CHAPTER:6:

CONCLUSIONS RECOMMENDATIONS AND SUGGESTIONS OF THE RESEARCH STUDY

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CHAPTER:6:
CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS OF THE RESEARCH STUDY

6.0: INTRODUCTION:

The healthcare sector in India has been facing challenges for a long time, including in Gujarat; the Government has been making efforts to improve the healthcare infrastructure by increasing the number of Primary Health Centres (PHCs) and sub-health centres. The Government also focuses on providing better training and resources for healthcare workers. However, there are still challenges, including a shortage of doctors and nurses, particularly in rural areas. The Government of India has launched several initiatives to improve the healthcare sector, such as the Ayushman Bharat Scheme, to provide health insurance coverage to millions of people. In addition, the National Health Mission aims to improve healthcare infrastructure and provide universal access to healthcare services. Primary Healthcare Centres (PHCs) remain an essential component of the healthcare system in India. PHCs are the first point of contact for users seeking medical attention and provide primary healthcare services to the local community. However, there are still significant challenges in the primary healthcare sector, including a shortage of doctors and other healthcare workers in rural areas, inadequate Infrastructure and equipment, and limited financial resources. These challenges have been further aggravated by COVID-19, which has significantly strained the healthcare system. To address these challenges, the Government of India has been increasing healthcare sector funding, promoting technology to improve healthcare delivery, and incentivizing healthcare professionals to work in rural areas. It has also been working to strengthen the healthcare supply chain, including improving the availability of essential medicines and vaccines.

6.1: ORGANISATION OF THE Ph.D. THESIS:

The Ph.D. thesis is classified into the following chapters.

Chapter 01: Reviewing the Role of Rural Healthcare Delivery System and Primary Healthcare Centres (PHCs)

Chapter 02: Review of Literature

Chapter 03: Research Methodology

Chapter 04: Data Analysis & Interpretations of the Research Study

Chapter 05: Findings and Implications of the Research Study

Chapter 06: Conclusions & Recommendations of the Research Study

6.2: A BRIEF ABOUT THE RESEARCH STUDY:

This empirical research study aimed to investigate how the users perceive different services provided by the PHCs and how they might contribute to developing healthcare services. This research study's purpose and critical objective were to interpret, analyze, and evaluate the influence of selected factors Accessibility, Affordability, Availability, Environment, Work Culture, Community Engagement, Infrastructure, Service Delivery, Perception of the Use of PHCs and Preferences for PHCs.

It aimed to measure users' perception of the healthcare services provided by the PHCs and their views and plans for using PHCs services in selected villages of the Vadodara District of Gujarat State.

Table Number: 6.1: A Brief Factual Profile of the Research Study	
Bibliography	
Number of Books Referred	15
Number of Research Journals, Thesis & Dissertations Referred	140
Number of Research Reports, Conference Proceedings Referred	20
Number of Websites Accessed	60
Name of Search Engines Used	Google Scholar
Name of Statistical Tools Applied	Frequency Distribution, Percentages, Mean, Proportion, Correlation, Chi- square Test, T-test, Friedman Test, Factor Analysis & Partial Least Square Structural Equation Modeling (PLS-SEM)
Sources of Secondary Data Used	Reference Book, Journals, Newspaper articles, Ph.D. Thesis, Master Dissertation, Working paper, Conference proceeding, Websites
Group of Hypotheses Tested	13
Research Design Used	Exploratory and Descriptive research design
Research Instrument Used	Structured Non-Disguised questionnaire
Sampling Decisions	
A Representative Sample	Primary Health Care Centers (PHCs) Users
Sampling Design	Non-Probability Sampling Design
Sampling Method	Convenient Sampling Method
Sampling Frame	The sampling frame includes those users of the PHCs by referring PHCs records of patients and using data released by the Gujarat State Government and data obtained from the Gram-Panchayat office, Sarpanch, and different local organizations.
Sample Size	650 participants who have used the services of rural PHCs have been selected as the sample.
Sampling Media	Structured Non-Disguised Questionnaire filled up through personal interviews with the PHCs Users
Details of Model	Service Quality Model
Number of Tables in Ph.D. Thesis	106
Number of Graphs in Ph.D Thesis	23
Number of Figures in Ph.D Thesis	28

6.3: RESEARCH METHODOLOGY:

The primary objective of this research study was to understand how users, including patients, perceive specific health services provided by Primary Health Care Centres (PHCs) in selected villages in the Vadodara District of Gujarat State. Several methodological and practical processes and conceptual facets of the exploratory and descriptive research methodology have been applied in this research study. It mainly includes viz., Basic Terms and Rationale of the research study, Research Design of the research study, Scope and Coverage of the research study, Objectives, Research Questions and Hypotheses of the research study, Conceptual Model developed in this research study, Sources of Secondary Data, Sampling Decisions, Collection of the Primary Data and its Analysis, and Interpretations, Recommendations and Suggestions of the research study of primary data. The researcher has offered justification, method, and process utilized to estimate and calculate a suitable sample size for this research study. It also contains information on the scale used, the number of statements/items generated, and the process followed in reviewing literature for drafting the Structured Questionnaire. It has provided data and information on the 'Reliability and Validity 'of the Structured Questionnaire for collecting primary data from users. It details the Normality Test performed on the research study's preliminary data to characterize its distribution. The researcher provided information on the statistical methods used to analyze the primary data. It has also offered a chapterisation of the Ph.D. Thesis.

A non-probability sample methodology was employed to conveniently choose 650 PHCs Users who lived in the different villages of the Vadodara district of Gujarat State to collect the primary data using a structured, non-disguised questionnaire.

The researcher used secondary and primary data to conduct the study. The data analysis was done with SPSS 21 software. In addition, the researcher applied Factor Analysis (FA) and the PLS-SEM to analyze and examine the relationships between Satisfaction, which influences their Behavioural Intention when considering Selected Factors of PHCs, viz., 'Accessibility, Affordability, Availability, Environment, Infrastructure, Work Culture, Service Delivery, Perception, Preferences, and Community Engagement'.

It was evident that Service Delivery, Financing, Community Engagement, and Patients Centered Health Care Services Delivery are significant characteristics that impact the delivery of Health Care Services. In addition, Human Resources, Care Quality, and Information Technology (IT) contributions are crucial in providing Health Care Services.

The delivery of Health Care Services needs consideration of equity factors for Gender and No discrimination based on Income, Caste, Location, and Accountability to the community. Patient-centric service delivery of Health Care Services needs attention to improving user awareness, Accessibility, Affordability, Preferences, Infrastructure, Environment, Work Culture, Use of Technology Security, Comprehensive Care, and Feedback Mechanism, respectively.

6.3.1: Assessment of Normality of the Distribution of the Collected Primary Data:

Normality tests were performed on data collected from 650 users who had availed of Primary Health Care Services and used facilities of PHCs in selected Villages located in the Vadodara District of the Gujarat State. The Kolmogorov-Smirnov Test was used to check for statistical significance since the sample size was more than 100. Table 6.2 displays the test results, which showed statistical significance at the 5 per cent level. This data indicated that the raw data did not follow a normal distribution.

Table No. 6.2: Kolmogorov – Smirnov Test of Normality

Sr. No.	Factors	Statistic	Df	P-value
1	Accessibility	.140	650	.000
2	Affordability	.130	650	.000
3	Availability	.156	650	.000
4	Environment	.164	650	.000
5	Infrastructure (Physical facilities)	.187	650	.000
6	Work Culture	.158	650	.000
7	Service Delivery	.178	650	.000
8	Community Engagement	.187	650	.000
9	Perception	.134	650	.000
10	Preference	.190	650	.000

Source: FieldWork

6.4: A BRIEF OF STRUCTURED NON-DISGUISED QUESTIONNAIRE:

The researcher developed the structured, non-disguised questionnaire with input from a review of the existing literature, and it was pilot-tested with information from one hundred users/citizens. The draft of the non-disguised structured questionnaire was revised based on this feedback.

6.4.1: Reliability and Validity of the Structured Non-Disguised Questionnaire:

The researcher has used the Cronbach coefficient alpha to evaluate the Reliability of different instrument constructs. As shown in Table No. 6.3, The Cronbach Alpha score (Cronbach, 1991) demonstrated the inner consistency of the measure and represented the level of coherence among the chosen questions. For example, the value of the users' opinions of rural Primary Health Centers (PHC) ranged from 0.764 to 0.895.

Table No. 6.3: Reliability of Opinion of Users of Rural Primary Health Centers (PHCs)

Sr. No.	Variables	Cronbach's Alpha
1.	Accessibility	0.895
2.	Affordability	0.805
3.	Availability	0.764
4.	Environment	0.823
5.	Infrastructure [Physical Faculties]	0.853
6.	Work Culture	0.815
7.	Service Delivery	0.864
8.	Community Engagement	0.864
9.	Perception of the use of PHC Services	0.835
10.	Preference for PHC	0.890
OVERALL RELIABILITY OF ALL FACTORS		**0.954**

Source: Fieldwork

6.4.2: Validity Assessment Test of the Structured Non-Disguised Questionnaire:

The researcher established the validity of the scale mean scores by comparing them to another questionnaire construct. The table mentioned below, number 6.4, illustrates how the means of the same construct were assessed. There was less variance in the specified question categories and a similar average satisfaction level. In addition, most responses were determined to be between Agree and Strongly Agree, satisfying the validity requirement.

Table No. 6.4: Comparision of Mean Scores Opinion of Users of Rural Primary Health Centers (PHCs)

Opinion of Users of Rural Primary Health Centers (PHCs) concerning Criteria (Q. 10 – Item 1 to 96). Rating Scale 1 [Strongly Disagree] to 5 [Strongly Agree]		Overall Opinion of Users of Rural Primary Health Centers (PHCs) concerning Criteria (Q. 11 – Item 1 to 10). Rating Scale 1 [Strongly Disagree] to 5 [Strongly Agree]		The difference in Mean Count [Column B - Column D]
Average Score	**Mean Score**	**Average Score**	**Mean Score**	**Mean Score**
(Q- 10 - 1 to 96)	**(Rank)**	**(Q-11 -1 to 10)**	**(Rank)**	**(Rank)**
A	**B**	**C**	**D**	**B-D**
Accessibility	4.42	Accessibility	4.55	-0.13
Affordability	4.40	Affordability	4.56	-0.17
Availability	4.46	Availability	4.51	-0.06
Environment	4.46	Environment	4.52	-0.06
Infrastructure [Physical Faculties]	4.45	Infrastructure [Physical Faculties]	4.51	-0.07
Work Culture	4.42	Work Culture	4.22	0.20
Service Delivery	4.48	Service Delivery	4.49	-0.02
Community Engagement	4.49	Community Engagement	4.52	-0.02
Perception of the use of PHC Services	4.49	Perception of the use of PHC Services	4.56	-0.07
Preference for PHC	4.52	Preference for PHC	4.47	0.05
Overall Average	4.46	**Overall Average**	4.49	-0.03

Source: FieldWork

6.5: DEMOGRAPHIC PROFILE OF SELECTED PRIMARY HEALTH CENTERS (PHCs) USERS:

The researcher has conducted research considering the rural population from selected rural areas/villages of the Vadodara district in Gujarat. As a result, the researcher has provided a demographic profile of users in terms of Qualifications, Age and Monthly Income as follows:

Table No. 6.5: Demographic Profile of the Respondents:

Parameters		Responses	Percentage
Age (In Years)	Below 30 Years	141	21.7
	31 to 50 Years	335	51.5
	50 Years and Above	174	26.8
	Total	**650**	**100**
Gender	Male	547	84.2
	Female	103	15.8
	Total	**650**	**100**
Educational Qualifications	No Formal Education	83	12.8
	Primary	184	28.3
	12^{th} Pass	224	34.5
	Graduation	131	20.2
	Post-Graduation	28	4.3
	Total	**650**	**100**
Occupation	Farmer	260	40
	Trader	97	14.9
	Home Maker/House Wife	93	14.3
	Student	49	7.5
	Service	151	23.2
	Total	**650**	**100**
Monthly Family Income	Below Rs. 10,000	199	30.6
	Rs. 10,001 to Rs. 20,000	199	30.6
	Rs. 20,001 to Rs. 30,000	105	16.2
	Rs. 30,001 and Above	147	22.6
	Total	**650**	**100**

Source: Field Work

Considering Occupation, Mix responses were received from people of different professions. Half of the total users were in the age group of 31 to 50 years of male users or users, 84.2 per cent used rural Primary Health Centers (PHCs), and more than Female users, 15.8 per cent. Considering Education, it has been observed that 28.3 per cent of users possess only Primary Education, 12.8 per cent of users have no Formal Education, and 34.5 per cent of users have qualified HSC. Meanwhile, 20.2 per cent possess a Graduation degree, and only a handful of users possess a post-graduation, Degree.

