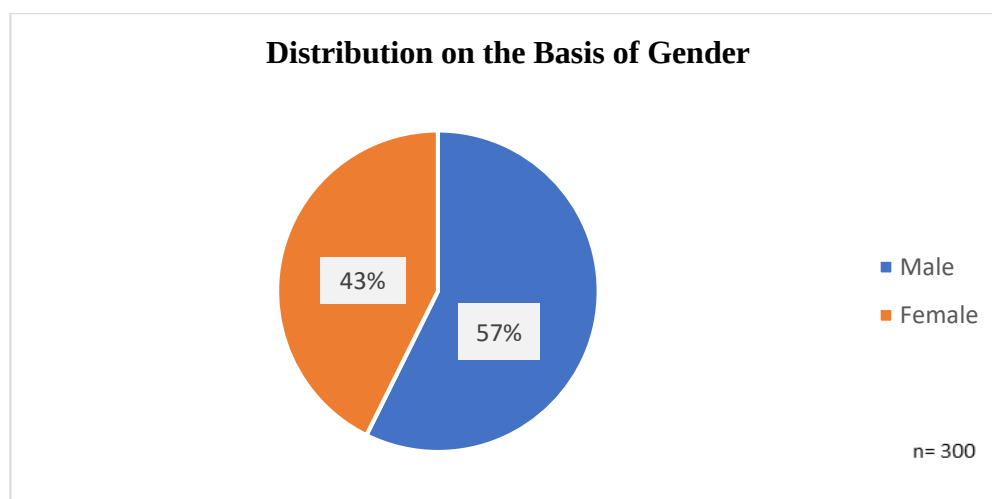


Fig.4.1.2 Pie chart diagram of respondents according to gender in percentage.

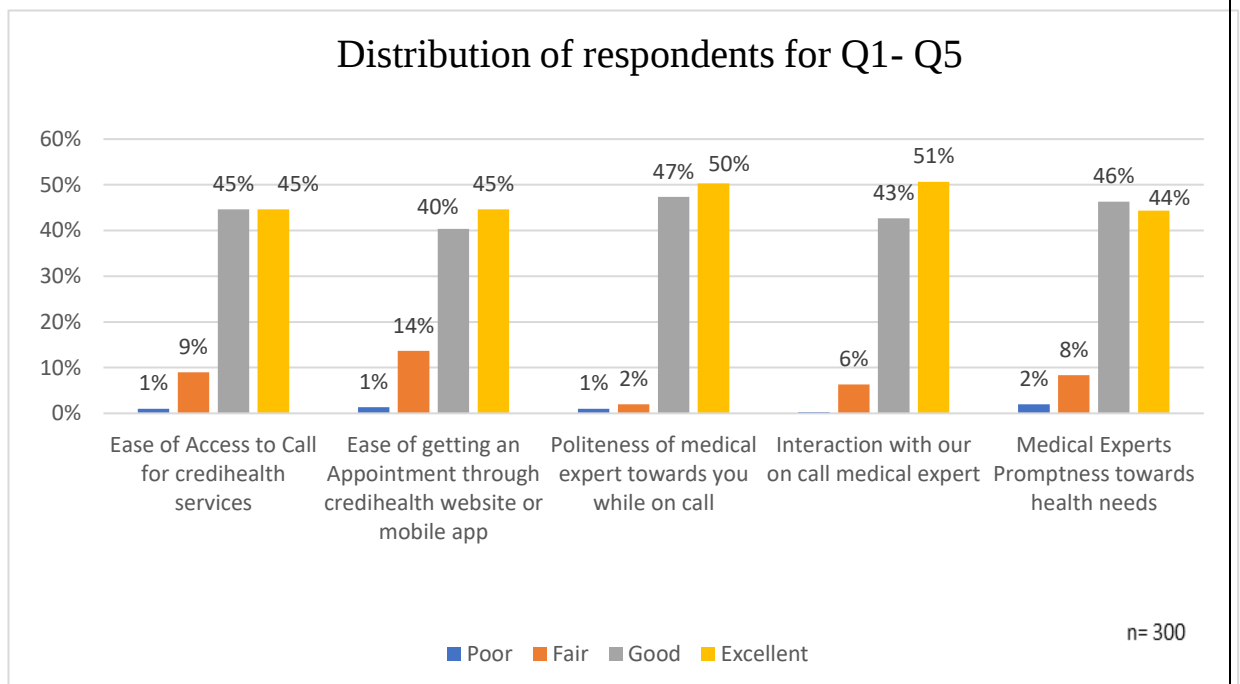
4.2 Distribution of sample based on patient satisfaction scores given by the respondents

Table 4.2 depicts the data based on rating given by the respondents for level of satisfaction on a scale of 1 to 4 where 1 = poor, 2 = fair , 3 = good and 4 = excellent.

