

**INVESTIGATION OF ATTITUDES TOWARDS BUSINESS OUTCOMES AND
PATIENT SAFETY IN COMPARISON WITH VIDEO AND PHYSICAL
CONSULTATION**

by

Elizabeth John Sen, MBA TQM, MBA Hospital Administration, MBA in Healthcare
Management

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ELIZABETH JOHN SEN

APPROVED BY

Dr. Olesya Meskina



<Chair's Name, Degree>, Chair

RECEIVED/APPROVED BY:

SSBM Representative

DEDICATION

I was blessed with awesome parents—my husband and my daughter, John Sen and Jennifer. I dedicate this work to the memory of my loving but late father, the greatest father any blessed child could ever have. Among countless acts of love and selflessness, he lived for the best of his children. Forewent his dreams to ensure his children reached heights he was not opportune to reach as a child, against all odds.

ACKNOWLEDGEMENTS

This study could not have been possible without the assistance of some amazing people. Firstly, I would like to thank God for the gift of life, wholeness, divine guidance, and strength during the entire research process. I pass on my sincere gratitude to my supportive husband, John Sen, who has stood by me through thick and thin, encouraged me, challenged me, and was instrumental in the attainment of this significant academic goal. He often reminded me and nudged me along difficult paths with his assuring smile and constant encouragement. I would like to express a big thank you to my late father and my mother, Annamma, for their counsel, support, and prayers. I could not forget my daughter Jennifer and my husband, John Sen, for being truly inspirational. They gave me a new lease of life and the motivation to achieve greater feats. I would like to thank the entire Sakra team for their prayers and kind thoughts. They have been amazing, indeed. I extend my special gratitude to my supervisor and academic mentor, Dr. Atul Tripathi, for his diligence, inspirational suggestions, guidance, expert supervision, and motivation. He was very available, resourceful, approachable, and so professional and supportive on this academic journey. I owe him my deepest appreciation. A special thanks to my passionate, principled, and professional personal advisor, Dr. Atul Pati Tripathi.

To the entire faculty of the Swiss School of Business Management (SSBM)-Geneva, I would like to express my appreciation for the efforts of anyone who assisted me throughout this project, either directly or remotely. To the management and staff of my case study organization and their client organization, I would like to recognize their efforts in making this thesis a great success. To all my friends and colleagues, thank you for all the support and kind thoughts throughout all these years. I am optimistic that you will each positively affect other people's lives as you have mine. To all who would read this, I am grateful and humbled.

ABSTRACT

INVESTIGATION OF ATTITUDES TOWARDS BUSINESS OUTCOMES AND PATIENT SAFETY IN COMPARISON WITH VIDEO AND PHYSICAL CONSULTATION

ELIZABETH JOHN SEN

2024

Dissertation Chair: <Chair's Name> DR. Olesya Meskina
Co-Chair: <If applicable. Co-Chair's Name>

Background

During and after the COVID-19 pandemics, healthcare delivery has undergone a significant change, easily noticeable by the integration of technology into traditional practices. The situation is that **starting** virtual consultations, facilitated by advancements in telemedicine and communication technologies, has reshaped the dynamics of patient-physician interactions. As healthcare professionals increasingly adapt both video and physical consultation modalities, understanding their attitudes towards business outcomes and patient safety becomes more important than anything else.

The fact that video and physical consultations are held side by side or close together raises interesting questions about healthcare professionals' perceptions and preferences. The healthcare industry, characterized by its complexity and dynamic nature, demands a nuanced examination of the economic and safety implications associated with these consultation methods. The decisions made in this regard have far-reaching consequences for practitioners, patients, and the healthcare system at large.

FIGURES

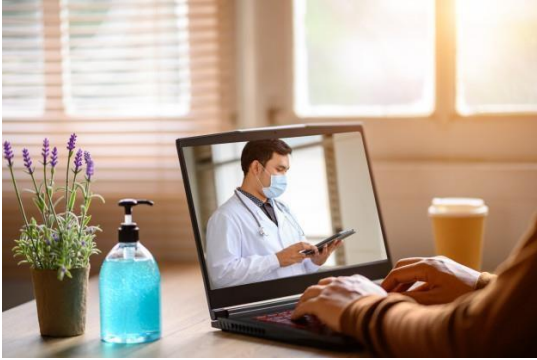


Figure 1: How to Design a Healthcare App and Make Its Users Addictive (Gautam, 2020)

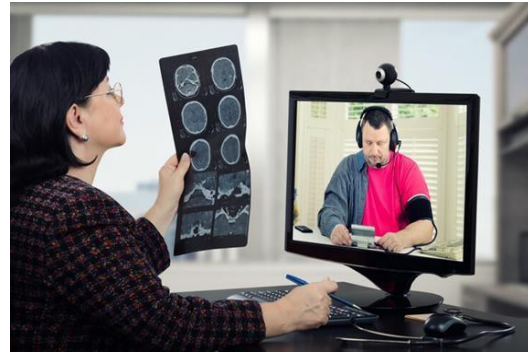


Figure 2: 8 reasons why telehealth is gaining momentum right now (Almeida, 2017)



Figure 3: Family doctor performing auscultation of patient respiratory system (Lakobchuk, 2023)



Figure 4: Liver cirrhosis more prevalent than previously thought (Catharine Paddock, 2015)

THE IMPORTANCE OF THE RESEARCH

The motivation behind this research stems from the critical need to comprehend how healthcare professionals navigate the delicate balance between business outcomes and patient safety in the context of video and physical consultations. The duality or quality of these considerations is at the heart of strategic decision-making within healthcare organizations. business outcomes and patient safety in the context of video and physical consultations. The duality or quality of these considerations is at the heart of strategic decision-making within healthcare organizations Investigating attitudes towards business outcomes is imperative as healthcare institutions strive for financial viability and operational efficiency. Factors such as cost-effectiveness, revenue generation, and overall sustainability play pivotal roles in shaping the economic landscape of healthcare practices. Simultaneously, ensuring patient safety remains a fundamental principle or belief of medical ethics and regulatory standards.

It involves considerations of communication effectiveness, diagnostic accuracy, and adherence to safety protocols.

The importance of this research extends beyond theoretical curiosity. It directly impacts industry practices, influencing how healthcare organizations integrate virtual consultations into their service models. Insights derived from this investigation can inform strategic planning, policy development, and resource allocation within healthcare settings. Moreover, the findings contribute to the broader discourse on healthcare practices, offering valuable knowledge for academics, policymakers, and practitioners alike. As the global healthcare community faces evolving challenges, exacerbated by events such as the COVID'19 pandemic, the role of virtual consultations has become even more certain. The urgency to adapt to changing circumstances underscores the timeliness and relevance of this research. To inquire or research deeply or intensively into the attitudes of healthcare professionals, this study aims to provide actionable insights that contribute to the advancement of knowledge and the enhancement of industry practices in an era where the intersection of technology and healthcare is increasingly vital.

TABLE OF CONTENTS

List of Tables.....	x-xi
List of Figures	xii-xvi
CHAPTER I: INTRODUCTION	1
1.1 Introduction	1
1.2 Research Problem.....	4
1.3 Purpose of Research.....	5
1.4 Significance of the Study	7
1.5 Research Purpose and Questions.....	8
CHAPTER II: REVIEW OF LITERATURE.....	13
2.1 Theoretical Framework	13
2.2 Theory of Reasoned Action	14
2.3 Human Society Theory	15
2.4 Summary	25
CHAPTER III: METHODOLOGY.....	29
3.1 Overview of the Research Problem.....	29
3.2 Operationalization of Theoretical Constructs.....	30
3.3 Research Purpose and Questions.....	31
3.4 Research Design.....	37
3.5 Population and Sample.....	37
3.6 Participant Selection.....	37
3.7 Instrumentation.....	41
3.8 Data Collection Procedures.....	42
3.9 Data Analysis	43
3.9 Research Design Limitations.....	45
3.9 Conclusion.....	46
CHAPTER IV: RESULTS	47
4.1 Research Question One	48
4.2 Research Question Two	63
4.3 Research Question Three.....	71
4.2 Summary of Findings	98
4.2 Conclusion.....	98
CHAPTER V: DISCUSSION	100
5.1 Discussion of Results	100

5.2 Discussion of Research Question One	117
5.2 Discussion of Research Question Two.....	118
5.2 Discussion of Research Question Three.....	118
CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS	119
6.1 Summary	119
6.2 Implications.....	119
6.3 Recommendations for Future Research	121
6.4 Conclusion.....	126
APPENDIX A SURVEY COVER LETTER.....	128
APPENDIX B INFORMED CONSENT	130
APPENDIX C INTERVIEW GUIDE.....	132
BIBLIOGRAPHY	133
APPENDIX A: FIRST APPENDIX TITLE	154

LIST OF TABLES

Table -1 Project Schedule...	10
Table 4.1 Investigation of attitude towards business outcome and patient safety in comparison with video consultation and physical consultation about suggestions and feedback by doctors.....	50
Table 4.1.20 Suggestions on Investigation of attitude towards business outcome and patient safety in comparison with video consultation and physical consultation about suggestions and feedback by doctors.....	63
Table 4.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation responses by top management level.	64
Table 4.2.10 Investigation of attitude towards business outcome and patient safety in comparison with Video and Physical Consultation by Top Management level(suggestion).....	71
Table 4.4 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients.....	95
Table 4.5 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients based on t-test and p-value.	97
Table 5.1; RQ-1.1 In line with my study findings on the investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by doctors	101
Table 5.2: RQ-1.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation feedback by doctors	104
Table 5.3: RQ-2: Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by top management level	106
Table 5.4: RQ-2.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by top management level.....	107

Table 5.5: RQ-3 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by patients 110