Traders and Students were minimum in numbers. Regarding occupation, 40 per cent were farmers, followed by Service-Going People at 23.2 per cent, and 14.3 per cent were Homemakers/Housewives. Most users, i.e. 61.2 per cent, had a Monthly Family Income of Less than Rs. 20,000.

6.6: KEY RESULTS OF THE RESEARCH STUDY:

6.6.1: Availability of PHCs n the Village:

Out of 650 users, 71.5 per cent had visited PHCs available in the nearest Village, and 28.5 per cent reported that the PHCs facility was available in their Village.

6.6.2: Nearby Village for Availing Services of PHCs:

72.3 per cent of users were compelled to visit the nearby Village to avail of the services of PHCs, and facilities helped only 27.7 per cent of the users in their Village.

6.6.3: Responses Received Based on PHCs:

It was found that the total responses, 650, had 44 Primary Health Centers (PHCs) covered under the research study. Maximum responses were received from the Koyli Primary Health Centers (PHCs), 12 per cent of the total responses received, followed by Sokhda Primary Health Centers (PHCs), at 7.7 per cent. Finally, Mobha Primary Health Centers (PHCs) received 6.8 per cent of the responses. On the other hand, the lowest number of responses have been received under the Primary Health Centers and Nimeta Primary Health Centers (PHCs).

6.6.4: Villages Covered under PHCs:

It shows that more than three villages are covered under the PHCs. Furthermore, almost all the users gave their views regarding the coverage of the PHCs, depicting that more than three villages were covered under PHCs.

6.6.5: PHC is Located at a Convenient Place in All Villages:

Out of 650 users, 97.1 per cent opined that "Rural PHCs are at the Convenient place where users can get medical facilities very easily".

6.6.6: Distance from Your Village to Reach PHCs:

Out of 650 users, 607 travelled less than 10 km to reach the PHCs. Out of 650 users, 607 travelled less than 10 km to get the PHCs. Therefore, 6.6 per cent of users had to visit far-off PHCs owing to the unavailability of PHCs in their Villages.

6.6.7: Time to Reach PHCs:

Of 650 users, 489 reached the PHCs within 15 minutes of their Village. 125 of them had arrived at the PHCs within 15-30 minutes from their Village, and 36 took more than 30 minutes as the distance found from their villages.

6.6.8: Doctors/Specialists Visit at PHCs:

Out of 650 users, 92 per cent got the facilities of a Gynaecologist in the PHCs in their Village. On the other hand, 08 per cent did not receive any Gynaecologist facilities at the PHCs. Moreover, 18.2 per cent of them had received treatment from eye specialists in PHCs, whereas 81.8 per cent did not receive any eye check-up assistance in the PHCs. Further, 93.2 per cent of them thought there was no availability of the Dentist in the rural PHCs, and only 6.8 per cent had received the facilities of the Dentist in the PHCs.

6.6.9: Availability of Primary Health Centre in Your Village or Nearby Village:

Of the 650 users, 252 knew about the PHCs' best practices, and 378 had used the best medical services offered by the PHCs. 97.2 per cent were aware of the low-price policy of rural PHCs for medical facilities. 98.2 per cent of users were in the opinion of regular Doctor's Availability at PHCs, and 98.7 per cent accepted the continued availability and support of the Para-medical Staff at PHCs. However, 17.4 per cent had not availed of services provided by the PHCs.

6.6.10: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regards to Accessibility:

96 per cent of the users agreed that they received all the medical services at the PHCs. Furthermore, 96% of them agreed with the availability of PHCs services to all income groups in rural areas. It also showed that 97 per cent of them had decided that without any gender discrimination, healthcare services had been provided at the PHCs of the Vadodara District of Gujarat State. Moreover, 98 per cent of users believed that the availability of doctors should be at the right time at PHCs. Finally, 96.1 per cent of them agreed with the constant availability of Para-medical Staff of the PHCs to help them with primary first-aid.

6.6.11: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regards to Affordability:

96.6 per cent of the users had accepted that they had not experienced any need to spend any money for availing healthcare services at the PHCs. 94.6 per cent of them had agreed that the PHCs were taking charge of the medical services per the Rules and Regulations set by the Ministry of Health and Family Welfare, Government of India. Therefore, 95.9 per cent of them agreed they could easily afford money to reach PHCs. 94.7 per cent of the users had agreed with the pricing policy of the medical treatment, which they can easily afford.

6.6.12: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regard to Availability:

95.8 per cent of the users had accepted that they had received all types of medicines from PHCs as per Doctor's prescription. 97.7 per cent of them had agreed that they had received free medical treatment, and 96.1 per cent with the Laboratory facilities provided to them by the PHCs, including Blood Testing, Urine, and Sputum of Patients. All the users had agreed with the availability of hospitalization facilities and minor surgeries at the PHCs. 87.1 per cent of users had agreed with the availability of Ambulance facilities at the PHCs rest believed that they had not received any Ambulance services at the PHCs. All the users had accepted that Pharmacist is always available at the PHCs.

6.6.13: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regards to Environment:

All users had agreed that garbage around PHCs has appropriately been disposed of at the dumping areas of the selected villages of Vadodara District. Furthermore, all of them had decided that they have facilities of Schools in their villages, Drainage facilities at the PHCs and Employment Opportunities available in their respective villages. Moreover, 99 per cent of the users had agreed with the proper Ventilation and natural lights, Noise Pollution free environment and infection-free environment available at the PHCs of the selected villages of the Vadodara District Gujarat State.

6.6.14: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regard to Infrastructure:

All the users had agreed that the continuous electricity supply was available at the PHCs of selected villages of the Vadodara District of Gujarat State. 89.2 per cent believed that drinking water facilities were available in the PHCs, and 10.8 per cent of them could not find any water facilities at the PHCs. 88.9 per cent of the users agreed that sanitation facilities were available at the PHCs, and 11.1 per cent did not find it. All of them had agreed with the availability of Beds for admitting users, Laboratory Facilities, Ambulances for Emergency services and necessary Medical Equipment at the PHCs of selected villages of the Vadodara District of Gujarat State.

6.6.15: Estimation for selected criteria of Rural Primary Health Centres (PHCs) Concerning Work Culture:

90.8 per cent of the users had found that the doctors act dutifully while treating the users, and 9.2 per cent of the patients found awful behaviour of the doctors at the PHCs. However, all the users agreed that the Doctor's attitude was positive and Doctors adequately explained all the tests to them. 90.2 per cent of them had accepted that they were adequately guided about medical treatment by the para-medical Staff, and 9.8 per cent disagreed. All of them agreed that the behaviour of the para-medical Staff was polite. They solved all the users' queries and listened to all their suggestions.

6.6.16: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regards to Service Delivery:

90.4 per cent of users had accepted that feedback was collected from users after the treatment was received at the PHCs, whereas 9.6 per cent did not agree. 90.7 per cent of them had agreed that the doctors were taking the help of other doctors online for medical treatment. However, 9.1 per cent of the users did not believe it. All of them had agreed that rules were followed adequately at the PHCs. 88.7 per cent of the users agreed that the doctors asked them to visit their or another Doctor's clinic, while 11 per cent disagreed. All of them agreed that they were appropriately guided by the doctors about their illness in the local language. Doctors used stethoscopes for examining patients, and Staff of the PHCs used gloves for the treatment. All the users were accepted about the post-medical treatment adequately provided by the doctors of PHCs.

6.6.17: Estimation for Selected Criteria of Rural Primary Health Centres (PHCs) with Regards to Community Engagement:

53.4 per cent of the users strongly agreed with the Doctor's visit to the families of rural people and explaining the medical precautions. 55.7 per cent of the users strongly agreed, and 44.3 per cent of the users agreed that the PHCs doctors were taking the help of posters for health awareness. 52.3 per cent of the users strongly agreed, and 47.7 per cent agreed that the PHCs staff were helping rural people to be aware of the medical issues. 46.6 per cent of the users strongly agreed that the PHCs staff provided health education to their children in the Village School, and 10.9 per cent disagreed. 52.6 per cent of the users strongly agreed, and 47.4 per cent agreed that the PHCs of selected villages of the Vadodara district of the Gujarat State organized the medical camp. 50.2 per cent of the users strongly agreed, and 49.8 per cent agreed that the PHCs staff participated in Gram Panchayat Meeting and were aware of the health and medical issue. 52.2 per cent of the users strongly agreed, and 47.8 per cent agreed that the PHCs staff were taking patient feedback about the medical treatment provided at the PHCs. 50.9 per cent of the users strongly agreed, and 49.1 per cent agreed that PHCs regularly met at the Mahila Mandal for medical awareness among women in rural areas. 55.1 per cent of the users strongly agreed, and 44.1 per cent agreed that PHCs were organizing free medical camps in rural areas.

6.6.18: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regard to Perception of the use of PHC Services:

It was shown that 49.5per cent of 6 agreed, and 50.5per cent strongly agreed that users should see physicians when their diseases are advanced. Furthermore, 43.5per cent of users and 56.5per cent said they had followed the PHC staff's advice, respectively. In addition, 47.5 per cent and 52.5 per cent of users said they followed the medical advice offered by PHCs' physicians.

42 per cent and 57.7 per cent of users agreed that they felt satisfied when physicians inquired about their health and medical conditions. 45.4 per cent and 54.6 per cent of users agreed that they felt at ease sitting in PHCs. Overcrowding at the PHCs was reported by 11.5 per cent of the users. Nonetheless, 88.5per cent of users said there was no congestion at PHCs. 47.1 per cent and 52.9per cent of users agreed and strongly agreed that the PHC staff treated users with a pleasant attitude. 45.5 per cent and 54.5 per cent of users said they were happy with the medical care received at PHCs.