Service Elements	Poor	Fair	Good	Excellent	Total
Ease of Access to Call for credihealth services	3	29	134	134	300
Ease of getting an Appointment through credihealth website or mobile app	4	41	121	134	300
Politeness of medical expert towards you while on call	1	6	142	151	300

Interaction with our on call medical expert	1	19	128	152	300
Medical Experts Promptness towards health needs	3	25	139	133	300
Services you needed were shared with clarity of information. If yes then,	Yes	286			300
	No	14			
a) Information sharing regarding doctor availability & time slots	3	21	142	120	286
b) Quote Estimation or cost of procedure	1	18	54	35	108
Information shared helped in decision making	4	30	147	119	300
Ability of medical experts to answer queries in understandable way	4	17	163	116	300
Rate your impression about overall services provided	0	17	178	105	300

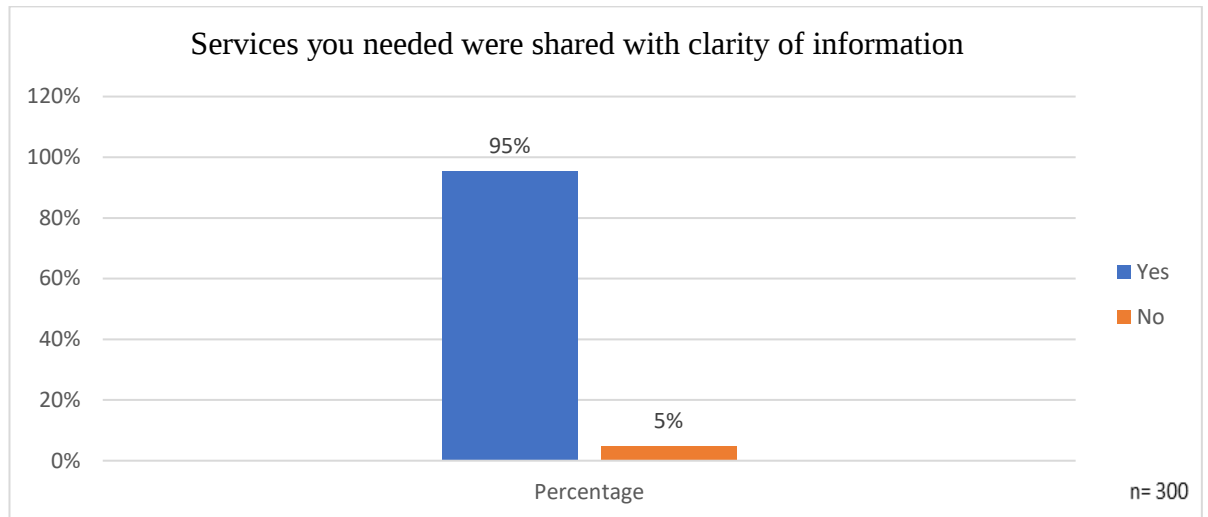
Fig 4.2.1 depicts bar diagram for percentage analysis of (Q1 -Q5) based on satisfaction scores.



The result shows overall responses of total 300 respondents. All the questions from Q1-Q5 overall received high level of expectation level, while out of these, interaction with