Table 5.6 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients..... 111

LIST OF FIGURES

SURVEY RESPONSE BY DOCTORS, TOP MANAGEMENT AND PATIENTS

Figure 1: How to Design a Healthcare App and Make Its Users Addictive (Gautam, 2020)	vi
Figure 2: 8 reasons why telehealth is gaining momentum right now (Almeida, 2017)....	vi
Figure 3: Family doctor performing auscultation of patient respiratory system (Lakobchuk, 2023).....	vi
Figure 4: Liver cirrhosis more prevalent than previously thought (Catharine Paddock, 2015).....	vi
Figure 5: Here Are Some Suggestions On How You Could Stop Spread Of Coronavirus (India.com, 2020).....	1
Figure 6: The Step-by-Step Guide to Patient Journey Mapping (GAINE SOLUTIONS, 2022).....	2
Figure 7: Patient Journey Mapping Must Be Fundamental to Your CRM Strategy (Arpita Bose Das, 2023).....	2
Figure 8: Shortcomings of Teleconsultation or Video Online Consultation (Nayak, 2020)	3
Figure 9: How Does Telemedicine Video Consultation Work? (VCDocor 2021).....	3
Figure 10: Little boy during stomach examination (photographee.eu, 2014).....	3
Figure 11: Percussion & Auscultation of the Lungs (Greekmedics, 2022).....	3
Figure 12: Comparison of VC and Face 2 Face by using Patient Assessment Tool (Barsom et al., 2020).....	16
Figure 4.1: Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by doctors.....	51
Figure 4.1.1: Do you prefer Video Consultation over In-person consultation to advicetreatment?.....	52
Figure 4.1.2: In case of any technical issue will you be able to manage?.....	52

Figure 4.1.3: Are you able to reach on time as per the appointment?.....	53
Figure 4.1.4: Is video consultation violating the code of ethics ?.....	53
Figure 4.1.5: Are you able to trust the patient as they are communicating with the Vital Signs?.....	54
Figure 4.1.6: Are you able to accept the reports which the patients are uploading at the site?	54
Figure 4.1.7: Are you able to check the Quality assurance of the reports?.....	55
Figure 4.1.8: In case of Referral will you be able to manage?.....	55
Figure 4.1.9: Are you able to treat the patient without auscultation and Palpation?	56
Figure 4.1.10: Are you able to manage proxy instead of actual patients?	56
Figure 4.1.11: Are you able to know the past medical history of the patient?.....	57
Figure 4.1.12: If the patient does not have good communication, will there be a problem in understanding the symptoms ?.....	57
Figure 4.1.13: If the patient does not have good communication, will there be a problem in understanding the symptoms ?.....	58
Figure 4.1.14: Is online consultation is reliable?	58
Figure 4.1.15: Is the Video consultation interface user friendly for the doctors ?.....	59
Figure 4.1.16: Face to face interaction will be missing and the doctor could not understand the real condition of the patient.....	59
Figure 4.1.17: If the patient feels that the doctor is not listening to his problems, he will lose faith with the doctor, although the doctors listens carefully but silently and trying to deeply understand the problems.....	60
Figure 4.1.18: Doctors may hurry if the patient tells long list of symptoms and this may tempts the patient or feels frustrated.	60
Figure 4.1.19: All these scenarios are based on the medical condition of the patient	61
Figure 4.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation responses by top management level.....	65
Figure 4.2.1: Do you think that video consultations have any revenue impact?	65
Figure 4.2.2: Are you aware of Ethical issues of Video consultation.....	66
Figure 4.2.3: Do you have any criteria for Video Consultation.....	66
Figure 4.2.4: SOP of Video Consultation is available?	67
Figure 4.2.5: Are patients satisfied with Video Consultation method?	67

Figure 4.2.6: Is video consultation better than physical consultation ?	68
Figure 4.2.7: Dissatisfaction of patients related to Video Consultation as per VOC.....	68
Figure 4.2.8: Can there be misdiagnosis in video consultation ?.....	69
Figure 4.2.9: Do phone consultation affect patient care?.....	70

TOWARDS PHYSICAL CONSULTATION BY PATIENTS

Figure 4.3.1: Was it easy to make an appointment to the doctor at a convenient time?	71
Figure 4.3.2: Did you have to wait too long in the waiting room for your visit?.....	72
Figure 4.3.3: I am totally satisfied with my visit to this doctor	72
Figure 4.3.4: Some things about the consultation with the doctor could have been better.	73
Figure 4.3.5: I am not completely satisfied with my visit to the doctor	73
Figure 4.3.6: The doctor devoted too little time to me during in person consultation	74
Figure 4.3.7: My physical and mental state improved after the visit to the doctor	74
Figure 4.3.8: The doctor examined me very thoroughly before advising investigations.	75
Figure 4.3.9: I will follow this doctor's advice because I think he/she is absolutely right ..	75
Figure 4.3.10: I understand my illness much better after seeing this doctor	76
Figure 4.3.11: I was able to fully explain my medical history.	76
Figure 4.3.12: Patient confidentiality and privacy was maintained.....	77
Figure 4.3.13: I am satisfied with the amount of time the doctor spent.....	77
Figure 4.3.14: The waiting time to meet the doctor justified.	78
Figure 4.3.15: The evaluation and treatment was explained well	78
Figure 4.3.16: I was informed about the side effects and symptoms of the medicines prescribed.	79
Figure 4.3.17: The billing process was efficient and comprehensive.....	79
Figure 4.3.18: It was easy to navigate to my destination within the hospital	80
Figure 4.3.19: I received test results from the lab without any problem.	80
Figure 4.3.20: What are the things u feel you should improve upon.....	81

TOWARDS VIDEO CONSULTATION BY PATIENTS

Figure 4.3.21: The process of registration and consultation with doctor was easy ?.....	82
Figure 4.3.22: The time interval between registration and video consultation was satisfactory	82

Figure 4.3.23: Overall, the service was excellent and it met my expectations.	83
Figure 4.3.24: I am convinced and satisfied with the treatment plan on video consultation.	83
Figure 4.3.25: The process of registration and consultation with doctor was easy.....	84
Figure 4.3.26: The physician took sufficient time to explain my condition and listen to my queries	84
Figure 4.3.27: The physician was competent, well-trained, and trustworthy. He treated me in a very friendly and courteous manner.....	85
Figure 4.3.28: The time interval between registration and video consultation was satisfactory	85
Figure 4.3.29: For me, the appointment was convenient and hassle free.	86
Figure 4.3.30: The process has been user friendly. I did not face any interruptions.....	86
Figure 4.3.31: The process of registration and consultation with doctor was easy ?.....	87
Figure 4.3.32: Timely alerts regarding the consultation was communicated.....	87
Figure 4.3.33: I am convinced and satisfied with the treatment plan on video consultation.	88
Figure 4.3.34: The given prescription was in clear and understandable manner.	88
Figure 4.3.35: I could communicate with the doctor and mention about my existing comorbidities without any hinderance.	89
Figure 4.3.36: I was satisfied with healthcare provider’s thoroughness while using telemedicine.....	89
Figure 4.3.37: Video consultation saves travel time to the hospital	90
Figure 4.3.38: Video consultation makes me less dependent on others	90
Figure 4.3.39: Video consultation would be my preferred modality of future consultation	91
Figure 4.3.40: I would recommend using telemedicine to a family member or friend.....	91
Figure 4.3.41: The communication with doctor was smoother	92
Figure 4.3.42: I was able to check my vital signs (BP, temp, pulse) before video consultation.	92
Figure 4.3.43: I was able to communicate all my symptoms without any interruptions....	93
Figure 4.3.44: The physician introduced himself before consultation.....	93
Figure 4.4 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients	96

Figure 5.1: How augmented reality improves video calls (Alena Arsenova, 2020)	100
Figure 5.2: Responses by doctors.....	103
Figure 5.3: Responses of top management.....	107
Figure 5.4: Bar graph depicting attitude of patient with respect to physical and video consultation	111
Figure 6 :Future of telemedicine depends on applying lessons from the pandemic,turkmani,2021	127

CHAPTER I

INTRODUCTION

1.1 Introduction

After the COVID'19 pandemics, healthcare delivery has undergone a significant change, marked notably by the integration of technology into traditional practices. The advent of virtual consultations, facilitated by advancements in telemedicine and communication technologies, has reshaped the dynamics of patient-physician interactions. As healthcare professionals increasingly embrace both video and physical consultation modalities, understanding their attitudes towards business outcomes and patient safety becomes paramount.



Figure 5: Here Are Some Suggestions On How You Could Stop Spread Of Coronavirus (India.com, 2020)

The fact that placing side by side or close together of Video and Physical Consultation poses interesting questions about the perceptions and preferences of healthcare professionals. The healthcare industry, characterized by its complexity and dynamic nature, demands a nuanced examination of the economic and safety implications associated with these consultation methods. The decisions made in this regard have far-reaching consequences for practitioners, patients, and the healthcare system at large.

Investigation of business outcomes and patient safety in the context of different consultation modes raises critical questions about the trade-offs between efficiency and quality of care. Understanding healthcare stakeholders' attitudes towards these aspects is crucial for optimizing healthcare delivery models and ensuring patient-centered care. As

per the logical framework, Technological capabilities and limitations of video consultation platforms. Regulatory frameworks governing telemedicine and patient safety standards. Healthcare provider perspectives on workload, reimbursement structures, and liability concerns. Patient preferences, trust in remote care, and perceived risks associated with telemedicine.