44.8per cent and 55.2per cent of users agreed and strongly agreed that PHCs provide sanitary conditions. All the users have decided to revisit PHCs for medical services if they find recovery in their health.

6.6.19: Estimation for selected criteria of Rural Primary Health Centres (PHCs) with Regards to Preference for PHCs:

51.1 per cent and 48.9 per cent of users agreed that they often visited PHCs because physicians were constantly on hand to treat rural residents. Most users, 52.8per cent, strongly agreed, and 47.2per cent decided they preferred PHCs for Medical care since all the medications were readily accessible at the PHCs in the Gujarati state's Vadodara district's chosen villages. 45.8per cent of users said they frequented PHCs because of the physicians' pleasant and polite behaviour, and 54.2per cent strongly agreed. Most users, 54.8per cent, strongly agreed, and 45.2per cent agreed that they trusted the physicians who provide medical care at PHCs. 55.8per cent of users firmly decided they frequented PHCs because doctors' actions were deemed favourable when attending to users. There was no waiting time for the PHCs to obtain healthcare services at PHCs in selected villages in the Vadodara District of Gujarat state, according to 52.2per cent of users who strongly agreed with this statement and 47.8per cent who agreed. Also, every respondent agreed that PHCs provide access to health information.

6.6.20: Overall Opinion on Selected Dimensions for Rural Primary Health Centres (PHCs):

Overall, 51.4per cent of users strongly agreed that all amenities were provided at the PHCs, with 48.6per cent agreeing. In addition, of those polled, 52.2per cent agreed that the PHC's atmosphere encouraged them to seek medical attention, with 47.8per cent giving their full approval.

Results showed that 49.2 per cent of users strongly agreed, and 50.8per cent agreed that the PHCs in the villages representing the Vadodara district of Gujarat state offered high-quality medical care. Overall, 51.1per cent of users strongly agreed that PHCs have the necessary Physical Infrastructure, and 48.9per cent agreed. There is a favourable work culture at the PHCs, with 49.5per cent of users strongly agreeing and 38.9 per cent agreeing.

Most users (51.7per cent) agreed with the PHCs' Community involvement procedures, whereas 48.3per cent agreed. The positive opinion of PHCs was shared by 56.5per cent of users, with solid understanding from the additional 43.5per cent. In addition, 38.3 per cent and 57.4 per cent of users strongly agreed that they preferred PHCs for medical care.

43.8 per cent of users strongly agreed, and 49.2per cent said they would advise others to utilize the PHCs' healthcare services. Also, it was discovered that 54.8per cent of users and 45.2per cent of them strongly agreed that they were happy with the medical services offered by the PHCs of certain villages in the Vadodara District of Gujarat.

6.6.21: Overall Opinion for Behavioural Intention Toward Rural PHCs:

The overall opinion of behavioural Intention towards PHCs of the Vadodara district of Gujarat State is as stated. Likewise, 46.5per cent of those polled strongly agreed, while 45.4per cent agreed they would keep using PHCs in the future. In addition, 54.6per cent of users strongly agreed, and 45.4per cent agreed that they would suggest the PHCs of chosen villages in the Vadodara district of Gujarat State to those in need of healthcare.

It was shown that 48.3 per cent of users and 51.7per cent of users agree or strongly agree that they felt happy after receiving treatment at PHCs.

6.6.22: Overall Suggestions on Selected Dimensions for Rural Primary Health Centres (PHCs):

Results showed that 51.8per cent of users strongly agreed, and 48.2per cent agreed that PHC staff should make more significant efforts to enhance the quality of medical care provided by PHCs. In addition, 54per cent of users strongly agreed, and 46per cent agreed that PHCs personnel should evaluate the health requirements of those living in rural regions. In addition, 54.6per cent of users strongly agreed, and 45.4per cent of users agreed that the PHC staff in chosen villages in the Vadodara District of Gujarat State should enlist the support of residents to upgrade the facility's Infrastructure. In addition, 50.5per cent of those surveyed strongly agreed, while 49.5per cent agreed that the primary health care centres (PHCs) in the Vadodara District of Gujarat State were free from corruption.

6.7: FINDINGS OF THE RESEARCH STUDY:

This study employed the Correlation, Chi-Square test, Friedman test, and Factor Analysis to assess the validity of several hypotheses derived from examining primary data collected from PHCs users in selected villages of the Vadodara District of Gujarat State. As a result, the study found the following, which can be summarized as its key conclusions:

6.7.1: Kendall's Tau Correlations between Continue use, Recommendation, and Satisfaction with the Factors under Study:

Accessibility:

The correlation coefficients between Accessibility and continuing to use, recommendations, and Satisfaction are 0.094, 0.098, and 0.111, respectively, indicating a weak positive correlation between Accessibility and the three factors.

Affordability:

The correlation coefficients between Affordability and continuing to use recommendations and Satisfaction are 0.118, 0.093, and 0.101, respectively, indicating a weak positive correlation between Affordability and the three factors under study.

Availability:

The correlation coefficients between availability and continue-to-use, recommendations, and Satisfaction are 0.125, 0.129, and 0.143, respectively, indicating a weak to moderate positive correlation between availability and the three factors.

Environment:

The correlation coefficients between environment and continue-to-use recommendations and Satisfaction is 0.175, 0.144, and 0.126, respectively, indicating a moderate positive correlation between environment and continue-to-use and a weak positive correlation between recommendations and Satisfaction.

Infrastructure:

The correlation coefficients between Infrastructure and continuing to use, recommendations, and Satisfaction is 0.157, 0.135, and 0.152, respectively, indicating a weak to moderate positive correlation between Infrastructure and the three factors under study.

Work Culture:

The correlation coefficients between work culture and continue-to-use, recommendations, and Satisfaction are 0.157, 0.158, and 0.143, respectively, indicating a weak to moderate positive correlation between work culture and the three factors under study.

Service Delivery:

The correlation coefficients between service delivery and continue-to-use, recommendations, and Satisfaction are 0.167, 0.109, and 0.107, respectively, indicating a moderate positive correlation between service delivery and continue-to-use and a weak positive correlation between recommendations and Satisfaction.

Community Engagement:

The correlation coefficients between community engagement and continue-to-use, recommendations, and Satisfaction are 0.119, 0.155, and 0.172, respectively, indicating a weak to moderate positive correlation between community Engagement and the three factors under study.

Perception:

The correlation coefficients between perception and continue to use, recommendations, and Satisfaction are 0.144, 0.087, and 0.105, respectively, indicating a weak to moderate positive correlation between perception and continue to use and Satisfaction but a weak positive correlation with recommendations.

Preference:

The correlation coefficients between selection and continued use, recommendations, and Satisfaction are 0.074, 0.152, and 0.154, respectively, indicating a weak positive correlation between the preference and the three factors under study. Thus, the overall table suggests a positive relationship between the ten selected factors and the three factors under investigation. Still, the strength of the connection varies across the factors. For example, factors like environment, Infrastructure, work culture, service delivery, and community engagement positively correlate with the three factors under study. In contrast, Accessibility, Affordability, Perception, and Preference have a weaker positive correlation.

6.7.2: Findings of the Chi-Square Test:

It was found that there was a strong link between the Age, Gender, Educational Qualifications, Occupation, and Monthly Income of the selected PHCs users. In addition, several statements about the PHCs services include Accessibility, Affordability, Availability, Community Engagement, Work Culture, Environment, Infrastructure, Perception of use PHCs, Preference for PHCs and Service Delivery.

6.7.3: Findings of the Friedman Test:

The researcher computed the mean rank for the selected criteria for selected villages of the Vadodara district of Gujarat State. Three criteria feature of PHCs, viz., Perception for use PHCs, Preference for PHCs, and Service Delivery, have shown high importance while evaluating the PHCs services. Therefore, these three criteria are essential in developing Primary Health Centers.

6.7.4: Summary of Findings Based on Factor Analysis:

A summary of the Key Findings is presented as follows:

Table No: 6.6
Summary of essential Key Items of Selected PHCs Factors

Sr. No.	Selected Factors of Healthcare Services of Rural Primary Health Centres	Critical Items of Selected Rural Primary Health Centres Factors	Factor Loading Score
01	**Accessibility**	I can easily visit the PHC of the Village	**0.763**
		The PHC is available at a convenient location in our Village	**0.826**
		The medical services are available to all	**0.832**
		Medical services are available to all, irrespective of the income of people	**0.795**
		Medical services are available to all, irrespective of the Gender of the Patients	**0.791**
		The patients can easily meet/visit/approach the doctors at the PHC	**0.749**
		The patients can easily meet/visit/approach the other Paramedical Staff at the PHC	**0.738**
02	**Affordability**	The medical services provided by PHC are Inexpensive	**0.725**
		Patients do not have to spend from their own pocket to avail of medical services at PHC	**0.749**
		Charges for different medical services provided by PHC are as per rules that are conveyed to patients	**0.826**
		Patients can easily afford to spend money to reach at the PHC	**0.713**
		The patients can afford to spend money on hospitalisation at the PHC	**0.741**
03	**Availability**	The doctors are available at PHC as per the schedule	**0.819**
		The medicines prescribed by doctors are available at PHC	**0.848**
		Patients get all the medicines free of cost from the PHC	**0.784**
		The laboratory of PHC offers services for testing the Blood, Urine, and Sputum of Patients	**0.708**
		The services of hospitalisation are available at PHC	**0.851**
		The services of minor surgeries are available at PHC	**0.886**
		The services of Laboratory Technicians are available at PHC as per schedule	**0.871**
		The services of Pharmacist are available at PHC as per the schedule	**0.870**
04	**Environment**	We do not find Water logging around the PHC	**0.943**
		We have clean PHC in our Village	**0.667**
		We do not find heaps of Garbage around PHC in our Village	**0.675**
		The PHC has Drainage facilities	**0.710**
		The people in Village are having jobs for their survival	**0.866**
		The school is available in Village	**0.702**
		PHC is Ventilated with natural lights	**0.706**
		The location of the PHC Noise pollution free	**0.740**
		The Environment of PHC is infection free	**0.740**
05	**Infrastructure**	The building of the PHC is in good conditions	**0.824**
		The walls of the PHC Building are painted	**0.885**
		The doors and windows of the PHC are in good conditions	**0.720**
		We do not find Water leakages in Rooms of PHC	**0.641**
		We find continuous Electricity Supply in PHC	**0.732**
		The drinking water facility for patients is available at PHC	**0.940**
		The toilet facility for patients is available at PHC	**0.943**