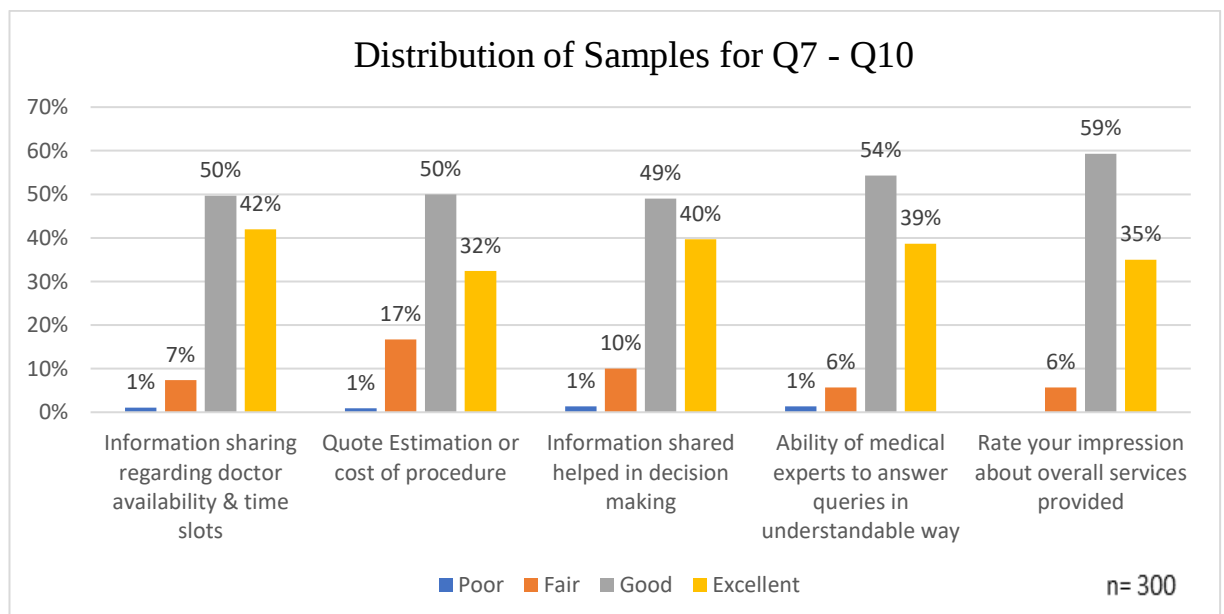
on call medical expert has highest level of expectation (Excellent, 51% and Good, 43%), ease of call for services received (Excellent, 45% and Good, 45%). Similarly ease of getting appointment through website or mobile app met (Good, 40% and Excellent, 45%) expectation level, politeness of medical received (Excellent, 50% and Good, 47%), Medical experts promptness towards health needs met (Excellent, 44%, Good 46%) of expectation level.

Fig 4.2.2 depicts bar diagram percentage analysis for (Q6) based on response for yes or no.



Majority of the patients (95%) agreed that services they needed were shared with clarity of information.

Fig 4.2.3 depicts bar diagram percentage analysis for (Q7 -Q10) based on satisfaction score



The results signify that the expectation level was quite high for (Q7-Q10), information sharing regarding doctor availability and time slot received (Excellent 50% Good 42%) which was highest of all. Followed by information shared helped in decision level met (Excellent, 40% Good, 49%) expectation level. Ability to understand queries received (Excellent 39% Good, 54%) for the expectation level. While quote estimation for surgery in received (Excellent 32% Good 50%) for the expectation level which was the lowest percentage score in comparison to others. The impression for overall services provided met (Excellent, 59% Good 35%) of expectation level which was high.

4.3 Mean and Standard deviation scores for service elements of patient satisfaction

Table 4.3 shows mean scores and standard deviation for parameters taken in the study related to patient satisfaction.

Service Elements	Mean Score	Standard Deviation ($\pm$ SD)
Ease of access to call for credihealth services	3.33	0.69
Ease of getting an appointment through credihealth website or mobile app	3.28	0.75
Politeness of medical expert towards you while on call	3.48	0.56
Interaction with our on call medical expert	3.44	0.63
Medical Experts Promptness towards health needs	3.34	0.67
Information sharing regarding doctor availability & time slots	3.33	0.65
Quote Estimation or cost of procedure	3.14	0.72
Information shared helped in decision making	3.27	0.69
Ability of medical experts to answer queries in understandable way	3.30	0.64
Rate your impression about overall services provided	3.29	0.57
Total Mean Score	3.32	0.66

The mean scores relevant to the items of service elements for patient satisfaction lies between 3.14 (Quote estimation or cost of procedure) to 3.48 (Politeness of medical experts towards you while on call). Among eleven parameters of patient satisfaction, the highest mean score belonged to the politeness of medical experts towards you while on

call whereas lowest mean score was related to quote estimation for a surgery. The total mean score for all the elements of patient satisfaction was 3.32 ± 0.66 (table 4.3) from 4.