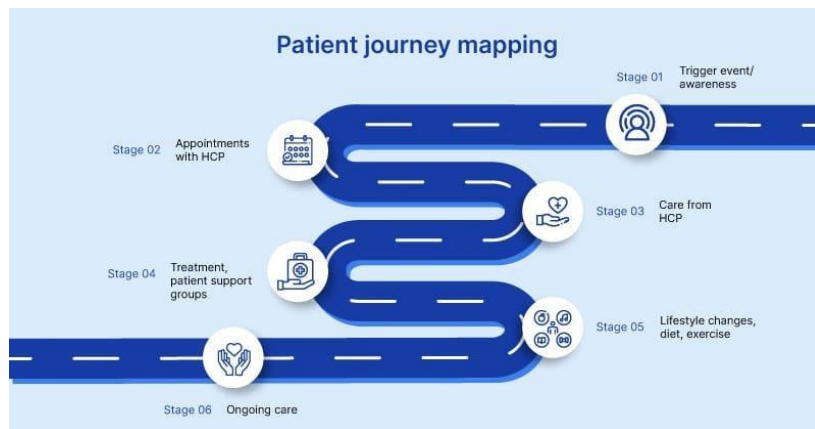


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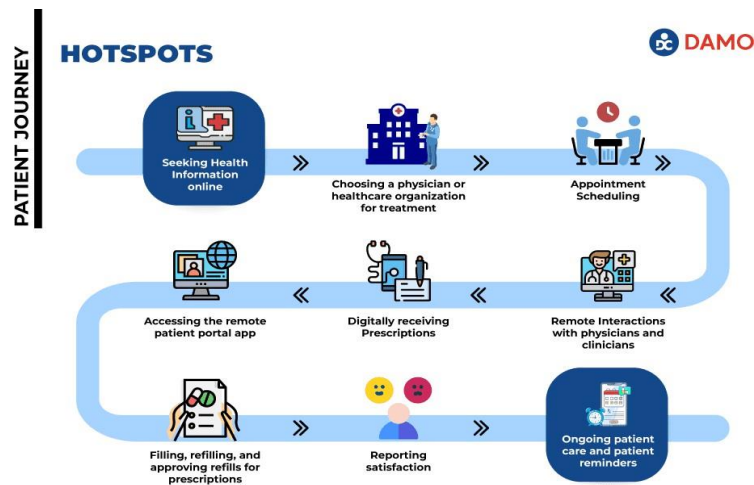


Figure 7: Patient Journey Mapping Must Be Fundamental to Your CRM Strategy (Arpita Bose Das, 2023)

VIDEO CONSULTATION VERSUS PHYSICAL CONSULTATION



Figure 8: Shortcomings of Teleconsultation or Video Online Consultation (Nayak, 2020)



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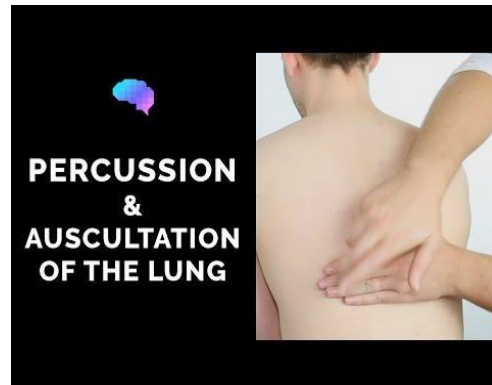


Figure 11: Percussion & Auscultation of the Lungs (Greekmedics, 2022)

According to my personal view points through this investigation, my aim is to show a slight degree of difference in considerations that a solid foundation is laid below ground level to support or strengthen attitudes towards business outcomes and patient safety, advocating for evidence-based practices and policies that prioritize both efficiency and quality of care. By thoroughly examining these dimensions, we can offer insights into something that happens, bring it up as one's own video consultations on healthcare delivery, inform policy decisions, and drive advancements towards a more integrated and patient-centric healthcare system.

This investigation of attitudes towards business outcomes and patient safety seeks to bridge the gap between theoretical discourse and practical implications and encourage the development of a deeper understanding of the evolving dynamics within modern healthcare delivery models. This investigation endeavors to illuminate the intricate nuances surrounding attitudes towards business outcomes and patient safety within the realm of healthcare delivery, particularly focusing on the integration of video consultations. It advocates for evidence-based practices and policies that prioritize both efficiency and quality of care, aiming to bridge theoretical discourse with practical implications in the evolving landscape of modern healthcare.

1.1 Research Problem

During the COVID'19 pandemic Patients considered video consultations to be an acceptable method of consulting with a doctor. Its advantages were that during a pandemic, it is useful to maintain physical distance so that people can practice infection control, and if the patient wants to show reports, then it is useful to take further action by the doctor. Video consultation is useful to discuss disease conditions in case the patient is out of station. On the other hand, there are many disadvantages observed, like the fact that there was no initial assessment or reassessment of the patient. Many times, there was no clarity on the prescription.

Sometimes, instead of an actual patient, a proxy will be sitting in front of the video. Another concern is the non-availability of the doctors at appointment time, which leads to a lot of dissatisfaction from the patient. Another concern is that lab reports are not available to the patient. From the business point of view, dissatisfaction of the internal customer can impact business areas like pharmacy, radiology, etc. There was no proper documentation available, and due to the proxy, there is a possibility of errors occurring, which can even lead to a violation of ethics. In cases of referral to different doctors, patients need to stick with hybrid-mode consultation. Some of the patients' perception is that video consultation is an easy way to consult a doctor. Some doctors were comfortable with video consultations. Then there is a possibility of a technical issue, and due to that, miscommunication or no communication can happen.

On the other hand, the advantages of a physical consultation are that the doctor can do an initial assessment face-to-face and understand the clinical condition of the patient. It is good to ventilate the anxiety directly to the doctor, whereas the disadvantages are that physical distance cannot be maintained in case of a pandemic, and waiting time to meet the doctor is another problem observed even after the appointment is taken. Due to the long waiting time, patients will be dissatisfied. Low performance is due to the fact that no standard operating procedure is available, like video consultation as well as physical

consultation. Or lack of awareness due to the lack of or inefficient training given to the doctors. Another observed perception by patients is that they can avoid traveling as well as reduce the waiting time for the doctors. Many times, patients also need to wait for the doctors to come online if they are attending another case. The importance of developing a standard operating procedure is mandatory for determining which categories of patients are suitable for video consultation and which categories of patients are suitable for physical consultation. In summary, there is a need for a better understanding of video consultation procedures and a structured approach to identifying and suggesting which categories of patients are suitable for video consultation as well as physical consultation.

1.2.1 Research questions

1. To investigate attitudes towards business outcomes and patient safety in comparison with video consultations and physical consultations by doctors.
2. To investigate attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation by top management level
3. To investigate attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation by patients.

1.3 Purpose of Research

Evaluate Healthcare Professionals' Attitudes Toward Business Outcomes by assessing and understanding the attitudes of healthcare professionals regarding business outcomes in both video and physical consultation settings, exploring factors such as financial viability, operational efficiency, and overall sustainability. Investigating and comparing healthcare professionals' perceptions of patient safety between video and physical consultations. Analyse factors influencing these perceptions, including communication effectiveness, diagnostic accuracy, and adherence to safety protocols.

Identifying and analysing the factors that significantly impact business outcomes in both video and physical consultations. This includes understanding how each modality contributes to revenue generation, cost-effectiveness, and overall success. Quantitatively measuring and comparing productivity metrics between video and physical consultation, including appointment turnover rates, patient throughput, and resource utilization. Evaluating the efficiency of each modality. By Investigating the perspectives of various stakeholders, including healthcare practitioners, administrators, and patients, to comprehend their roles in shaping attitudes towards business outcomes and patient safety

in both consultation modalities. Conducting a comprehensive cost-benefit analysis comparing video and physical consultation Evaluating the economic impact, including infrastructure costs, resource allocation, and the overall financial implications for healthcare organizations.

Deriving insights and recommendations to inform the development or adjustment of policies and guidelines related to virtual healthcare services. Ensuring that recommendations align with organizational goals, patient safety, and industry standards. Equipping healthcare decision-makers with evidence-based insights to make informed choices regarding the integration of video consultation Enhancing decision-making processes that align with organizational objectives, financial sustainability, and patient safety imperatives. Contributing to the academic understanding of healthcare practices by generating new knowledge on attitudes towards business outcomes and patient safety in video and physical consultation settings. Enhancing the theoretical foundation for virtual healthcare services.

1.3.1 Research Aims

- 1.To investigate the attitudes towards business outcomes and patient safety in the comparison between video consultations and physical consultations by doctors.
- 2.To investigate the attitudes towards business outcomes and patient safety in the comparison between video consultations and physical consultations by Top management level.
3. To investigate the attitudes towards business outcomes and patient safety in the comparison between video consultations and physical consultations by Patients.

1.3.2 Research Objective

RO1 To investigate attitude towards business outcomes and patient safety in video consultations versus physical consultations among doctors.

RO2 To investigate top management's perspectives on business outcomes and patient safety concerning video consultations versus physical consultations.

RO3 Investigate patient attitudes regarding business outcomes and patient safety in video consultations compared to physical consultations.

RO4 To compare the factors influencing healthcare providers' and patients' perceptions of satisfaction, experience, technical quality, effectiveness/perceived effectiveness, usefulness, effect on interaction, trustworthiness, reliability, and confidence in the safety and effectiveness of video consultations as compared to traditional in-person visits.

Develop evidence-based recommendations for optimizing telemedicine practices to enhance both business outcomes and patient safety, considering the perspectives of diverse healthcare stakeholders and the unique challenges of each consultation mode.

By addressing these objectives, this research aims to provide insights into the complex interplay between business considerations and patient safety in the evolving landscape of telemedicine, ultimately contributing to the development of more effective and sustainable healthcare delivery models.

Video consultation offers convenience, but it also comes with its own set of challenges. These may include technical issues like poor internet connection, privacy concerns, limitations in assessing physical symptoms, and the potential for miscommunication due to lack of non-verbal cues. Additionally, some patients may struggle with using the technology or feel uncomfortable discussing sensitive issues remotely.