		The facility of beds for admitting patients is available at PHC	**0.666**
		Facility for testing of Blood, Urine, and Sputum of the Patients is available at PHC	**0.643**
		The Ambulance is available at PHC to handle the emergency	**0.822**
		Necessary Medical equipment are available in working conditions at PHC	**0.785**
06	**Work Culture**	The Doctors explain about the illness to patients	**0.710**
		The Doctors supports patients while giving medical treatment	**0.870**
		The doctors behave politely and courteously with patients	**0.857**
		The Doctors show positive attitude while providing medical services to patients	**0.689**
		The Doctors take patients into confidence before testing of Blood, Urine, and Sputum of the Patients	**0.666**
		The Para-medical Staff explains to patients about medical treatment	**0.915**
		The Para-medical Staff are polite and courteous	**0.631**
		The Para-medical Staff satisfactorily answers to quarries of patients	**0.749**
		The Para-medical Staff listen to patients' suggestions	**0.774**
07	**Service Delivery**	The patients feel safe while availing medical treatment at PHC	**0.612**
		The Doctor, Nurse or any other PHC worker does not ask for money other than for the Case Paper	**0.688**
		The Staff of PHC collect feedback from patients	**0.889**
		Doctors refers to other doctors online for giving medical treatment	**0.882**
		The Rules, Procedure are followed by PHC	**0.786**
		The Doctors asks patients to visit his own, or any other Doctor's Private Clinic	**0.804**
		The Doctor examine patients using stethoscope	**0.856**
		The doctors explain about patient illness in his/her language	**0.873**
		PHC staff wears the hygienic gloves	**0.797**
		Post Medical Treatment is explained by Doctors to patients	**0.645**
08	**Community Engagement**	The Staff of PHC organizes meeting with the Village Sarpanch and community	**0.745**
		The Staff of PHC give presentations in Village about Health/Medical issues	**0.692**
		The Staff of PHC visit families in the villages to give advice about precautions for maintaining good health	**0.768**
		The Staff of PHC show Poster to inform people of Village about good health.	**0.808**
		The Staff of PHC train people of Village to develop awareness about medical issues	**0.752**
		The Staff of PHC give health education to children in school of Village	**0.638**
		The Staff of PHC organizes health camps	**0.833**
		The Staff of PHC go to Gram Panchayat meetings to make people aware about health issues	**0.600**
		The Staff of PHC collect feedback from people of Village on services provided by PHC	**0.723**
		The Staff of PHC meets Mahila Mandals to develop awareness on health issues	**0.673**
		The Staff of PHC assesses the health need of the people of the Village	**0.655**
09	**Perception for use of PHC Services**	People visit the PHC when the first symptoms of dieses arise	**0.898**
		People follow the advice given by PHC Doctors and Para-medical Staff	**0.678**

		People feel happy when doctors ask questions about my medical illness	**0.815**
		People feel comfort while sitting inside PHC	**0.710**
		People find no overcrowding in PHC	**0.849**
		Attitude of PHC staff is positive	**0.815**
		People am satisfied with medical treatment provided by PHC	**0.876**
		Hygiene and sanitary conditions of PHC are good	**0.689**
		People visit PHC again if medical services of PHC has improved my health	**0.818**
		People visit higher-level health facility if PHC's medication did not help them in becoming physically fit	**0.687**
10	**Preference for PHC**	People visit PHC as the charges of medical services are reasonable	**0.765**
		People prefer to get treatment from PHC as quality of medical service is acceptable	**0.787**
		The PHC is preferred due to availability of medicine/drugs	**0.834**
		People visit the PHC due to good behaviour of health staff	**0.891**
		People have faith in doctors and health staff of the PHC	**0.739**
		People prefer to get treatment form PHC as response of doctors is positive	**0.753**
		People prefer to visit PHC as there is not much waiting time	**0.779**

Source: Field Work

The above table no 6.6 consisted of 87 items that users had considered necessary for healthcare services for expressing his/her satisfaction/dissatisfaction with services provided by PHCs of selected villages of the Vadodara District of Gujarat State.

Table No: 6.7

Summary of Factor Wise Key Items of Selected for PHCs that Need Improvement

Sr. No.	Selected Factors of Healthcare Services of Rural Primary Health Centres	Key Items of Selected Rural Primary Health Centres Factors	Factor Loading Score
1	**Availability**	The Ambulance Service is available at PHC	**0.533**
2	**Service Delivery**	the behaviour of the Nurse, Pharmacist and lab technician is polite and courteous	**0.556**
3	**Community Engagement**	Health care Centre organizes free medical check-ups in Village	**0.590**
4	**Perception of the use of PHC Services**	People visit PHC when my disease is in its advanced stage	**0.388**
		People understand that medication should be continued as long as recommended by PHC	**0.599**
		People accept the advice of Doctors at PHC on the prevention of medical illness	**0.552**
5	**Preference for PHC**	People visit PHC as health personnel remain available to offer services to the community	**0.577**
		People found the hygiene of PHC to be acceptable	**0.527**
		People visit PHC as there is a provision for health information	**0.559**

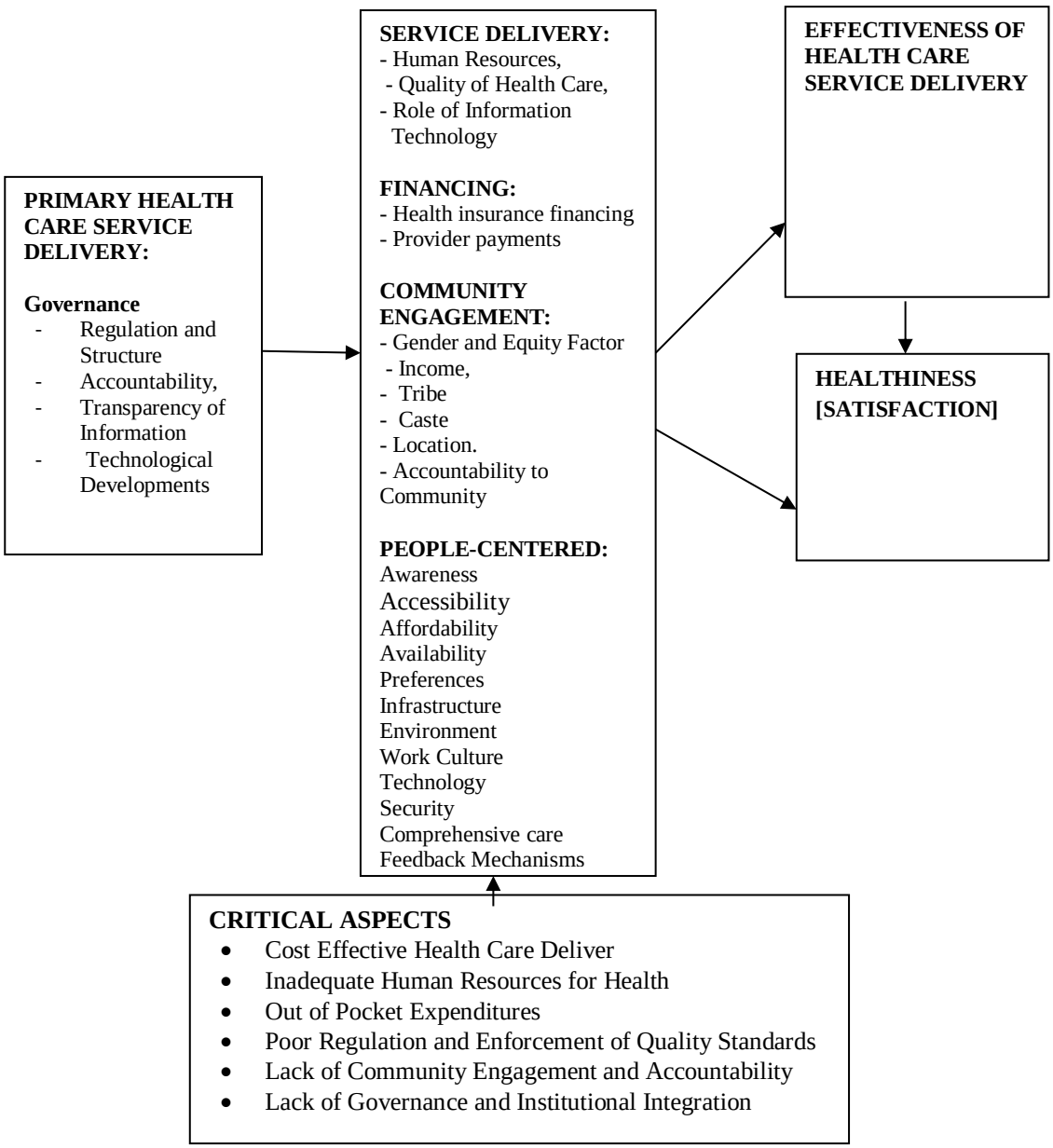
Source: Field Work

The above table no 6.7 has listed 09 essential items that users considered necessary and needs further improvement by the PHCs.

6.8: CONCEPTUAL MODEL FOR THE RESEARCH STUDY:

The research model has been developed based on the review of the literature.

Figure No.: 6.1
The Conceptual Model of the Research Study



Source: Model of Research Study Adapted from Priya Anant ET. al.2016.

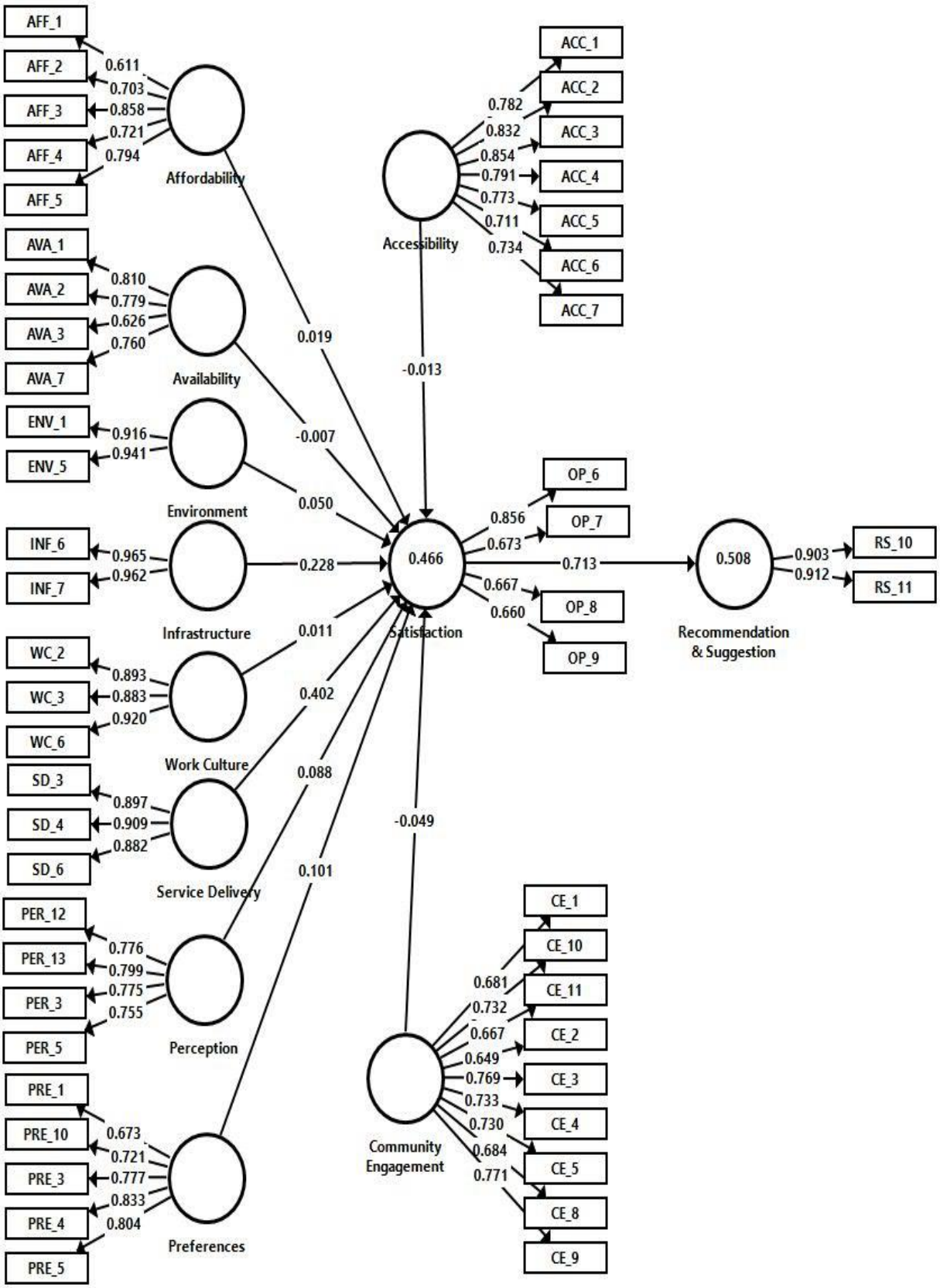
Based on the above model, an attempt will be made in this research study to empirically examine the relationship between Primary Health Care Services, the selected Service Quality Dimensions and the Effectiveness of Health Care Service Delivery on health and healthiness.