4.4 Sum of total score, frequency and percentage of respondents (n = 300) for patient satisfaction

Table 4.4 shows sum of total scores in range and percentage of respondents for patient satisfaction where scores ranges between 12- 40 with a mean score of 30.97 ± 4.77 .

Score Range	Frequency	Percentage
12 -18	6	2%
19-26	30	10%
27-33	157	52%
34-40	90	30%

4.4.1 City wise distribution of satisfaction level in percentage

Table 4.4.2 represents perceived satisfaction level of patients in percentage for five major cities where patients were highly satisfied in Delhi followed by Hyderabad, Bangalore, Mumbai and Kolkata which has low perceived satisfaction level.

City	Below 65% (Poor)	Between 65%-80% (Moderate)	Above 80% (High)	Total
Bangalore	12%	45%	43%	100%
Kolkata	15%	43%	42%	100%
Delhi	3%	53%	43%	100%
Hyderabad	10%	58%	32%	100%
Mumbai	18%	50%	32%	100%

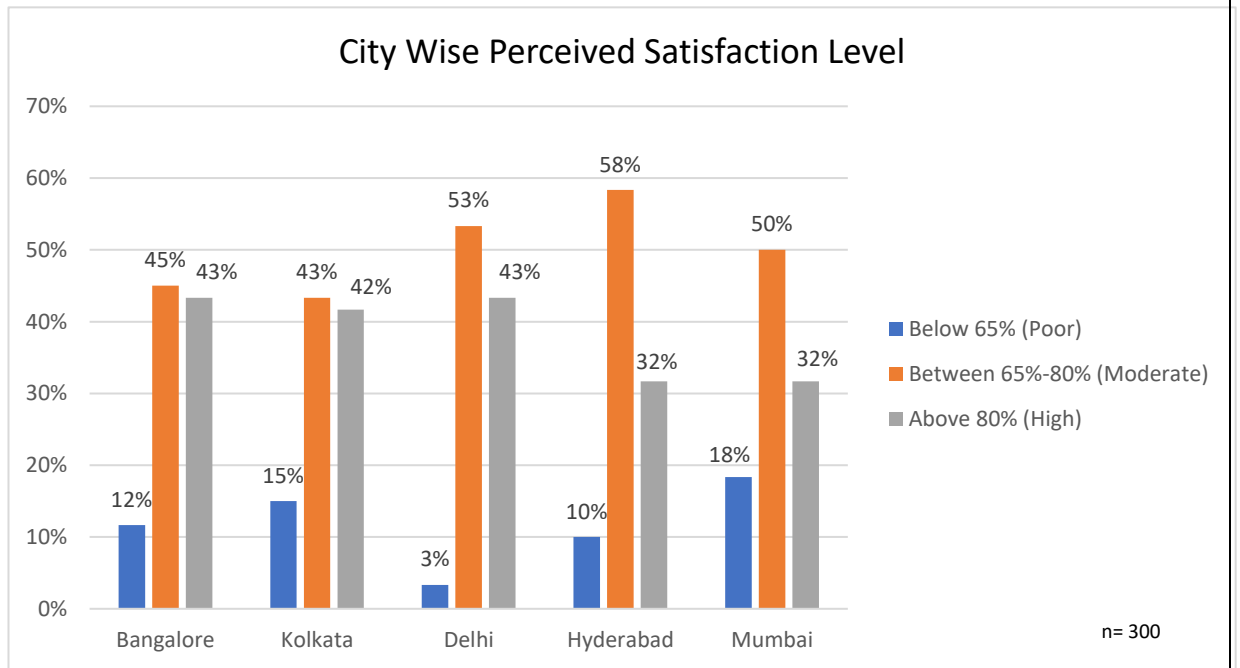


Fig.4.4.1 Graphical representation of satisfaction level of five major cities in percentage