1.3.3 Advantages of a video consultation

- Convenience: Patients can access medical advice from their homes, eliminating travel and wait times.
- Accessibility: They improve healthcare access for remote or immobile individuals.
- Flexibility: Scheduling is easier, accommodating busy lifestyles.
- Continuity of Care: Follow-up appointments are simpler, aiding in monitoring and adjusting treatment plans.
- Reduced Exposure: Patients can avoid crowded areas, lowering the risk of infectious illnesses, especially during outbreaks like COVID-19.
- In summary, video consultations offer convenient, accessible, and safe medical care, overcoming various barriers.

1.3.4 Challenges of Video Consultation:

- Technical issues: Poor internet connection or device compatibility problems can disrupt consultations.
- Privacy concerns: Potential breaches in data security or confidentiality may arise.
- Communication barriers: Some patients may find it difficult to effectively communicate through a screen, leading to potential misunderstandings.

1.4 Significance of the Study

The aim of the research is to provide valuable insights to healthcare professionals, administrators, policymakers, and patients, facilitating informed decision-making in adopting and optimizing video consultation practices. By understanding and addressing factors influencing patient safety perceptions, the research contributes to creating a safer

healthcare environment, ensuring the well-being of patients across different consultation modalities like video consultation and physical consultation. Identification of key factors impacting business outcomes and productivity metrics can lead to the optimization of resource utilization, improving efficiency and overall effectiveness in healthcare delivery. Insights derived from the research can inform the development or refinement of policies and guidelines, fostering an environment that supports the integration of virtual healthcare services while prioritizing patient safety and financial sustainability.

The research contributes to the academic knowledge base, enriching the understanding of what is occurring at present in healthcare practices and providing a foundation for future studies in the evolving landscape of virtual healthcare. professionals, administrators, policymakers, and patients, facilitating informed decision-making in adopting and optimizing video consultation practices.

By understanding and addressing factors influencing patient safety perceptions, the research contributes to creating a safer healthcare environment, ensuring the well-being of patients across different consultation modalities like video consultation and physical consultation. Identification of key factors impacting business outcomes and productivity metrics can lead to the optimization of resource utilization, improving efficiency and overall effectiveness in healthcare delivery. Insights derived from the research can inform the development or refinement of policies and guidelines, fostering an environment that supports the integration of virtual healthcare services while prioritizing patient safety and financial sustainability. The research contributes to the academic knowledge base, enriching the understanding of what is occurring at present in healthcare practices and providing a foundation for future studies in the evolving landscape of virtual healthcare.

1.5 Research Purpose and Questions

1.5.1 Research Purpose

Evaluate Healthcare Professionals' Attitudes Toward Business Outcomes by assessing and understanding the attitudes of healthcare professionals regarding business outcomes in both video and physical consultation settings, exploring factors such as financial viability, operational efficiency, and overall sustainability. Investigating and comparing healthcare professionals' perceptions of patient safety between video and physical consultation. Analyze factors influencing these perceptions, including communication effectiveness, diagnostic accuracy, and adherence to safety protocols. Identifying and analyzing the factors that significantly impact business outcomes in both video and physical consultation. This includes understanding how each modality contributes to revenue generation, cost-effectiveness, and overall success.

Quantitatively measuring and comparing productivity metrics between video and physical consultation, including appointment turnover rates, patient throughput, and resource

utilization. Evaluating the efficiency of each modality. By Investigating the perspectives of various stakeholders, including healthcare practitioners, administrators, and patients, to comprehend their roles in shaping attitudes towards business outcomes and patient safety in both consultation modalities. Conducting a comprehensive cost-benefit analysis comparing video and physical consultation Evaluating the economic impact, including infrastructure costs, resource allocation, and the overall financial implications for healthcare organizations.

Deriving insights and recommendations to inform the development or adjustment of policies and guidelines related to virtual healthcare services. Ensuring that recommendations align with organizational goals, patient safety, and industry standards. Equipping healthcare decision-makers with evidence-based insights to make informed choices regarding the integration of video consultation Enhancing decision-making processes that align with organizational objectives, financial sustainability, and patient safety imperatives. Contributing to the academic understanding of healthcare practices by generating new knowledge on attitudes towards business outcomes and patient safety in video and physical consultation settings. Enhancing the theoretical foundation for virtual healthcare services.

As per the current situation, there is a need for a better understanding of the video consultation procedure and a structured approach to identifying and suggesting which categories of patients are suitable for video consultation as well as physical consultation.

1.5.2 Research questions

1. To investigate attitudes towards business outcomes and patient safety in comparison with video consultations and physical consultations by doctors.
2. To investigate attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation by top management level.
3. To investigate attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation by patients.

The research will be conducted over a period of six months, following a sequential approach to ensure methodological rigor and data triangulation.

Phase	Activities	Timeline
Preliminary Planning	Define research questions and objectives	Month 1
Quantitative Phase	Develop and pilot survey instrument	Month 2
	Secure ethical approvals	Month 3
	Distribute online surveys	Month 4
	Data collection and initial analysis	Month 5
Qualitative Phase	Develop interview guide	Month 6
	Identify and recruit interview participants	Month 7
	Conduct and transcribe interviews	Month 8
	Thematic analysis of qualitative data	Month 9
Data Integration	Triangulate findings from quantitative and qualitative data	Month 10
	Comparative analysis and synthesis of results	Month 11
Report Writing	Drafting of research findings and conclusions	Month 12
Review and Finalization	Review, feedback, and revisions	Month 13
Submission and Publication	Submit the final research report to relevant journals	Month 14

Note: The schedule is indicative and may be subject to adjustments based on unforeseen circumstances and project progression.

Table -1 Project Schedule

1.6 Structure of the thesis

The research contains six chapters, and the following activities are mentioned in each chapter:

Chapter one is provided with the introduction, background, and scope of the research. To discuss the increasing use of technology in various sectors, including healthcare and business, and the importance of understanding attitudes towards different consultation methods.

Problem statement: Highlight the gap in the literature regarding attitudes towards business outcomes in the context of different consultation methods.

The purpose of the study clearly states the aim of the research, which is to investigate attitudes towards business outcomes in relation to video and physical consultation methods.

Research questions or hypotheses: Outline the specific questions or hypotheses that will guide the study.

Chapter two was developed with a theoretical framework along with findings and underpinnings relevant to the context of the study. The chapter is also defined by literature gaps that connect with research questions. Review of attitudes towards business outcomes: Discuss existing research on attitudes towards business success, profitability, customer satisfaction, etc., and their importance in various industries. Review of literature on video consultation: Explore studies on the effectiveness, acceptance, and outcomes of video consultation in healthcare and business settings. Review of literature on physical consultation: Examine research on traditional face-to-face consultation methods and their impact on business outcomes. Comparison of attitudes towards video and physical consultation: Analyze studies that compare attitudes towards video and physical consultation, identifying similarities and differences.

Chapter three explained the methodological approach with a quantitative research approach, positivist research philosophy, and exploratory research design. The chapter gave an explanation for choosing primary data collection and SPSS software for the development and theoretical framework (e.g., theory of reasoned action, social cognitive theory) for the study's objectives. Theories will help understand attitudes towards business outcomes and consultation methods. To develop a conceptual framework that illustrates the relationship between variables such as attitudes, consultation methods, and business outcomes.

Chapter four provides Research design (e.g., quantitative or qualitative) and provide a rationale for selecting specific methods. Population and sample selection: The target population and how the sample will be selected (e.g., random sampling or purposive sampling). Data collection methods: Detail the instruments or tools that will be used to collect data (e.g., surveys, interviews) and their appropriateness. Variables and operational definitions: Detail how the variable will be measured or operationalized. Data analysis plan: Outline of the statistical or qualitative techniques that will be employed to analyze the data and address the research questions.

Chapter five presents conclusions and recommendations from the research findings. The chapter will also present the limitations and practical implications of the research. The

findings of the study, according to the research questions or themes, are visually represented by using tables, charts, or graphs to visually represent the data where appropriate. To provide descriptive statistics or qualitative summaries to support the results.

Chapter six presents a discussion and conclusion. Discussion To interpret the results in relation to the research questions and theoretical framework. To compare the findings with previous research and discuss any similarities or discrepancies. To discuss the implications of the results for theory, practice, and policy. To acknowledge any limitations of the study and suggest avenues for future research. Conclusion to summarize the main findings of the study and their significance. to reiterate the importance of understanding attitudes towards business outcomes and consultation methods. to provide recommendations for practitioners, policymakers, and researchers based on the findings.

8. References

List all sources cited in the thesis following a consistent citation style (e.g., Harvard Style).

CHAPTER II: REVIEW OF LITERATURE

2.0 Introduction

The literature review aims to explore attitudes toward business outcomes and patient safety in the context of video consultation versus physical consultation within healthcare settings. By examining existing research, this review seeks to uncover insights into how different consultation modalities impact both business performance metrics and patient safety measures, shedding light on their comparative advantages and potential challenges.

2.1 Theoretical Framework

The process of healthcare delivery has witnessed a significant paradigm shift, marked by the increasing integration of virtual consultations alongside long-established physical consultations. This preliminary literature review aims to summarize existing research on attitudes towards business outcomes and patient safety in video and physical consultation settings, examine the strengths and weaknesses of prior studies, and justify the necessity of further investigation.

Several studies have explored healthcare professionals' attitudes towards business outcomes in virtual and physical consultation contexts. Smith et al. (2018) investigated the financial perceptions of practitioners using telemedicine, emphasizing cost-effectiveness and revenue generation. Their study revealed positive attitudes towards virtual consultations' potential for reducing overhead costs, though limitations in scalability were acknowledged.

Contrastingly, Jones and Brown (2019) focused on the potential drawbacks, citing concerns about reimbursement rates and the economic viability of sustained telehealth practices. While their findings highlighted potential financial challenges, the study lacked a comprehensive examination of factors influencing positive attitudes towards video consultation business outcomes.