6.9: STRUCTURAL EQUATION MODEL (SEM) OF THE RESEARCH STUDY:

Rectangular figures in the model indicate selected statements that were asked of the users to get primary data. Loading figures can also be seen in Table 5.45, which shows 'Factor Loading, Convergent Validity, Composite Reliability and Cronbach Alpha of the Constructs' and Table Number 5.46 and Table Number 5.47 shows 'Discriminant Validity of the Constructs through Fornell–Larcker and Heterotrait – Monotrait Ratio'. The oval shape indicates ten different constructs of the research study. Arrows from and to the construct determine the relationships between the selected statements and the construct and the construct. Arrows from construct to selected statements indicate factor loading of the statements, which reflect the loading of each item for construct.

A one-sided arrow from one construct to another construct shows a standardized beta coefficient (path coefficient) which determines the degree of change in the outcome (dependent) variables for each one of the units of change in the predictor (independent) variables. The significance of the path coefficients is shown in Table Number 5.64. "The path coefficient values are standardized from -1 to +1, with coefficients closer to +1 representing strong positive relationships and coefficients closer to -1 indicating strong negative relationships" (Sarstedt et al., 2014).

Figure No. 6.2: Structure Equation Model



Coefficient of determination (R^2) shows the proportion of the variance in the dependent variable that is predictable from the independent variable.

For example, the R^2 value for Overall Satisfaction is 0.466 and Recommendations and Suggestions is 0.508, indicating the SEM's predictive accuracy. "The R^2 ranges from 0 to 1; a higher-level score indicates greater predictive accuracy.

An R^2 value of 0.75 is considered substantial, 0.50 as moderate and 0.25 as a weak determinant of the SEM" (Hair, Ringle & Sarstedt, 2011; Henseler Ringle & Sinkovics, 2009).

The SEM revealed a positive effect of the construct on others. The significant positive effect is observed at 0.01 level for all selected criteria, viz., Accessibility, Affordability, Availability, Work Culture, Environment, Service Delivery, Infrastructure, Perception of use of PHCs, Community Engagement and Preference for PHCs. The Service Delivery ($\beta = 0.402$, $t = 7.894$, $p = 0.000$) influence more on the Satisfaction of the users of PHCs followed by Preferences ($\beta = 0.101$), Affordability ($\beta = 0.019$, $t = 0.567$, $p = 0.571$) Infrastructure ($\beta = 0.228$, $t = 4.546$, $p = 0.000$) Environment ($\beta = 0.05$, $t = 1.603$, $p = 0.109$), Availability ($\beta = -0.007$, $t = 0.203$, $p = 0.839$) Accessibility ($\beta = -0.013$, $t = 0.357$, $p = 0.721$), and Community Engagement ($\beta = -0.049$, $t = 1.221$, $p = 0.222$). But the effect of Work Culture ($\beta = 0.011$, $t = 0.234$, $p = 0.815$) was found insignificant. Further, overall Satisfaction significantly affected the recommendations and suggestions of the users of PHCs ($\beta = 0.713$, $t = 35.802$, $p = 0.000$).

From the results of the Coefficient of determination, it can be predicted that 46.6 per cent of overall Satisfaction and 50.8 per cent intention for recommendations and suggestions for the use PHCs by the users of the services.

Q^2 values larger than zero for a particular endogenous construct indicates that the path model's predictive accuracy is acceptable for that specific construct (Rigdon, 2014; Sarstedt, Ringle, Henseler & Hair, 2014). For example, the Q^2 value for the model predicting overall Satisfaction (0.176) and recommendations and suggestions (0.415) for the use PHCs show the further predictive accuracy of the model under study.

6.10: FINDINGS AND IMPLICATIONS OF THE RESEARCH STUDY:

In this section, the researcher has presented implications based on the findings and conclusions of the an empirical research study carried out in the selected cities of Gujarat.

6.10.1: Summarised Findings and Implications of the Research Study:

Table No. 6.8
Summary of the Research Study's Hypotheses, findings, Conclusions, and Implications.

Testing of Hypotheses	Summarised Findings of the Research Study	Implications of the Research Study
H1: Accessibility, Affordability, Availability, Environment, Infrastructure Facilities, Work Culture, Service Delivery, Community Engagement, Perception for the use of PHC services, and preference for PHC has a significant relationship with the intention of the users of PHCs to continue to use medical services offered by PHCs.	Low degree of positive correlation between the Accessibility, Affordability, Availability, Environment, Infrastructure Facilities, Work Culture, Service Delivery, Community Engagement, and Perception of the use of PHC services. Preference for PHCs to continue and use medical services offered by PHCs.	All ten factors showed a statistically significant positive correlation with continuing to use PHC Services. It implies that these selected factors are essential for a repeat usage of PHC services.
2)H1: Accessibility, Affordability, Availability, Environment, Infrastructure Facilities, Work Culture, Service Delivery, Community Engagement, Perception for the use of PHC services, and preference for PHC has a significant relationship with the intention to recommend the use of PHCs healthcare services to others.	Low degree of positive correlation between Accessibility, Affordability, Availability, Environment, Infrastructure Facilities, Work Culture, Service Delivery, and Community Engagement. Perception of the use of PHC services and preference for PHC to recommend PHC healthcare services to others.	All ten factors showed a statistically significant positive correlation with the idea of recommending the use of PHC healthcare services to others. It implies that the factors under study are equally important to strengthen the Intention of PHC Service users to recommend PHC Services to others.
3)H1: Accessibility, Affordability, Availability, Environment, Infrastructure Facilities, Work Culture, Service Delivery, Community Engagement, Perception for the use of PHC services, and preference for PHC have a significant relationship with overall satisfaction with PHC services.	A moderate degree of positive correlation between Accessibility, Affordability, Availability, Environment, Infrastructure Facilities, Work Culture, Service Delivery, Community Engagement, and Perception of the use of PHC services. Preference for PHC to overall health and Satisfaction with PHCs services.	All ten factors showed a statistically significant positive correlation, suggesting that these factors offer the utmost Satisfaction for users of PHC Services. Therefore, it implies that these selected factors are essential for Satisfaction for users of PHC Services.

Testing of Hypotheses	Summarised Findings of the Research Study	Implications of the Research Study
4)H1: There is a significant relationship between Gender, Age, Education, Occupation, And Monthly Income Vis-À-Vis Selected Criteria of the Accessibility factor.	The study failed to accept the hypothesis for the other 35 instances as no significant association was found between the demographic variables and the statements identifying the variable 'Accessibility' under the study.	The chi-square test of independence provides insights into the association between different demographic variables and factors related to the Accessibility of PHCs services. The results suggest that some elements may be significantly associated with Accessibility while others may not. These findings can inform policy decisions and interventions to improve Accessibility to PHCs services. The study shows that monthly Income is an essential factor affecting Accessibility. Gender and occupation were not significant factors concerning Accessibility, which may indicate that accessibility issues are not specific to particular gender or occupational groups. Age and education were found to have limited associations with Accessibility, which may warrant further investigation to identify any potential patterns or issues.
5)H1: There is a significant relationship between gender, age, education, occupation, and monthly income vis-à-vis selected criteria of the Affordability factor.	The study failed to accept the hypothesis for the other 20 instances as no significant association was found between the demographic variables and the statements identifying the variable 'Affordability' under the study.	The study suggests that monthly Income is an essential factor affecting Affordability. Education was not associated with Affordability, which may indicate that Affordability issues are not specific to certain educational levels. Age, occupation, and Gender were not significant factors in Affordability, suggesting that Affordability issues are more evenly distributed across different demographic groups.
6)H1: There is a significant relationship between Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected Criteria of the Availability factor.	The study failed to accept the hypothesis for the other 37 cases as no significant association was found between the demographic variables and the statements identifying the variable 'Availability' under the study.	The study suggests that multiple demographic factors may influence Availability outcomes. The fact that Gender, Age, occupation, and monthly Income were each associated with Availability indicates that Availability issues are not specific to particular demographic groups. In addition, the study highlights the importance of education as a factor influencing Availability outcomes, suggesting that efforts to improve Availability should consider educational levels.

Testing of Hypotheses	Summarised Findings of the Research Study	Implications of the Research Study
7)H1: There is a significant relationship between Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected criteria of the Environment factor.	The study failed to accept the hypothesis for the other 36 cases as no significant association was found between the demographic variables and the statements identifying the variable 'Environment' under the study.	These findings imply that education plays an essential role in shaping Attitudes and Perceptions related to the Environment. Therefore, educational programs should be implemented to increase awareness and promote Environmental responsibility among the general population.
8)H1: There is a significant relationship between gender, Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected criteria of the Infrastructure (Physical Facilities) factor.	The study failed to accept the hypothesis for the other 44 cases as no significant association was found between the demographic variables and the statements identifying the variable 'Infrastructure' under the study.	Overall, there are relatively few significant associations between Infrastructure criteria and Demographic Factors. It suggests that infrastructure-related perceptions and preferences may be similar across different demographic groups, at least in the study context. Some Infrastructure criteria significantly associated with Demographic Factors include the Age factor, which provides for Water leakages in rooms of PHC, drinking water facilities at PHC, toilet facilities at PHC, and availability of beds for users at PHC. In Education variable includes the doors and windows of PHC are in good condition, drinking water facilities at PHC, toilet facilities at PHC, and availability of beds for users at PHC. The monthly income variable includes Drinking Water at PHC toilet facilities at PHC. These results suggest that certain infrastructure criteria may be more important to specific demographic groups and that addressing them may improve their Satisfaction and perception of the PHCs.
9)H1: There is a significant relationship between Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected criteria of the Work Culture factor.	The study failed to accept the hypothesis for the other 32 cases as no significant association was found between the demographic variables and the statements identifying the variable' work culture' under the study.	Several implications can be drawn about Doctors' and Para-medical Staff's work culture. The Doctors are more likely to explain illness and positively approach users. It also suggests that they tend to take their users into confidence while testing, which shows the importance of gaining trust in their work. On the other hand, it also reveals that the para-medical Staff are more likely to be polite and answer the queries of users, indicating a higher level of service they provide. It also suggests they can listen to patient suggestions more easily.