4.4.2 Perceived satisfaction level for total number of respondents.

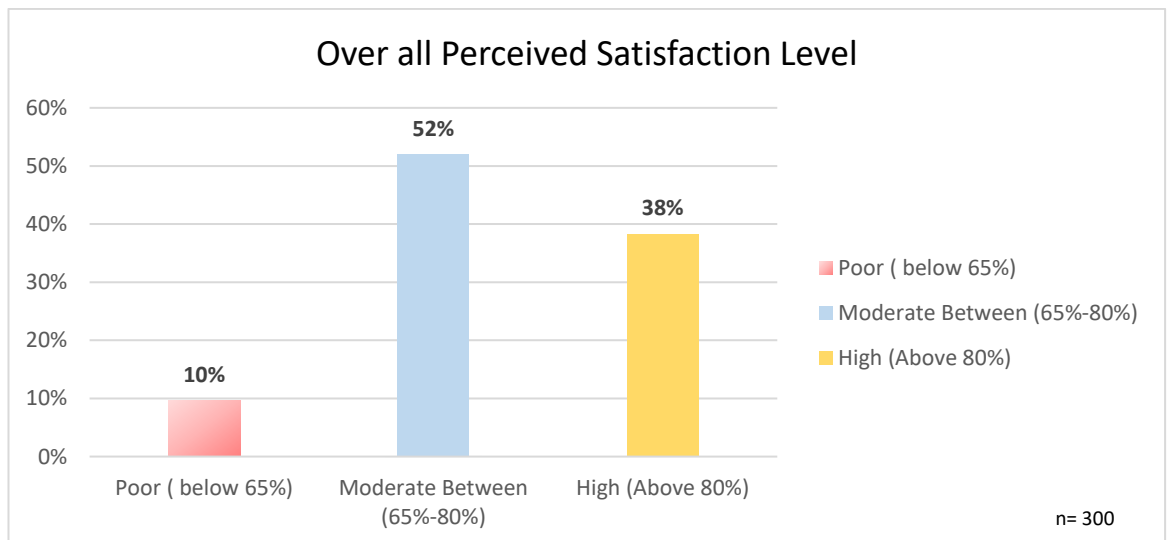


Fig. 4.4.3 depicts the perceived satisfaction level for the respondents where n=300. The results show 38% of the participants were highly satisfied with the services provided by the organization while 52% were moderately satisfied and 10% were poorly satisfied.

4.5 Chi Square Analysis

4.5.1 Perceived satisfaction level v/s Age Groups

Results				
Age group	Poor (Below 65%)	Moderate (65%-80%)	High (Above 80%)	Row Totals
18-35	8 (11.31) [0.97]	67 (60.84) [0.62]	42 (44.85) [0.18]	117
36-55	9 (8.99) [0.00]	45 (48.36) [0.23]	39 (35.65) [0.31]	93
55+	12 (8.70) [1.25]	44 (46.80) [0.17]	34 (34.50) [0.01]	90
Column Totals	29	156	115	300 (Grand Total)

The chi-square statistic is 3.7483. The p-value is .441146. The result is not significant at $p < .05$.

Tables 4.5.1 that patient satisfaction level for all the services was highest in age group of 18-35 (39%) followed by 56-65 age group (20%) in comparison to other age groups however, there difference is not statistically significant however, there difference is not statistically significant ($p = 0.4411$).

4.5.3 Perceived satisfaction level v/s Gender

Results				
	Poor (Below 65%)	Moderate (65%-80%)	High (Above 80%)	Row Totals
Male	14 (16.43) [0.36]	89 (89.53) [0.00]	67 (64.03) [0.14]	170
Female	15 (12.57) [0.47]	69 (68.47) [0.00]	46 (48.97) [0.18]	130
Column Totals	29	158	113	300 (Grand Total)

The chi-square statistic is 1.156. The p-value is .561019. The result is not significant at $p < .05$.

Table 4.5.3 shows results shows that patient satisfaction level for all the services was higher in males (57%) than in females (43%) however, there difference is not statistically significant ($p = 0.5610$).

4.5.4 Perceived satisfaction level v/s City

Results				
City	Poor (Below 65%)	Moderate (65%-80%)	High (Above 80%)	Row Totals
Bangalore	8 (11.31) [0.97]	67 (60.84) [0.62]	42 (44.85) [0.18]	117
Kolkata	5 (5.12) [0.00]	27 (27.56) [0.01]	21 (20.32) [0.02]	53
Delhi	4 (3.87) [0.00]	18 (20.80) [0.38]	18 (15.33) [0.46]	40
Hyderabad	7 (5.70) [0.29]	29 (30.68) [0.09]	23 (22.62) [0.01]	59
Mumbai	5 (3.00) [1.34]	15 (16.12) [0.08]	11 (11.88) [0.07]	31
Column Totals	29	156	115	300 (Grand Total)

The chi-square statistic is 4.5322. The p-value is .806206. The result is not significant at $p < .05$.