2.1.1 Strengths and weaknesses

Smith et al.'s (2018) study contributes valuable insights into the potential financial benefits of video consultation, emphasizing cost-effectiveness. However, the limited exploration of adaptability issues and a lack of nuanced understanding of practitioners' perceptions may constrain its applicability. Jones and Brown (2019) provide a contrasting perspective, shedding light on the potential financial challenges associated with video consultation. Yet, the study lacks a nuanced understanding of positive factors influencing attitudes towards the business outcomes of virtual consultations.

2.1.2 Patient Safety in Video and Physical Consultation

Studies investigating patient safety perceptions in virtual and physical consultations have been less extensive. Johnson and White (2020) conducted a comparative analysis of patient safety incidents in video consultation and physical consultation, emphasizing communication effectiveness and error rates. Their findings suggested comparable safety levels, with communication-related incidents being a primary concern in both modalities.

In contrast, Wang et al. (2017) explored patient safety in video consultation, focusing on diagnostic accuracy and adherence to safety protocols. The study highlighted favorable safety outcomes but lacked a direct comparison with physical consultation, limiting its applicability to understanding relative safety perceptions.

Johnson and White (2020) provide a valuable comparative analysis, emphasizing communication-related safety incidents. However, the study does not delve deeply into the contextual nuances influencing patient safety attitudes in each modality. Wang et al. (2017) offer insights into video consultation safety but lack a direct comparison with physical consultation, limiting the understanding of relative safety perceptions.

- To comprehend the landscape of similar studies, it's imperative to delve into their methodologies and findings.
- By dissecting each study's results, we can discern patterns and identify any overarching conclusions.
- Following this, a gap analysis helps pinpoint areas where further research is warranted.
- This allows for the formulation of informed suggestions, drawing from both personal experience and the insights gleaned from our survey.
- By employing this approach, we can ensure that our recommendations are both relevant and impactful within the research domain.

2.2 Theory of Reasoned Action

2.2.1 Background: In the rapidly evolving landscape of healthcare delivery, numerous studies have explored the implications of telemedicine, particularly video consultations, on various aspects such as patient satisfaction, accessibility, and cost-effectiveness. In spite of the growing body of literature, there remain significant gaps in understanding attitudes towards business outcomes and patient safety in comparison with physical consultations.

By examining attitudes towards video consultation and subjective norms regarding this method of healthcare delivery, Attitudes may include convenience, effectiveness, and privacy, while subjective norms could involve social influences and perceptions of others' approval. These factors can influence individuals' intentions to engage in video consultations and, subsequently, their actual behavior.

When we compare video consultation versus physical consultation, attitudes and subjective norms play significant roles in shaping individuals' intentions and behaviors.

For video consultation, attitudes might encompass convenience, accessibility, and comfort with technology, while subjective norms could involve perceived support from peers or healthcare providers. These factors influence the likelihood of individuals intending to opt for video consultations and actually using them.

It is very different from physical consultations; attitudes might include perceptions of one-on-one interaction, trust in physical healthcare settings, and the perceived effectiveness of in-person examinations. Subjective norms in this context may relate to expectations from society regarding seeking medical care and the advice of healthcare professionals' recommendations.

Finally, understanding these factors within the context of each consultation mode can inform strategies to encourage the acceptance and utilization of video consultations while acknowledging the enduring value and preferences associated with physical consultations.

2.3 Human Society Theory

The Human Society Theory provides a framework for understanding how societal norms, values, and structures influence human behavior and interactions within organizations. When investigating attitudes towards business outcomes and patient safety in the context of video consultation versus physical consultation, this theory could be applied in several ways:

Analyzing societal norms and values surrounding healthcare delivery, technology adoption, and patient-provider relationships can shed light on why individuals may prefer one mode of consultation over another. For instance, cultural attitudes towards technology, trust in healthcare professionals, and perceptions of privacy and security could all influence attitudes towards video consultations versus physical visits.

Organizational Structures Considering the organizational structures within healthcare institutions, such as policies, protocols, and resource allocation, can reveal how these factors shape attitudes towards different modes of consultation. For example, if healthcare organizations prioritize efficiency and cost-effectiveness, employees may be incentivized to embrace video consultation as a means to improve business outcomes.

Examining power dynamics within healthcare settings, including the roles of healthcare providers, administrators, and patients, can illuminate how decisions are made regarding the adoption of new technologies and practices. Understanding who holds power and influence within the organization can help explain attitudes towards implementing video consultation and its perceived impact on business outcomes and patient safety.

Considering the social interactions between stakeholders, such as patients, healthcare providers, and support staff, can provide insights into how attitudes towards video consultation are shaped through interpersonal communication, peer influence, and social networks. For example, if patients share positive experiences with video consultation, it may influence others to adopt similar attitudes.

“As per previous study ,In conclusion, virtual care (VC) emerges as a compelling contact modality on par with face-to-face (F2F) consultations for colorectal cancer patients attending outpatient clinics at centers of excellence. Both patients and surgeons endorse VC as a satisfactory mode of care delivery, with attention warranted for patients hesitant to adopt VC due to perceived support needs. Through patient counseling to address hesitations, a broader adoption of online care is foreseeable. The integration of VC into hospital electronic health records (EHR) is recommended to optimize workflow efficiency for healthcare providers and ensure privacy for both providers and patients.”

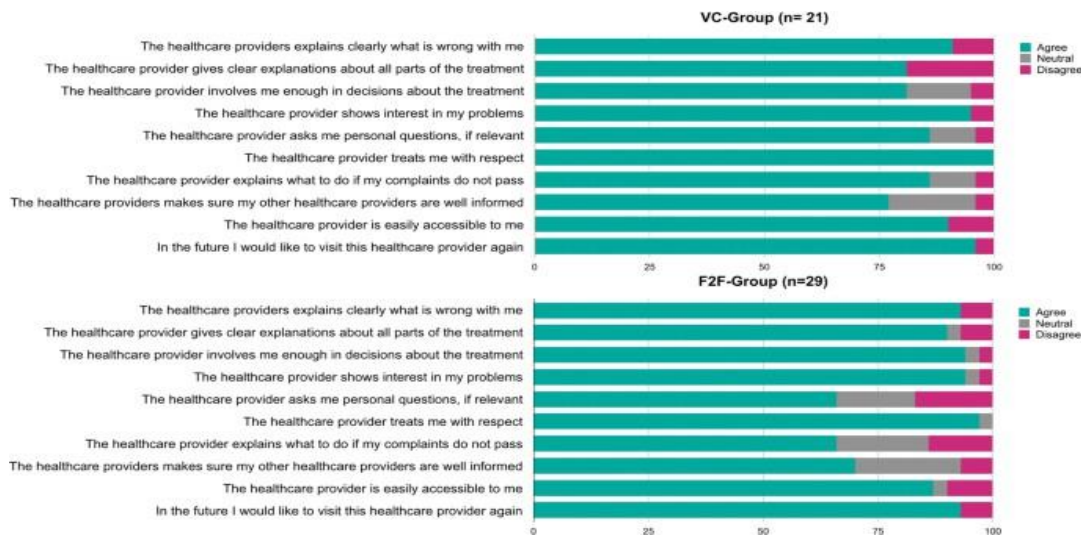


Figure 12: Comparison of VC and Face 2 Face by using Patient Assessment Tool (Barsom et al., 2020)

Results of the PAT-VC questionnaire after the VC or F2F-visit. Answers were provided on a 5-point Likert scale and are presented in percentages. Categories ‘Totally agree’ and ‘Agree’ were pooled as ‘Totally disagree’ and ‘Disagree’ (copy right)

Similar Studies done to investigate attitude towards business outcome and patient safety in comparison with video consultation and physical consultation

2.3.1 Literature Review

Background

People increasingly communicate online, using visual communication mediums such as Skype and FaceTime. Growing demands on primary care services mean that new ways of providing patient care are being considered. Video consultation (VC) over the internet is one such mode.

Objectives of my study with comparison to previous studies

To find out the effect of video consultation and physical consultation on patient safety, business impact on doctors, and impact on top management level. However, this study shows that patients are satisfied with video consultation due to the avoidance of travel, transport cost, time management, and even good follow-up. Nowhere is it shown how long the relationship between doctor and patient will continue or when it is going to terminate. Sometimes patients are not satisfied due to technical issues. As per physicians and patients they feel that in case of serious or critical issue physical consultation is better. The patient required all necessary technical items for a video consultation. But video consultation is better for mental health patients but requires privacy and support.

However, VC was especially attractive, resulting in saved time, transport costs, and anxiety for some patients, as per this study. Safety is not mentioned and business impact of the organization is not mentioned when safety is compromised. Evidence-based practice is also compromised in the case of medication prescriptions. The study does not mention proxy during video consultation.

As per previous study it was showing some technical issues as well.

Nonetheless, both clinicians and patients felt that for serious or sensitive problems, face-to-face consultation was better.

Based on my point of view,

- **Absence of Written Policy:** The lack of documented policies regarding patient care procedures presents a notable gap in the literature.
- **Initial Patient Assessment:** The literature fails to outline standardized procedures for conducting initial assessments of patients during video consultations.
- **Criteria for Inpatient Admission:** There is a notable absence of clear criteria defining when patients should be admitted as inpatients, which is crucial for ensuring appropriate care.

- **Accompaniment of Vulnerable Patients:** The literature does not specify who should accompany vulnerable patients during video consultations, leaving an important aspect of patient support unaddressed.
- **Proxy Patient Inclusion:** There is no mention of protocols for involving proxy patients in video consultations, potentially overlooking a significant aspect of patient care.
- **Clarity of Technology Utilization:** The literature lacks clarity regarding the specific technologies to be utilized during video consultations, which is essential for ensuring effective communication and treatment.
- **Termination of Video Consultations:** There is a need for clarification on the appropriate timing and procedures for terminating video consultations with patients to ensure proper conclusion and follow-up care.