Testing of Hypotheses	Summarised Findings of the Research Study	Implications of the Research Study
10)H1: There is a significant relationship between gender, Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected criteria of the Service Delivery factor.	The study failed to accept the hypothesis for the other 40 cases as no significant association was found between the Demographic variables and the statements identifying the variable' Service Delivery' under the study.	Under Service Delivery, Age and Education seem to significantly impact patient Satisfaction with PHC services, as these variables have the highest number of significant 'P' values across the criteria. Any Age with any Education can have the basic Health facilities provided by the Primary Health Centres. Gender, Occupation, and Monthly Income have a relatively lower impact on patient satisfaction, as indicated by the lower number of significant 'P' values for these variables across the criteria.
11)H1: There is a significant relationship between Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected criteria of the Community Engagement factor.	The study failed to accept the hypothesis for the other 55 cases as no significant association was found between the demographic variables and the statements identifying the variable 'Community Engagement' under the study.	The Demographic variable with the highest impact on Community Engagement was Age, with significant associations found. It suggests that period could be essential when designing Community Engagement initiatives.
12)H1: There is a significant relationship between Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected criteria of the 'Perception for using PHC Services' factor.	The study failed to accept the hypothesis for the other 58 cases as no significant association was found between the demographic variables and the statements identifying the variable 'Perception for the use of PHC Services' under the study.	Healthcare providers can use the users data to develop targeted strategies to enhance the Perception of PHC services among specific Demographic groups. Moreover, these results can inform policy decisions related to healthcare financing and resource allocation. For instance, policymakers may consider targeting Healthcare resources to improve PHC services in areas with significant associations.
13)H1: There is a significant relationship between Gender, Age, Education, Occupation, and Monthly Income Vis-À-Vis Selected Preference criteria for the PHC factor.	The study failed to accept the hypothesis for the other 46 cases as no significant association was found between the demographic variables and the statements identifying the variable 'Preference for PHC' under the study.	For preference for PHC, Demographic variables may not be essential in determining an individual's choice. Other factors, such as Accessibility, Quality of Care, and Personal Experiences with Healthcare, may play a more significant role in shaping one's preference for PHC.

Table No. 6.9: **Summary of the Research Study's Objectives, findings, Conclusions, and Implications.**

Objectives of Research Study	**Test Applied for Objectives**	**Findings and Implications of the Research Study**
To measure the awareness of those users who had availed health care services and had also used the facilities provided at Primary Health Care Centers (PHCs).	Frequency Distribution (Descriptive Statistics have been used.	Out of the total respondents 650, 185 agreed that they have the Primary Health Centers (PHCs) facility in their Village, and 465 respondents accepted that there were non-availability Primary Health Centers (PHCs) in their respective villages. It is implied that some rural regions do not receive primary health centres. Also, it is implicit that some of the population within this area are unaware of rural PHCs. This data will be specimen information for the policymakers to implement health-related policies and schemes in the rural areas of the Vadodara district of Gujarat State.
To Study and understand the influences of selected demographic variables on the acceptability of the Health Care Services as delivered by the selected PHCs functioning in the villages of the Vadodara District of Gujarat State.	Frequency Distribution (Descriptive Statistics), and Chi-Square, have been used.	Demographic variables, such as Age, Education, Monthly Income, Gender, and Occupation, have different levels of association with PHC services, including Accessibility, Affordability, Availability, Infrastructure, Users of PHC Services, Satisfaction, and Community Engagement. For example, Monthly Income is an essential factor affecting the Accessibility and Affordability of PHC Services, while Education is vital for availability outcomes. Age significantly impacts users of PHC Services satisfaction and could be critical when designing Community Engagement initiatives. Infrastructure-Related Perceptions and Preferences may be relatively similar across different demographic groups, although certain infrastructure criteria may be more important to specific demographic groups. The Demographic variable with the highest impact on Community Engagement was Age, with significant associations found. It suggests that period could be essential when designing Community Engagement initiatives.
To assess the Primary Health Care Services offered by the Government through Primary Health Care Centers(PHCs) in chosen villages from Vadodara District of Gujarat State.	Factor Analysis have been used by the researcher to understand and determine the underlying criteria that decide the significance of respective factor in assessing the users response based on factor loadings score for each criteria.	Based on the factor analysis, Accessbility, Community Engagement, Service Delivery, Perception for use of PHCs and Preference for PHCs are the factors where there is needs of improvement.

To study and analyse the 4 A's (Availability, Acceptability, Affordability and Accessibility of the Health Care Services as delivered by the selected PHCs functioning in the villages of the Vadodara District of the Gujarat State.	Frequency Distribution, Chi Square, Correlation, Friedman Rank Test, Factor Analysis and SEM through PLS have been used to analyse the 4 A's (Availability, Acceptability, Affordability and Accessibility of the Health Care Services as delivered by the selected PHCs	Perception of the use of PHC services, stands out as the top most evaluated parameter. This position was followed by the criterion of Preference for PHC, which emphasizes more preferences were given to PHCs for healthcare facilities. The factors like Work Culture, Affordability, and Accessibility had a relatively lower impact on the respondents' perceptions. It indicates that healthcare service providers and policymakers should focus on enhancing the Quality of Services, Community Engagement, and Availability of Resources to improve the perception of PHCs.

6.11.: FINDINGS AND IMPLICATIONS BASED ON SELECTED PHCs USERS.

- It is implied that there were 105 entire villages of the Vadodara district have been covered under the research study. The research study mainly focused on rural healthcare, particularly on services provided by the Primary Health Centers (PHCs) in different villages of the Vadodara district.
- It is implied that some rural regions do not receive primary health centres. Also, it is implicit that some of the population within this area are unaware of rural PHCs. This data will be specimen information for the policymakers to implement health-related policies and schemes in the rural areas of the Vadodara district of Gujarat State. It is also understood that the right infrastructure policy and framework are needed at the grass root level for sustainable development of the healthcare sector. Therefore, it concluded that there is a lack of Infrastructure inside PHCs in many villages of Vadodara in Gujarat State.
- It is implied that many rural regions do not receive primary health centres' PHCs. Also, many rural people are unaware that accessible medical facilities are available at Primary Health Centers (PHCs). It is also understood that many people have to visit nearby villages to avail PHCs services, making medical facilities costlier as they have to manage transportation to reach the PHCs. It is inferred that there is a lack of PHCs and basic primary healthcare facilities in the many villages of the Vadodara district of Gujarat State. Therefore, proper infrastructure policy and framework are needed at the grass root level for sustainable development of the healthcare sector.
- It is implied that 42 villages have Primary Health Centers (PHCs) facilities in the Vadodara district of Gujarat State. It is also noted that due to the facility of PHCs, people get accessible facilities to healthcare facilities at their doorstep.
- It is implied that there is an inadequate number of rural PHCs in rural regions as the ratio of Village to PHC is 3:1. With this, it can be observed that rural areas need more rural PHCs. The functioning of PHCs becomes challenging because of the low ratio. Moreover, many of the villages of the Vadodara District do not have the facilities of the PHCs, so they have to travel to urban areas for medical facilities.
- It can be observed that the rural population found the rural PHCs to be in a location that is not very far and quickly reachable. In addition, it is also implied that the rural population prefers to have such centres in close vicinity.
- It can be observed that the rural population found the rural PHCs to be in a location that is not very far and quickly reachable. In addition, it is also implied that the rural population prefers to have such centres in close vicinity.
- It can be examined that the rural population found that they need at least 10-15 minutes to reach their nearest rural PHCs. In addition, many of the rural population found it difficult to get PHCs as the distance is more from their villages. It can also be added that the rural population prefers such nearby centres.

- The rural PHCs are functional, but the doctors specializing in varied medical areas are not always available due to their professional commitments off PHCs. It is understood that the lack of specialized healthcare services is missing at the PHCs. It is also implied that all these areas, such as Gynaecology, Dentistry, and Oncology, are equally important to health and hazards.
- It is implied that most people residing in rural areas know the PHCs and have used the PHC's services. However, many villagers have not yet used the PHCs services. It is also understood that all the PHCs in rural areas are properly constructed and located conveniently. It is also implied that the best medical services are provided at the PHCs at a low cost. It is also noted that the doctors and para-medical Staff were always available at the PHCs.

6.11.1: Criteria-Wise Implications of the Research Study:

Accessibility:

It is implied that the rural people have easy access to the PHCs of the Vadodara District of Gujarat State. It is also understood that the PHCs were located conveniently and provided quality medical services to all people without gender discrimination. Moreover, doctors and para-medical Staff were available at the PHCs, where users could easily approach them for treatment.

Affordability:

It is implicit that the healthcare services provided by the PHCs were inexpensive for the rural people residing in the Vadodara District of Gujarat State. It is also understood that the PHCs were providing free medical services to the rural people, and if the PHCs took any charges, that was accordingly to Government guidelines. Therefore, it is implied that rural people can easily afford the expenses to reach PHCs and the hospitalization charges levied by the PHCs.

Availability:

It is implied that the doctors are always available at the PHCs as per their daily duty schedule. It is implicit that the medicines and drugs the doctors prescribe are always available free of cost. It is also understood that the PHCs should continue to provide Hospitalization Services and Laboratory services to the rural people of selected villages of the Vadodara District of Gujarat State. It is also implied that the PHCs provide minor surgeries to rural people with quality treatment. It is also implicit that the PHCs provide Ambulance services for emergency users. It is also implied that the Lab Technicians and pharmacists in PHCs are ready to help the users to diagnose their health issues with proper medicines.

Environment:

It is implied that many PHCs are yet to receive drainage facilities in the villages. It is also understood that many PHCs have suffered from Water Logging and proper ventilation issue in the selected villages of the Vadodara district of the Gujarat State. It is also implicit that the PHCs are clean and properly situated in a Noise Pollution and infection-free environment. It is also understood that school education and employment opportunities are available in their villages.

Infrastructure:

It is implied that some rural regions are yet to receive primary health centres with good Construction, well-painted buildings, and proper Infrastructure. Also, it is implicit that some of the PHCs have suffered from the Water Leakages issue as the Construction was not correctly made. It is also implied that the continuous Electricity, Sanitation Facility, Drinking Water Facility, and proper seating arrangements lead to better treatment of the users by the doctors. It is also understood that the availability of beds, laboratory facilities, ambulance services, and significant medical equipment is must require at the PHCs. It is also understood that the right infrastructure policy and healthcare framework is needed at the grass root level for sustainable development of healthy life of the rural people. It is inferred that there is a lack of Sanitation facilities in PHCs of selected villages of the Vadodara district of the Gujarat State.