Tables 4.5.4 shows that patient satisfaction level for all the services was highest in Delhi (96%) followed by Hyderabad (90%) in comparison to other major cities however, there difference is not statistically significant ($p = .8062$)

4.6 Distribution of respondents for suggestions for improvement given and reasons behind the low satisfaction level.

Any suggestions for improvement	Frequency	Percentage
No Suggestion	121	40%
Excellent Services	19	6%
Good Services	86	29%
Gave Suggestions	74	25%

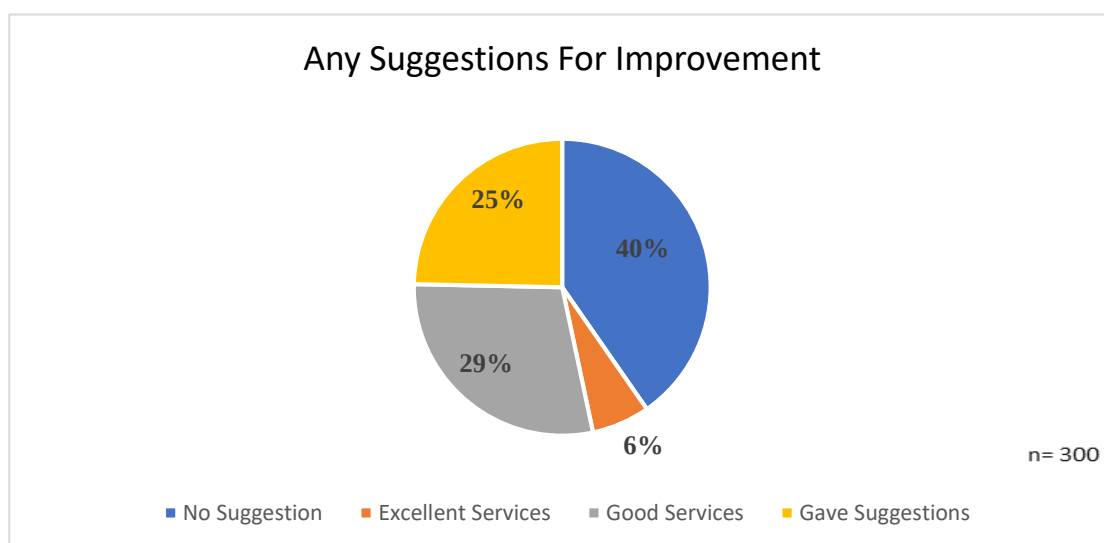


Fig. 4.6.1 Pie chart diagram for suggestions for improvement in percentage.

The results show that only 6% of the participants said that the services are excellent, while 40% of the population gave no suggestions, where as 25% of the participants gave suggestions for improvement of the services provided.