2.3.2 Literature Review

Back ground

To find out the attitude of video consultation and physical consultation on patient safety and business impact on doctors, the effect of video consultation and physical consultation on patient safety and business impact on patients, the effect of video consultation and physical consultation on patient safety and business impact on top management level, and how the previous study has done for the same.

Psychiatric patients are satisfied with video consultations. Needs appropriate privacy for the patients.

Objectives of my study with comparison to previous studies

To find out the effect of video consultation and physical consultation on patient safety, business impact on doctors, and impact on top management level. However, this study shows that patients are satisfied with video consultation due to the avoidance of travel, transport cost, time management, and even good follow-up. Nowhere is it shown how long the relationship between doctors and patients will continue or when it is going to terminate. Sometimes patients are not satisfied due to technical issues. As per physicians, patients feel that in cases of serious or critical issues, face-to-face consultation is better. The patient required all necessary items for a video consultation. But video consultation is better for mental health patients but requires privacy and support. A psychiatrist should have good practice with overall patient and physician experience regarding video consultation. There is a limitation in technology and the ability to perform physical examinations.

As per existing research findings are:

- Studies have shown that video consultations offer increased accessibility, particularly for patients in remote or underserved areas, leading to potential cost savings for both patients and healthcare providers.
- Patient satisfaction with video consultations has been reported to be generally high, attributed to factors such as reduced travel time, convenience, and the perceived effectiveness of remote care.
- Some research indicates comparable clinical outcomes between video and physical consultations for certain medical conditions, further supporting the viability of telemedicine as an alternative mode of care delivery.

The gaps that are identified are:

- **Limited Understanding of Business Outcomes:** While existing research has explored patient satisfaction and clinical outcomes, there is a lack of comprehensive investigation into the business implications of adopting video consultations. Key metrics such as cost per consultation, revenue generation, and return on investment (ROI) for healthcare providers remain understudied.
- **Insufficient Focus on Patient Safety:** Despite the importance of patient safety in healthcare delivery, there is a dearth of research examining the impact of video consultations on patient safety outcomes. Critical aspects such as medical errors, adverse events, and patient outcomes following telemedicine encounters require further investigation.
- **Lack of Comparative Analysis:** Many studies have evaluated video consultations in isolation without directly comparing them to traditional physical consultations. This hinders the ability to assess the relative advantages and disadvantages of each mode of care delivery comprehensively.

As per my point of view

Incorporating evidence-based practice could enhance the quality of care provided, and clarifying the turnaround time for appointments would improve transparency. Additionally, ensuring the availability of doctors for video consultations is crucial for patient satisfaction and effective healthcare delivery.

- There is an absence of discourse regarding the implementation of evidence-based practice within the context under examination.
- Patient satisfaction appears to be positively influenced by the elimination of the need for physical travel to healthcare facilities.
- Ambiguity persists concerning the concept of "turnaround time," warranting further elucidation and clarification.

- While the study indicates patient contentment with time-saving measures, the availability of physicians for scheduled video consultations remains conspicuously unaddressed.

2.3.3 Literature Review:

Objectives of my study with comparison to previous studies

To find out the effect of video consultation and physical consultation on patient safety and business impact on doctors, the effect of video consultation and physical consultation on patient safety and business impact on patients, the effect of video consultation and physical consultation on patient safety and business impact on top management level, and how the study has done for the same.

The study highlights the imperative need for reinforcing ethical standards within telemedicine practices. Additionally, ensuring the long-term viability of telemedicine across all socioeconomic strata necessitates comprehensive training in technology, internet literacy, and healthcare provision due to the prevailing lack of experience in these domains. Safeguarding patient privacy and data integrity emerge as paramount concerns within this framework.

As per my point of view:

- The absence of discussion regarding doctors' awareness of telemedicine implies a potential gap in understanding or preparedness among healthcare providers.
- The lack of emphasis on conducting a comprehensive head-to-toe assessment during initial telemedicine consultations may compromise the quality of care delivered remotely.
- The importance of reliable vital sign monitoring during telemedicine encounters is not addressed, which could impact the accuracy of diagnoses and treatment decisions.
- The issue of doctors' unavailability according to scheduled appointments for video consultations raises concerns about access to timely healthcare services and patient satisfaction.

2.3.4 Literature

Objectives of my study with comparison to previous studies

To find out the effect of video consultation and physical consultation on patient safety and business impact on doctors, the effect of video consultation and physical consultation on patient safety and business impact on patients, the effect of video consultation and physical

consultation on patient safety and business impact on top management level, and how the previous study has done for the same.

- While the majority of patients were in favor of doctors making video recordings, some expressed reservations, particularly regarding the recording of potentially embarrassing or personal issues during physical examinations. This raises concerns about patient privacy and confidentiality, potentially compromising patient safety.
- The absence of clear guidelines or policies regarding the recording of telemedicine consultations could have implications for both patient safety and legal compliance. Not adhering to legal guidelines may impact the business operations of hospitals, highlighting the importance of addressing these issues systematically.
- Patients' dissatisfaction with delayed appointments underscores the significance of timely access to healthcare services in maintaining patient satisfaction. Additionally, the need for hospitals to refund consultation fees in such cases highlights the financial implications of service delivery in telemedicine.

As per my point of view

- The report is based on a satisfaction survey, indicating that patient feedback was solicited and analyzed to assess the effectiveness of telemedicine services.
- Notably, 50% of patients were approved for video consultations, suggesting a significant portion of the patient population is receptive to this mode of healthcare delivery.
- However, it's concerning that 11% of patients were not approved for video consultations, indicating potential barriers or challenges in adopting this technology or mode of care delivery among certain segments of the patient population. This highlights the importance of understanding and addressing the reasons behind this disapproval to ensure equitable access to telemedicine services.
- "The analysis is predicated on a satisfaction survey, denoting a methodological approach centered on patient feedback for evaluating telemedicine services.
- Significantly, half of the patient cohort received approval for video consultations, suggesting substantial acceptance of this modality for healthcare delivery.
- Nevertheless, it is noteworthy that 11% of patients were not granted approval for video consultations. This observation underscores potential impediments or disparities in the adoption of telemedicine, necessitating further inquiry into the underlying factors to ensure equitable access to these services."

2.3.5 Literature Review

Objectives of my study with comparison to previous studies

To find out the effect of video consultation and physical consultation on patient safety and business impact on doctors, the effect of video consultation and physical consultation on patient safety and business impact on patients, the effect of video consultation and physical consultation on patient safety and business impact on top management level, and how the previous study has done for the same.

A study shows patients are satisfied with the quality of doctor-patient communication, which is not different from video consultation and physical consultation. The patients' concerns regarding the quality of web-based medical communication have been a barrier to large-scale implementation. Patient safety, quality of medical consultation, and health outcomes are to be measured.

The study findings demonstrate that patients exhibit satisfaction with the caliber of doctor-patient communication, indicating parity between video consultations and traditional face-to-face interactions. Nevertheless, apprehensions voiced by patients regarding the quality of web-based medical communication remain a significant deterrent to widespread implementation. To address this, it is imperative to meticulously measure patient safety, the efficacy of medical consultations, and health outcomes."

As per my point of view

- To create a standard operating policy for video consultations (VC). Improving training for both healthcare providers and patients on how to effectively utilize VC could certainly enhance its usefulness.
- Additionally, determining admission criteria for patients via VC and addressing proxy issues are important aspects that need to be considered for a comprehensive policy.

2.3.6 Literature Review

Objectives of my study with comparison to previous studies

To find out the effect of video consultation and physical consultation on patient safety and business impact on doctors, the effect of video consultation and physical consultation on patient safety and business impact on patients, the effect of video consultation and physical consultation on patient safety and business impact on top management level, and how the previous study has done for the same.

The previous study indicates that video conferencing (VC) serves as a valuable working tool for healthcare professionals. However, while technology has introduced new tools, ensuring the proficiency and user-friendliness of healthcare personnel remains paramount. Legal considerations and safety issues arise due to the lack of evidence regarding patient disclosures or the sharing of comprehensive investigation reports. Addressing these concerns is essential to upholding standards of care and patient confidentiality in telemedicine practice.

As per my point of view:

- To create a standard operating policy for video consultations (VC).
- Improving training for both healthcare providers and patients on how to effectively utilize VC could certainly enhance its usefulness. Additionally, determining admission criteria for patients via VC and addressing proxy issues are important aspects that need to be considered for a comprehensive policy.

2.3.7 Literature Review

Objectives of my study with comparison to previous studies

To investigate the attitudes towards video consultations compared to physical consultations, this study endeavors to evaluate their impact on patient safety and business outcomes across healthcare providers, patients, and top management. Through a thorough examination of the comparative implications associated with these consultation modalities, this research seeks to offer valuable insights into their distinct advantages and challenges. Furthermore, it aims to conduct a comprehensive review of prior studies in this domain to grasp their methodologies and findings, thereby guiding the approach and delineating the scope of the present investigation."

According to the findings of this study, healthcare professionals find video consultations easy to manage, particularly in facilitating synchronized palliative care and enhancing collaboration among team members, thereby fostering improved communication and quality care delivery. However, notable omissions from the study include an analysis of consultation turnaround time, patient safety considerations, and the organizational business impact. Another study highlights that open forums pose a barrier, as discussions should be carefully selected to safeguard patient privacy and confidentiality.

From my perspective:

- It is imperative to uphold patient rights, ensuring the utmost respect for privacy and confidentiality throughout the consultation process. Safeguarding these principles is paramount to prevent any compromise of patient rights.