Work Culture:

It is implied that the doctors adequately explained the illness to the users of selected villages of the Vadodara District of Gujarat State. It is also understood that many doctors did not support users while treating them. It is implicit that the Doctor's behaviour was polite, and showed a positive attitude towards users while treating them. It is inferred that the para-medical Staff of the PHCs were very well-mannered, punctual and ready to support users with all queries while getting treatment at the PHCs.

Service Delivery:

It is implicit that the people felt safe while taking medical services at PHCs. The Staff of the PHCs was not corrupt and was not taking any charges from the people other than case papers. The Staff of the PHCs were taking feedback from the users for delivering quality services at PHCs. Many doctors were found to be getting help from other doctors online, but all people did not accept it. It is also inferred that the PHCs followed strict rules and regulations while treating users at the PHCs in selected villages of the Vadodara District of Gujarat State. It is implied that the doctors explained the illness adequately to the users in their local or state language, which helps the users understand correctly and check via stethoscope regularly. It is inferred that the behaviour of PHCs Staff was found polite, always explaining to users about the post-medical treatment. Staff were found using gloves while treating users at PHCs of selected villages of the Vadodara District of Gujarat State.

Community Engagement:

It was implied that the Staff of PHCs conducted timely awareness programmes with the surrounding communities. They implicitly educated the village communities about contagious diseases such as COVID-19 and HIV. They also actively visited the families regarding the awareness of proper health care. They also ensured that they educated the village communities using the print media such as Banners, Hoardings and Boarding featuring celebrities, instructing them on precaution and safety measures. Furthermore, the Staff conducted health camps to educate the children about health care. Apart from running awareness programmes, the Staff also conducted various health camps that stressed primary check-ups and tests.

They also have taken the assistance of Gram-panchayat in certain events. Also, it is pretty implicit that the Staff was instrumental in collecting the data of the feedback given by the rural communities.

One of the significant implications is that even the Mahila Mandals support the PHCs in the welfare measures. Therefore, it can be comprehended that the Staff of PHCs could draw the data on the rural communities' requirements emphasizing healthcare camps.

Perception of the use of PHC Services:

It is implied that village communities perceive PHCs to be their first place for a visit in times of health issues for primary diagnosis. It is also suggested that they take shelter of PHCs even during advanced-stage diseases. People trust the prescription done by doctors without any hesitation. They also closely adhere to the instructions given by the doctors and para-medics in the treatment process. It is also implied that people were morally uplifted and satisfied by the Doctor's positive approach and supportive attitude towards the users. It can also be implicit that the users feel hesitant on the PHC premises that are not over-crowded with village people. The users also made evident the implication that the premises were cleaned and maintained overall hygiene. The data also implied that the village people rely highly on the PHCs at not just a basic level of diseases but also at a high level or advanced stages of their illness.

Preference for PHCs:

People made it evident the implication that the services provided by the PHCs are highly subsidized and are at nominal charges. It is implicit that the rural population undoubtedly firmly believes they would get appropriate assistance at the PHCs. The health personnel, other Staff and required medicines are available at the PHCs. Implied is also the fact that the visitors found the Doctors and other Staff cordial. One implication is that the rural population prefers to go to the PHCs because of less time consumption when waiting for a consultation and other services. It is also implied that the PHCs maintained a hygiene level worth the visitors' attention. Finally, it means that people are aware of the services provided by the PHCs because of the information provided through print media.

6.11.2: Overall Implications of the Research Study:

- The said variables' research has focused on gathering data related to Accessibility, Affordability, availability, environment, facilities, work culture, service and other factors. The study implies strong evidence of the value of each of the said factors. It means that the rural population finds PHCs highly approachable and accessible. It can also be the implication that the rural population find the PHCs to be reasonably affordable. They found that the work culture and the environment at the PHCs are positive and amicable. It is also evident from the study that the perception of the PHCs is positive in the eyes of the rural population. They found PHCs and their conditions favourable for treatments and consultations. The study also implies that the rural population positively recommends the PHCs to other needy people for medical services. The study's significant implication is that the population is pretty satisfied with their overall experience of the PHCs. The study also implies that the workforce appointed at the PHCs is not just qualified bus but also amicable to an extent where they can comfort the users to convey their problems and illnesses, ultimately trying to help them in the best possible ways. It is also implied that the delivery of medical services is of a level worth commendable.

- The study implies that the rural population would continue availing of the services offered by the PHCs. The study also means that the people who rendered the services would highly recommend them to others to make the most of the benefit. It creates a win-win situation where the weaker communities do not remain unattended, nor are the PHCs of the status that they could not provide services to the needy. This study also implies that the PHCs can appeal to the people regarding their approach and services. Overall, it is implicit that the population is satisfied with the PHCs.
- It can be implied from the study that the population believes that they should be informed about their rights and not just their duties. It can also be the implication from the table that the PHCs should monitor PHCs absenteeism. Implicitly, the users suggested that the Staff of PHCs should take more measures to improve the services. The implication is that the PHCs should encourage the Staff to deliver the services in the best possible manner to meet that region's health requirements. As also suggested in the early implications of the other tables above, the health Mitra volunteer scheme' implies that even the population promotes the concept of local people helping the PHCs in the proper and smooth functioning of the PHCs.

  Also, it is implicit that the PHCs should help the local village people. One more implication that can be drawn from the study is that the PHCs should encourage the Staff to use fair means without any corrupt ways of functioning.

6.12: RECOMMENDATIONS AND SUGGESTIONS OF THE RESEARCH STUDY:

- The research study is recommended to be separately conducted for healthcare facilities provided by the Primary Health Centres (PHCs) of each taluka and for each Village of the Vadodara district of Gujarat State.
- Rural Primary health centres are one of the essential services for rural people who often tend to treat themselves with superstitions and other home remedies which may not always help them to recover from health issues. Therefore, it becomes a need for these rural people to adopt modern health care services. At the same time, there should be the availability of PHC in their respective rural areas. It also recommended an awareness campaign for individual health and the Primary Health Centers (PHCs) at the rural level, as many users are unaware of the Primary Health Centers (PHCs). It is also suggested that the Government should provide more grants for the new Construction of PHCs and new healthcare infrastructure.
- It is recommended that the new Construction of Primary Health Centers (PHCs) is needed in the rural areas as many of the villages of the Vadodara district of Gujarat State still do not have the facilities of the PHCs. It is suggested that the rural authorities create transport facilities to access these rural primary health centres that are not located in their areas. It is also implicit that if there are no transport facilities, the government officials need to consider this and do the needful.
- It is recommended that the Government focus more on rural healthcare facilities as most of the population reside in rural areas, and PHCs facility is unavailable at all villages of Vadodara District of the Gujarat State.
- It is suggested that the authorities governing the rural areas need to consider having sanctioned rural PHCs in the areas that do not have them. In addition, the Government should provide more grants and subsidies for the new Construction of the PHCs and the renovation of the existing PHCs in rural areas.
- It is suggested that the authorities governing the rural areas must consider the location for easy access to the rural PHCs. It enables the smooth functioning of the very purpose of having rural PHCs.
- It is suggested that the authorities governing the rural areas need to consider the transport facilities and location before finalizing the spot of the PHC buildings. As Proper Road and transportation facilities are already missing in rural areas, the Government needs to focus on PHCs where rural people can easily reach the PHCs and get medical help.
- It is suggested that the authorities Governing the rural areas need to keep the distance of PHC buildings near the villages because there are fair chances of snake bites, road accidents, and other mishaps that may need urgent treatment. It is also suggested that there is a requirement for Telecommunication facilities at PHCs for communication during an emergency.

- It is suggested that the governing body, the Ministry of Health and Family Welfare, should hire specialized doctors available daily for the PHCs in rural areas. It is also recommended that the Government make the timely recruitment for specially PHCs as there is a lack of specialized doctors in the PHCs.
- It is suggested that an awareness campaign is needed at the grass root level as many rural people are still unaware of the PHCs. It is also recommended that more PHCs should be constructed as fewer PHCs are available in the Vadodara District of Gujarat State. It is also suggested that the Government should provide timely recruitment of Doctors, Specialized Doctors and Para-medical Staff for the smooth conduction of the PHCs. Finally, it is also recommended that the PHCs continue to support rural people via the best medical services free of cost.

6.12.1: Criteria-Wise Recommendations and Suggestions of the Research Study:

Accessibility:

It is recommended that the Government continue to support rural people for easy access to the PHCs and continue providing free medical services via PHCs of the Vadodara District of the Gujarat State. It is also suggested that the timely appointment of trained Para-medical Staff at the PHCs is essential. It is recommended that the para-medical Staff's behaviour must improve so they can treat the users properly and politely. The Government should provide interpersonal training to all the para-medical Staff of the PHCs of Vadodara District of the Gujarat State to develop interpersonal skills at the individual level.

Affordability:

It is suggested that the Government continue to provide less expensive healthcare services via PHCs to rural people as their family income is meagre. So, it is challenging for rural people to spend money from their pockets. It is also recommended that the Government arrange accessible transportation facilities for the rural people as they have to spend money for transportation to reach the PHCs. It is also recommended that the Government focus more on rural healthcare and provide grants and subsidies for the new Construction of the PHCs, as the PHCs are not available in all the villages of the Vadodara district of the Gujarat State.

Availability:

It is recommended that the doctors of the PHCs should continue to provide quality medical treatment and remain available for the rural people of the selected villages of the Vadodara District of Gujarat State. The Government should invest more money in the new ambulances as the PHCs are unavailable in all towns of the Vadodara District of Gujarat State. It should be recommended that the PHCs continue to provide all types of medicines to the rural people; if it is not available, it should be exported from the Urban Health Centres or Government Hospitals. It should be noted that many of the PHCs do not have Laboratory facilities, for the Government should provide separate budgets to develop laboratories at the PHCs.

It is recommended that the PHCs continue to support rural people via medicines on a free-of-cost basis. It is also suggested that the timely recruitment of Laboratory Technicians and Pharmacists is essential.

Environment:

It is recommended that the PHCs should be constructed with proper ventilation and natural light. It is suggested that the Government appoints exceptional Staff in PHCs for Cleanliness and garbage disposal. The Government should also allocate funds for the drainage system in the PHCs of selected villages of the Vadodara District of the Gujarat State. The Government should also provide School Education to all the children to make them aware of the Physical health and Healthcare facilities available in their villages. It is also suggested that Employment opportunities are also needed at the grass root level. So, rural people can improve their living standards and individual health.

Infrastructure:

Rural Primary health centres are the backbone for the rural people who often take medicines and medical treatment from there. It is suggested that the Government should provide basic amenities like drinking water facilities, sanitation facilities, and Electricity at the PHCs. It is also recommended that timely renovation of buildings is needed for PHCs buildings as most of them are very old, leading to the unacceptable event. It is also recommended that the Government should provide the latest medical equipment at the PHCs for better treatment of the users. It is also suggested to the Government that more patient beds are needed at the PHCs as half of the population resides in rural areas and often takes medical treatment from the PHCs. It is also recommended that more ambulances be needed at the PHCs as many villages do not have not the facilities of PHCs. Another suggestion is that the Government should initiate an extraordinary drive for the Construction of toilets at PHCs of the selected villages of the Vadodara district of the Gujarat State.