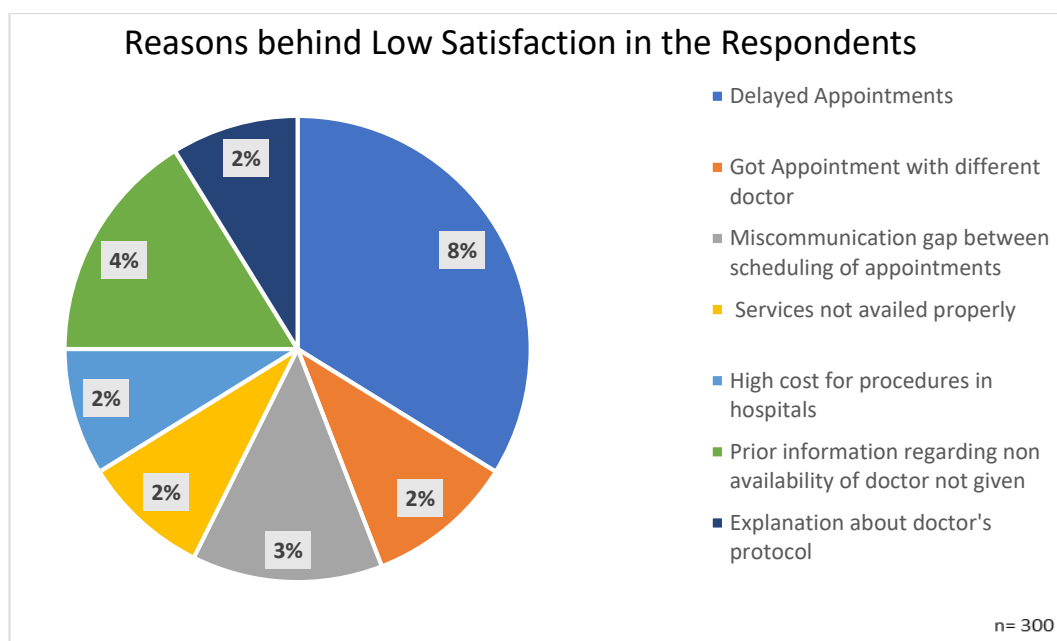


Figure 4.6.2 It represents the reasons behind the low satisfaction level of the patients towards services provided to them. The results show that low satisfaction in the patients was mainly due to delayed appointments (8%) followed by no prior information given to patients about non-availability of doctors in hospital (4%)

CHAPTER 5

DISCUSSION & LIMITATION

This chapter gives brief explanation about the present study including conclusion drawn from the findings and inference of the results there by recommendations has been presented for the areas of improvement identified to enhance overall patient experience.

5.1 Discussion

The research study was conducted over a sample size of 300 patients taken from five major cities which included Delhi, Mumbai, Bangalore, Hyderabad and Kolkata in Credihealth organization located in Gurugram, Haryana. The main aim of the study was to assess overall patient satisfaction level for the services provided by the organization. Every organization has its own unique culture and expectations that affect the overall satisfaction with in the health services. The results indicated that majority of patients were satisfied with the services (38% highly satisfied, 52% moderate satisfaction level). The service elements which received high satisfaction level were politeness of the medical experts, interaction with medical experts on call which signifies that patients were highly satisfied with the communication skills and behaviour of the staff.

Some of the elements were not that much strong factors which influenced patient satisfaction to that extent for instance, patients were unhappy with the cost of procedure shared to them, they suggested that it has to be explained in a more elaborative manner which ideally cannot be possible as strict protocol has to be followed which sometimes becomes difficult to make patients understand over a phone call. In the study males were found to be more satisfied than females. The age group of 18-35 years were having highest satisfaction level of 39% which means that this age group is active user of internet services for utilising health services. The study also focuses to find the relationship between the demographic variables and satisfaction scores, but there was no difference present in significance level related to age group, gender and cities. It is believed that improving the effectiveness and efficiency while handling the patients over phone calls will help in improving the overall patient satisfaction rate there by enhancing the patient experience.

Delhi was found to be most satisfied in terms of patient satisfaction scores followed by Hyderabad. The factors behind high satisfaction levels in Delhi is due to good number of human resource available along with the presence of integrated network between the organization and hospital through a well-established system which strongly influenced patient's experience in comparison to other cities.

5.2 Issues

While doing the study various issues were identified through direct and indirect observations and after having one on one conversations with the concerned persons of each city at ground level, which became patient's reasons behind low satisfaction ratings. These were as follows:-

- **Non availability of prior information**

No prior Information is provided by the hospitals about the doctor's schedule who are on leave for same day or future appointments, this creates a misunderstanding between the patients and the medical expert leads to feeling of dissatisfaction at patient end.

- **Delayed or Missed Appointment Confirmation**

- a) It was observed in some cases that patients received the confirmation 15-20 minutes before the appointment time from the hospital end leading to disappointment towards the services provided by the organization which give bad impression over the patient.
- b) Non-availability of desired appointment time slots asked by the patients, from hospital end for renowned doctors due to huge waiting time period (minimum 7 to 10 days) results in delayed appointment / missed appointment which is one of the factors behind low satisfaction rating. Though arranging same day walking appointments for these patients helps to bridge the gap in between to some extent.

- **Consultation with the different doctor other than desired**

Patients were dissatisfied with the fact of consulting with the doctor other than the desired choice as for few doctors in the hospitals as per the protocol, patients must consult with the team who are equally experienced as the senior doctors prefers to see the emergency cases first who requires more attention. Due to the psychological perception of the patient that team doctors are not as much experienced as the recommended doctor, this yields low satisfaction levels in patients.