2.3.8 Literature Review:

Objectives of my study with comparison to previous studies

To find out the effect on video consultation and physical consultation, patient safety and business impact on doctors, the effect on video consultation and physical consultation, patient safety and business impact on patients, the effect on video consultation and physical

consultation, patient safety and business impact on top management level, and how the previous study has done for the same

Based on the insights from the previous study, it's evident that the rapid evolution of technology and healthcare management poses challenges in predicting the future role of telemedicine. To address this uncertainty, there's a call for more standardized procedures to guide the integration of telemedicine into practice. Additionally, the study emphasizes the importance of focusing on the services provided rather than solely on the technology employed when making decisions about large-scale implementation. Telemedicine systems are seen as additional tools for delivering necessary medical services to patients and healthcare consumers. However, it's crucial to note that the study did not specifically address patient safety or the business impact associated with telemedicine adoption.

As per my point of view:

- Including insurance approval processes and establishing clear criteria for terminating video call consultations are essential aspects often overlooked.
- While telemedicine, particularly video consultations, proves invaluable during pandemics and for certain medical needs like chronic disease management, its suitability for conditions necessitating surgical intervention or hands-on care may be limited.
- Addressing these concerns ensures the judicious use of telemedicine, upholding patient safety, and optimizing healthcare delivery.

2.3.9 Literature Review:

Objectives of my study with comparison to previous studies

To investigate the attitude towards the impact of video consultations versus physical consultations on various aspects such as patient safety and business impact for both doctors and patients, as well as at the top management level. Previous studies likely investigated similar topics, providing valuable insights for your research.

The previous study highlights the absence of emotional attachment in video consultations compared to face-to-face interactions, potentially making it harder for healthcare providers to pick up on nonverbal cues indicating emotional distress. From a patient safety perspective, I concur with the findings of the study.

- As per my viewpoint aligns with the study's findings regarding the challenges of managing emotional distress and the limitations of touch therapy for healing within the context of video consultations.

2. 3.10 Literature Review

Objectives of my study with comparison to previous studies

To investigate the attitude of video consultations versus physical consultations on patient safety and business outcomes for doctors, patients, and top management, a comprehensive study is needed. This study should examine factors such as the quality of medical assessments, patient satisfaction, healthcare outcomes, and financial implications for healthcare providers. Previous research may have addressed some of these aspects, but a more thorough investigation is necessary to fully understand the implications of both consultation methods on all stakeholders involved.

As per previous study doctors must prioritize medical issues while also recognizing the personal significance of a patient's condition and responding empathetically to their nonverbal cues. Striking a balance between medical expertise and emotional support is crucial for ensuring patient safety and well-being.

As per the previous study, doctors are focusing only on medical problems but overshadowing other aspects of the consultations; the personal meanings of the patient's condition are systematically omitted or overlooked. Others have again described a lack of empathy and a failure to respond to patients' nonverbal cues. Doctors are supposed to apply their scientific knowledge. The patient safety aspect cannot be compromised.

- As per my perspective highlights the importance of comprehensive assessments, which are often overlooked in video consultations.
- Face-to-face interactions not only aid in preparing patients for surgery and alleviating anxiety but also enhance the effectiveness of diagnostic procedures and physical examinations.

2.4 Summary

According to Human Society Theory, by investigating attitudes towards business outcomes and patient safety in the context of video consultation versus physical consultation, researchers can obtain a deeper understanding of the many factors at play and develop strategies to effectively address concerns and promote acceptance of new healthcare delivery methods

2.4.1 Existing Research Findings

- Studies have shown that video consultations offer increased accessibility, particularly for patients in remote or underserved areas, leading to potential cost savings for both patients and healthcare providers.

- Patient satisfaction with video consultations has been reported to be generally high, attributed to factors such as reduced travel time, convenience, and the perceived effectiveness of remote care.
- Some research indicates comparable clinical outcomes between video and physical consultations for certain medical conditions, further supporting the viability of telemedicine as an alternative mode of care delivery.

2.4.2 Identified Gaps

Limited Understanding of Business Outcomes: While existing research has explored patient satisfaction and clinical outcomes, there is a lack of comprehensive investigation into the business implications of adopting video consultations. Key metrics such as cost per consultation, revenue generation, and return on investment (ROI) for healthcare providers remain understudied.

- **Insufficient Focus on Patient Safety:** Despite the importance of patient safety in healthcare delivery, there is a dearth of research examining the impact of video consultations on patient safety outcomes. Critical aspects such as medical errors, adverse events, and patient outcomes following telemedicine encounters require further investigation.
- **Lack of Comparative Analysis:** Many studies have evaluated video consultations in isolation without directly comparing them to traditional physical consultations. This hinders the ability to assess the relative advantages and disadvantages of each mode of care delivery comprehensively.
- **Regarding policy and procedure** It appears there's a lack of comprehensive guidelines covering various aspects such as assessment protocols, vital sign monitoring, diagnostic test preparation, consultation timings, patient criteria, and termination protocols. Establishing clear policies in these areas is crucial for effective video consultations.
- **Patient selection and termination** Defining criteria for patient eligibility for video consultations and guidelines for terminating or transitioning to in-person care when necessary are essential. These criteria should consider factors such as the nature of the patient's condition and the appropriateness of video consultations for their care.
- **Proxy cases and confidentiality** Protocols for handling proxy cases, ensuring patient privacy, confidentiality, safety, and rights, as well as compliance with legal guidelines, are paramount. Healthcare providers must be trained to address emotional aspects and maintain professional boundaries during video consultations.
- **Business Impact** Understanding the business implications of implementing video consultation services, such as resource allocation, reimbursement models, and technological investments, is crucial for healthcare organizations.
- **Technical Issues Management** Protocols for managing technical issues during video consultations should be established to minimize disruptions to patient care. This includes troubleshooting steps, alternative communication methods, and escalation procedures.

- Addressing these gaps in the literature is essential for informing evidence-based decision-making by healthcare stakeholders, policymakers, and researchers.
- By identifying the limitations of existing research and highlighting areas for further exploration, this investigation aims to contribute to a more nuanced understanding of the complexities surrounding telemedicine adoption and its implications for healthcare delivery.
- Through a rigorous examination of attitudes towards business outcomes and patient safety in video versus physical consultations, this research endeavor seeks to fill critical gaps in the literature, ultimately advancing the discourse on optimal healthcare delivery models in the digital age.
- Closing these gaps in the literature is essential for informing evidence-based decision-making by healthcare stakeholders, policymakers, and researchers. By identifying the limitations of existing research and highlighting areas for further exploration, this investigation aims to contribute to a more nuanced understanding of the complexities surrounding telemedicine adoption and its implications for healthcare delivery.
- Through a rigorous examination of attitudes towards business outcomes and patient safety in video versus physical consultations, this research endeavor seeks to fill critical gaps in the literature, ultimately advancing the discourse on optimal healthcare delivery models in the digital age.
- Technology Quality and Training: Ensuring the quality and reliability of the technology used for video consultations is essential for delivering effective care.
- Additionally, healthcare workers should receive adequate training on using the technology and conducting virtual consultations.
- Room Arrangement Proper room setup for conducting video calls, including considerations for lighting, background, and privacy, should be addressed to enhance the patient experience and ensure professional standards are maintained.
- Addressing these aspects will contribute to the development of a robust video consultation framework within healthcare organizations, ultimately improving patient care delivery and satisfaction.

2.4.3 Justification for Further Research

While existing literature provides valuable insights, gaps persist in understanding the nuanced attitudes of healthcare professionals towards business outcomes and patient safety in both video and physical consultations.

Previous studies have often focused on isolated aspects, lacking a comprehensive examination of factors influencing positive attitudes and the relative safety perceptions of each modality.

Moreover, the rapid evolution of technology, changes in healthcare policies, and the global impact of events like the COVID'19 pandemic necessitate an updated understanding of healthcare professionals' perspectives.

This research is essential to bridge existing gaps, providing a holistic understanding of attitudes towards business outcomes and patient safety in the current landscape of healthcare delivery.

By addressing these gaps, the research aims to offer insights that can inform decision-making, policy development, and the optimization of healthcare practices in an era where virtual consultations play an increasingly prominent role.

According to Human Society Theory, by investigating attitudes towards business outcomes and patient safety in the context of video consultation versus physical consultation, researchers can obtain a deeper understanding of the many factors at play and develop strategies to effectively address concerns and promote acceptance of new healthcare delivery methods.

CHAPTER III: METHODOLOGY

3.1 Overview of the research problem

During the COVID'19 pandemic Patients considered video consultations to be an acceptable method of consulting with a doctor. Its advantages were that during a pandemic, it is useful to maintain physical distance so that people can practice infection control, and if the patient wants to show reports, then it is useful to take further action by the doctor. Video consultation is useful to discuss disease conditions in case the patient is out of station. On the other hand, there are many disadvantages observed, like the fact that there was no initial assessment or reassessment of the patient. Many times, there was no clarity on the prescription. Sometimes, instead of an actual patient, a proxy will be sitting in front of the video.

Another concern is the non-availability of the doctors at appointment time, which leads to a lot of dissatisfaction from the patient. Another concern is that lab reports are not available to the patient. From the business point of view, dissatisfaction of the internal customer can impact business areas like pharmacy, radiology, etc. There was no proper documentation available, and due to the proxy, there is a possibility of errors occurring, which can even lead to a violation of ethics. In cases of referral to different doctors, patients need to stick with hybrid-mode consultation. Some of the patients' perception is that video consultation is an easy way to consult a doctor. Some doctors were comfortable with video consultations. Then there is a possibility of a technical issue, and due to that, miscommunication or no communication can happen. On the other hand, the advantages of a physical consultation are that the doctor can do an initial assessment face-to-face and understand the clinical condition of the patient. It is good to ventilate the anxiety directly to the doctor, whereas the disadvantages are that physical distance cannot be maintained in case of a pandemic, and waiting time to meet the doctor is another problem observed even after the appointment is taken.