Work Culture:

It is recommended that the Government should organize seminars and workshops on How to develop the interpersonal skills of the Doctors as well as para-medical Staff working at the PHCs of selected villages of the Vadodara District of the Gujarat State. It is also suggested to the Government to put hoardings about the general healthcare facilities available at the PHCs of selected villages of the Vadodara District of the Gujarat State. Doctors are advised to explain all the issues regarding the illness of the users and treatment for the same. Furthermore, it is recommended that proper training for the para-medical Staff while treating the users at the PHCs of the selected villages of the Vadodara district of the Gujarat State is essential.

Service Delivery:

It is recommended that the PHCs continue to follow the rules and regulations of PHCs and provide safe treatment to users with safety precautions, gloves, masks etc. The Staff should continue to behave politely with users for primary treatment at the PHCs of selected villages of the Vadodara District of the Gujarat state. It is a suggestion to the Government to recruit more Staff in the local language at PHCs which helps the users who avail the services of the PHCs.

It is advised to the PHCs that they should continue to take feedback from the users about the medical treatment provided at the PHCs. It is also suggested that the doctors give medical post-treatment to all users of the PHCs of selected villages of the Vadodara district of Gujarat state.

Community Engagement:

The Staff of PHC can use other media apart from print for better awareness. They can also bring in NGOs to conduct the events and use volunteers for street plays and demonstrations. They can also think of creating a digital platform for appointments and the disbursements of medicines. The Staff can consider having a "health Mitra" sort of volunteer workforce that can enable them to bridge communication with the village people. PHCs can emphasize the women volunteers who can educate the village women on menstrual hygiene and precautions. It can also be considered that there is a school representative who liaison between the PHCs and the school for primary health care and first-aid in miscellaneous needs such as distributing food supplements and flyers.

Perception of the use of PHCs Services:

The PHCs can have more beds and have enlarged buildings that can accommodate more visitors during adverse times such as COVID when maintaining distance becomes a protocol. Local language interpreters or doctors conversant in the local language should be appointed at PHCs for better communication. Doctors and paramedics need to be trained in the mannerisms of the Village for a better understanding of their local and traditional customs for treating certain diseases. It can also be suggested that the PHCs should install suggestion boxes for the users and visitors for any developments or complaints. The PHCs should consider the idea of having ample space for the parking of vehicles and should have enough room for an ambulance to reach the ramp.

Preference for PHCs:

The PHCs can adopt digital media for appointments, doctors' schedules and other necessary information such as phone numbers, addresses and further related details of nearby PHCs, specialized doctors, availability of medicines, camps etc. Moreover, these PHCs can develop software to monitor inward and outward visits using paperless digital platforms. In case of any mishap or unforeseen event of quarrel, altercation or fight, PHC health Mitra can intervene to alleviate the situation. Because the rural population has many traditional ways to treat certain diseases, the health Mitra can help the doctors understand such ways to do the treatment in the most appropriate and supplementing methods.

6.12.2: Overall Recommendations and Suggestions of the Research Study:

- It can be suggested to policymakers that the number of PHCs can be increased as it was found in the study that many of the rural locations lack the medical services provided by the PHCs. The PHCs should provide continued assistance to the rural population as they may take some years to fully develop economically and have the Affordability to take high-charge services from the private players. Suppose the medical standards are to be brought to a pedestal in a country like India. In that case, PHCs can only get a positive difference on the statistics analysed by World Health Organization.

  One recommendation can be made that PHCs should be subsidized to a level and Infrastructure to be developed at a story from which even the advanced stage treatments can be given to the needy. It is recommended that PHCs should strongly support the idea of having a 'health Mitra volunteer scheme' for smooth functioning and hassle-free environment.

NGOs that perform street plays and can make other demonstrations can be associated with awareness programs and other educational purposes. Specific training can be given to the para-medical Staff for appropriate communication without sounding authoritative to the visitors and users.

- It can be suggested that the policymakers may employ specific publicity campaigns where the population may not have to recommend the being of PHCs. However, PHCs should be a part of everyday rural life. Instead of people recommending PHCs should make sure that people know about them. Also, specific strategic locations such as Bus Stands, Village Entry, Bridge Walls, Public gathering places, School Walls etc., may be used for publicity and awareness about the PHCs. It can also be suggested that PHCs should not just waste their time and energy on advertising at the cost of their services.
- One firm suggestion is that all the PHCs should have a 'PHC Mitra volunteer scheme' that takes over the PHCs and the visitors in terms of recommending and campaigning about the services offered by the PHCs. The volunteers under such a scheme can be incentivized with other benefits. Also, the PHCs should adopt the online platform for better transparency in terms of working and cash flow dynamics. Furthermore, the PHCs should emphasize educating the rural communities about their rights vis-à-vis the PHC services. Also, it can be suggested that the PHC staff members should be given handsome salaries, festival bonuses and comfortable accommodations which do not let them adopt corrupt or other malpractices. However, all of this is subject to discussion and implementation.

6.13: CONCLUSION:

The world has committed to an ambitious development agenda to enhance the health and well-being of all people via the UN's Sustainable Development Goals (SDGs). It is time for the international community to move boldly in that direction forty years after the Declaration of Alma-Ata, armed with evidence and motivated by the new global commitment. The SDGs and Universal Health Care (UHC) must be accomplished with a new primary health care strategy. The moment is opportune, but progress will take guts and tenacity. Never before has the world been more ready for success. Primary care is a critical component of healthcare delivery in rural areas. As a result, the research examined several variables that affect primary healthcare facilities' effectiveness. The provision of infrastructural facilities, community engagement, and coordination with PHCs are all factors that affect how well direct healthcare services are delivered. The research made an effort to pinpoint the variables affecting the provision of healthcare in rural regions. It concluded that the Vadodara district of Gujarat State's rural areas lacks efficient primary healthcare delivery services. Chi-square, factor analysis, correlation analysis tests, and regression utilising SEM have all been used to evaluate various hypotheses. The conclusion that primary health centres are believed to provide higher-quality healthcare services than community health centres was astounding. The main issues cited at PHCs were a lack of physicians and medical equipment, poor clinical examinations, and subpar medication quality.

How rapidly a government scheme may adapt may depend on the scale of the healthcare sector, whether it is government payer, private, or multi-tiered, as well as the market's level of maturity. Transformation happens more slowly in the UK, where the country is now centralising and simplifying its healthcare systems. Imagine turning a huge ocean ship. Yet in developing nations like India, where many start-up businesses are using technology to close the access to care gap for millions of clients living outside of cities, change may happen quickly. Healthcare organisations worldwide will continue to encounter difficulties in providing better care for the people they serve, emphasising preventative measures, greater access, a personalised approach, higher quality, and results while being more effective and efficient. The use of data and technology will be essential to overcoming these obstacles. The challenge will be to combine intelligent data that can reveal how to suit each population's cultural and geographic demands with technology such as artificial intelligence and medical equipment. Technology will also make clinical research more accessible and inclusive. However, healthcare organisations must acknowledge that users' confidence in their doctors and hospitals to protect their personal health information has diminished. Therefore, they should take further precautions to safeguard the data and the way it is transmitted. Last but not least, healthcare organisations need to widen the concept of health to take into account social factors that influence the well-being of their communities.

To leverage the cost perspective of the PHC in the country, the Government to take bold decisions considering the trends that are impacting the delivery and financing of healthcare are viz., Demographic shifts and social change; Shifts in global economic power, Technological advances; and The empowered consumers. Such consideration by the Government result in emergence of new business models for healthcare services; a greater focus on reward for outcomes instead of volume of activity in healthcare; new entrants expanding and reshaping the health system; a shifts towards better healthcare services to rural population. and rebalancing of the participation of the public and private sectors in the financing and delivery.

One topic that has generated the most heated discussion worldwide is the expense of medical care, or, more specifically, the amount of money a country has to spend to provide its population access to medical treatment. It is crucial to consider how one might characterise this paradigm: Is access to medical care a right people can demand from the state, or does each person bear the responsibility for their well-being? On the other hand, there is a widespread agreement that the expansion of even the healthiest economies is at risk of being derailed if not at least one type of universal health coverage is made accessible. Access to preventative, promotive, and curative care of a quality high enough to be effective should be included in the range. It should be guaranteed that individuals will not go bankrupt due to their medical expenses. The "New Indian Healthcare Ecosystem" will redefine the healthcare delivery and products space by introducing low-cost hospitals and speciality clinics, medical devices that cost a fraction of the price of imported machines, mobile technologies that address primary healthcare needs, and quality healthcare that is both affordable and accessible. These inventions not only meet the demands of India, but they also have the potential to be duplicated across the underdeveloped globe, where the majority of problems are similar to those that our nation faces.

Some of the disruptive trends that the Indian health economy is currently experiencing include an increase in patient consumerism, an expansion of the continuum of care, a shift towards quality-based care, an increase in patient participation, the use of technology in the delivery of care, and an increase in insurance penetration. For relevant stakeholders to be successful in the "New Indian Health Economy," they will need to redefine themselves and reorganise themselves following these trends and turbulent events, as well as adopt new components of people, processes, and technology into their business models. This will allow them to capitalise on the opportunity presented by the implementation of NHM. Hence, changes are needed for Primary Health Care Centers in infrastructure, work culture, and community participation to achieve India's long-term goal of sustainable development and a healthy population.

6.14: LIMITATIONS OF THE RESEARCH STUDY:

- The received data resulted in inaccurate and erroneous data information, analysis, and research study outcomes.
- With the first-hand data and information from rural communities, it was incorrect to generalize that it was accurate and applied to Gujarat State's entire population.
- The research was primarily conducted in selected villages in the Vadodara District. Therefore, this study did not intend to provide a comprehensive picture of all Gujarat State's village healthcare service customers.
- The research study's conclusions suffered from constraints such as a small sample size and the use of a convenience sampling method.
- The findings of the research study may not have been generalized
- It was not easy to obtain basic information on healthcare service users because they were dynamic and constantly fluctuated over time.
- Results were influenced since the research study's time limit and funding was constrained.
- The skewed viewpoint of healthcare service users may not have conveyed honest and accurate facts.
- The various model viewpoints of experts may have varied in this regard.

6.15: DIRECTION FOR FUTURE RESEARCH STUDY:

In order to gain a more comprehensive understanding of the perception, behavioural intention, and future usage of healthcare services throughout India, it may be beneficial for future researchers to conduct studies on healthcare service stakeholders in other districts of Gujarat as well as in other states of India. By expanding the scope of the research beyond the Vadodara District, researchers may be able to obtain a more diverse sample of healthcare service users with a variety of perspectives and experiences. This would help to ensure that any conclusions drawn from the research are more representative of the broader population of healthcare service users in India. In addition to expanding the scope of the research geographically, future studies may also consider using different research methods to overcome some of the limitations of the previous study. For example, a larger sample size and a more representative sampling method could help to increase the generalizability of the findings. Additionally, researchers may consider conducting longitudinal studies to track changes in perception and usage of healthcare services over time. Overall, by conducting future studies on healthcare service stakeholders in other districts of Gujarat and other states of India, researchers may be able to provide valuable insights that could inform the development of healthcare policies and services throughout the country.

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