- **Heavy work load on team of operators and increased waiting time**

Though there is 60 % conversion rate in answering calls by the operators on daily basis yet patients' complaints of busy servers and increased waiting time over a phone call making patient dissatisfied, it happens due to hefty work load on the operators as frequently patient doesn't answers the call which takes lot of time with each call hence increasing the TAT for answering the call along with underutilisation of the resources (chat-bot) available in terms of in built technology .

5.3 Limitation of the study

This study involves manual process of collecting data for patient satisfaction over the phone calls, hence the questionnaire for the survey was restricted to a certain number and demographic variables of the patients which were available in the secondary database was taken, as engaging patient for a feedback over a call requires efforts.

Measuring patient satisfaction over a phone call will not be feasible for long term use on a larger scale. As the study has been performed in five major cities with a sample of 300 respondents only hence findings cannot be generalized.

CHAPTER 6

CONCLUSION AND SUGGESTIONS

6.1 Conclusion

As expected, the results in the study show that overall patient satisfaction level for the indicators taken is quite high and in relation with the other study there was no relationship found between gender, age group and city with perceived satisfaction scores as the difference in between them was statistically insignificant. The present study represents that politeness and empathetic behaviour of staff while interaction created a positive impact over patient satisfaction. From the organization perspective, the study emphasizes to focus on the current demands of the patients and incorporating patient centred care which will improve the patient's experience, thereby enhancing overall satisfaction towards the services provided in near future.

6.2 Suggestions

Based on the findings from the research study, following suggestions were proposed to the organisation to engage and enhance patient experience :-

- In order to measure patient satisfaction on a larger scale, a feedback survey has been designed and adopted as a strategy which is simple and easy to understand and would be sent through direct links and messages after consultation to engage, educate and enhance patient's loyalty and satisfaction.
- Prior information regarding on call leave updates of the doctors should be given on daily basis so that appointments can be confirmed in a timely manner thereby decreasing the number of appointment cancellations hence reducing the dissatisfaction levels.
- Integration of network system needs to be initiated for other hospitals so that real time information regarding appointment time slots and doctor's schedule is available thereby reducing the human dependency and smoothening the process flow.
- Regular training sessions are required for the employees in order to improve the efficiency.
 - Training will be done team wise based on the performance scores received.
- Adoption of proactive approach for confirmation of appointments by utilizing the chat bot feature to its maximum potential by making it more user friendly for the patients. This will result in reducing the work load of overall team and providing seamless patient experience.
- Adding a feature for multi lingual language spoken by doctors on the website portal will include value to the services boosting patient engagement.

Supplementary

PATIENT SATISFACTION QUESTIONNAIRE

SECTION A

NAME :	CREDI ID :
E MAIL ID :	MOBILE NO. :
AGE :	
☐ 18-35	☐ 36 -45
☐ 46-55	☐ 56-65
☐ Above 65	
SEX : MALE	☐
FEMALE	☐
SPECIALITY	DOCTOR/ HOSPITAL
PATIENT CITY	

We would like to know how you feel about services we provide so we can make sure we are meeting your needs. Your responses are directly responsible to improve our services and your feedback is important to us .

Kindly please listen to each question carefully and rate the services on a scale of 1 to 4 depending 1 being the poor service and 4 being the excellent service.

1 = Poor 2 Fair 3 = Good 4 = Excellent

Statement	Poor	Fair	Good	Excellent
1. Ease of access to call to reach medical expert for Credihealth Services?	1	2	3	4
2. Ease of making an appointment request through Credihealth website/mobile app?	1	2	3	4
3. Politeness and courteousness of medical experts towards you while on call?	1	2	3	4
4. Your interaction with our on call medical expert?	1	2	3	4
5. Medical experts promptness towards your health needs?	1	2	3	4

6. Services you needed were shared with clarity of information by medical expert?

☐ Yes

No

☐

If answer is no, skip to question 8

7. Information sharing regarding :-

a) Doctor's availability and time slots in a particular hospital

1

2

3

4

b) Cost Estimation about a procedure / surgery in hospital

1

2

3

4

8. Information shared helped you in decision making?

1

2

3

4

9. Ability of medical experts to answer all your queries in an understandable way?

1

2

3

4

10. Rate your impression about the services provided by us?

1

2

3

4

11. Any suggestions how to improve our services ?

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