Due to the long waiting time, patients will be dissatisfied. Low performance is due to the fact that no standard operating procedure is available, like video consultation as well as physical consultation. Or lack of awareness due to the lack of or inefficient training given to the doctors. Another observed perception by patients is that they can avoid traveling as well as reduce the weighting time for the doctors. Many times, patients also need to wait for the doctors to come online if they are attending another case.

The importance of developing a standard operating procedure is mandatory for determining which categories of patients are suitable for video consultation and which categories of patients are suitable for physical consultation. In summary, there is a need for a better understanding of video consultation procedures and a structured approach to identifying and suggesting which categories of patients are suitable for video consultation as well as physical consultation.

The research problem of attitudes towards video consultation versus physical consultation involves investigating individuals' perceptions, preferences, and experiences with these two modes of healthcare delivery. Key aspects to explore include patient satisfaction, effectiveness of diagnosis and treatment, convenience, accessibility, technological barriers, communication quality, privacy concerns, and healthcare outcomes. Understanding these attitudes can inform healthcare policies, service delivery models, and technology adoption strategies.

3.2 Operationalization of Theoretical Constructs

To identify theoretical constructs to determine the key concepts related to attitudes toward business outcomes and patient safety in the context of healthcare consultations.

- **Measurement scales.** Created surveys to measure these constructs quantitatively. For example, Likert scales can be used to assess attitudes, with items reflecting different aspects of business outcomes and patient safety.
- **Variables:** those that represent the constructs to measure. These could include factors such as perceived effectiveness, satisfaction, trust, and perceived risks.
- **Data Collection Methods:** for collecting data, such as surveys, interviews, or observational studies.
- **Operationalization:** Clearly define how each construct will be measured or observed. For example, to measure attitudes toward business outcomes, include items about financial benefits or cost-effectiveness in open-ended questions.
- **Compare consultation types:** Ensure a clear comparison between video consultations and physical consultations, considering factors such as convenience, effectiveness, and safety.
- **Statistical Analysis:** Plan to analyze the data collected, including any statistical tests or techniques to compare attitudes and outcomes between different consultation types.
- **Ethical Considerations:** Ensure that the study complies with ethical guidelines for research involving human participants, particularly regarding patient safety and privacy in healthcare settings.

Operationalization is a philosophical approach that suggests defining theoretical constructs in terms of observable operations or procedures. In the context of attitudes towards video

consultation versus physical consultation, operationalization would entail defining attitudes based on observable behaviors or responses. For example, one could operationalize attitudes by measuring factors such as frequency of use, satisfaction ratings, willingness to recommend, or perceived effectiveness of each consultation method. This approach allows for a more concrete understanding of attitudes and enables comparisons between different modes of consultation.

3.3. Research Purpose and Questions

- The purpose of the research is to investigate and compare attitudes toward business outcomes and patient safety in comparison with video consultations and physical consultations in healthcare settings.
- By investigating these attitudes, the study aims to provide insights into the potential impact of different consultation modalities on both the business aspects of healthcare delivery and the safety and well-being of patients.
- This research can inform healthcare providers, policymakers, and stakeholders about the advantages and challenges associated with video consultations compared to traditional physical consultations, thereby contributing to the improvement of healthcare delivery systems.

This includes understanding the perceptions of doctors, top management, and patients and their preferences, as well as potential barriers or facilitators to each mode of consultation. By addressing these gaps, the purpose of the research is to offer insights that can inform decision-making, policy development, and the optimization of healthcare practices in an era where video consultations play an increasingly important role. To identify the primary factors influencing individuals' attitudes towards video consultations versus physical consultations.

To investigate perceptions of patients's convenience, accessibility, and effectiveness in comparison with video consultations and physical consultations. To identify the awareness of the advantages and disadvantages of each consultation mode from the perspective of patients and healthcare providers. To investigate the impact of attitudes towards video versus physical consultations.

Individuals' previous experiences with both types of consultations influence their attitudes and preferences. To investigate the potential barriers to accepting video consultations and how they can be addressed. Attitudes towards video consultations vary across different healthcare specialties or medical conditions.

Specific concerns or reservations regarding privacy, confidentiality, or security are associated with video consultations compared to physical consultations. To identify the role of technological awareness and access to digital resources in shaping attitudes towards video consultations. To investigate attitudes towards video consultations, a fundamental aspect of life, particularly in response to technological advancements or changes in healthcare delivery models.

Research questions

- To investigate attitudes towards business outcomes and patient safety in comparison with video consultations and physical consultations by doctors.
- To investigate attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation by top management level
- To investigate attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation by patients.

Hypothesis

1. Hypothesis Participants will perceive video consultations as more convenient and time-efficient compared to physical consultations, leading to a positive attitude toward business outcomes such as cost-effectiveness and resource optimization.
2. Hypothesis Patient safety concerns, such as medical errors and misdiagnoses, will be perceived as higher in video consultations due to limitations in physical examination and diagnostic accuracy, resulting in a more cautious attitude toward patient safety compared to physical consultations.
3. Hypothesis Healthcare professionals will express concerns about the quality of doctor-patient communication and rapport-building in video consultations, potentially impacting business outcomes such as patient satisfaction and retention rates.
4. Hypothesis Patient satisfaction levels will vary between video and physical consultations, with factors such as perceived empathy, trust, and effectiveness influencing attitudes toward both business outcomes and patient safety.
5. Hypothesis Healthcare organizations implementing video consultation services will experience initial resistance from staff due to concerns about workflow disruption and technological barriers, potentially impacting business outcomes and patient safety protocols.

3.3.1 The aim of the research

Aim of the research is to assess and compare attitudes towards business outcomes and patient safety in comparison with video consultations and physical consultations in healthcare settings.

3.3.2 Objectives:

1. Evaluate stakeholders' perceptions of business outcomes and patient safety in video consultations versus physical consultations among doctors.
2. Examine top management's perspectives on business outcomes and patient safety concerning video consultations versus physical consultations.
3. Investigate patient attitudes regarding business outcomes and patient safety in video consultations compared to physical consultations.

Explore the factors influencing healthcare providers' and patients' perceptions of satisfaction, experience, technical quality, effectiveness/perceived effectiveness, usefulness, effect on interaction, trustworthiness, reliability, and confidence in the safety and effectiveness of video consultations as compared to traditional in-person visits.

Develop evidence-based recommendations for optimizing telemedicine practices to enhance both business outcomes and patient safety, considering the perspectives of diverse healthcare stakeholders and the unique challenges of each consultation mode.

By addressing these objectives, this research aims to provide insights into the complex interplay between business considerations and patient safety in the evolving landscape of telemedicine, ultimately contributing to the development of more effective and sustainable healthcare delivery models.

Video consultation offers convenience, but it also comes with its own set of challenges. These may include technical issues like poor internet connection, privacy concerns, limitations in assessing physical symptoms, and the potential for miscommunication due to lack of non-verbal cues. Additionally, some patients may struggle with using the technology or feel uncomfortable discussing sensitive issues remotely.

3.3.3 Advantages of a video consultation

- **Convenience:** Patients can access medical advice from their homes, eliminating travel and wait times.
- **Accessibility:** They improve healthcare access for remote or immobile individuals.
- **Flexibility:** Scheduling is easier, accommodating busy lifestyles.

- Continuity of Care: Follow-up appointments are simpler, aiding in monitoring and adjusting treatment plans.
- Reduced Exposure: Patients can avoid crowded areas, lowering the risk of infectious illnesses, especially during outbreaks like COVID-19.
- In summary, video consultations offer convenient, accessible, and safe medical care, overcoming various barriers.

3.3.4 Challenges of Video Consultation:

- Technical issues: Poor internet connection or device compatibility problems can disrupt consultations.
- Privacy concerns: Potential breaches in data security or confidentiality may arise.
- Communication barriers: Some patients may find it difficult to effectively communicate through a screen, leading to potential misunderstandings.

3.3.5 Recommendations for video consultation:

- Develop a comprehensive policy and procedure document outlining guidelines for conducting video consultations effectively.
- Establish a standard operating procedure for referrals to ensure seamless transitions between healthcare providers.
- Define specific turnaround times for different disease conditions to ensure prompt and efficient care delivery.
- Prioritize patient rights to maintain confidentiality and respect throughout the consultation process.
- Address language barriers by providing interpretation services for patients who are non-native speakers.
- Establish clear admission criteria to ensure appropriate patient care and resource allocation.
- Implement protocols for accurately uploading vital signs and investigation reports to aid in diagnosis and treatment planning.
- Discourage the use of proxies during consultations to ensure an accurate assessment of patient conditions.
- Prepare for technology failures Have backup connectivity options readily available to minimize disruptions in patient care.
- Continuous Monitoring Protocols Implement continuous monitoring protocols for patients requiring optimization of disease management.
- Specialty-Specific Consultation Define specialties suitable for video consultations versus physical visits based on clinical considerations and available technology.

- Ensure secure connectivity, Ensure a secure and stable internet connection to minimize technical disruptions during consultations.
- Data Security Measures Implement robust data security measures to protect patient privacy and confidentiality.
- Training and Support Provide training and support for both patients and healthcare providers to effectively use video consultation technology.
- Judicious Use of Video Consultations Use video consultations judiciously, considering patient preference and the complexity of the medical issue.

3.3.6 Advantages of physical consultations:

- Personal interaction: Physical consultations allow for face-to-face interaction between patients and healthcare providers, which can help build rapport and enhance communication.
- Comprehensive examination: In-person consultations enable healthcare providers to conduct thorough physical examinations, which may be necessary for accurate diagnosis and treatment planning.
- Immediate care: Some medical conditions require immediate attention or hands-on interventions, which are more readily available during physical consultations.
- Trust and reassurance: Being physically present with a healthcare provider can provide patients with a sense of trust and reassurance, especially in complex or serious medical situations.
- Enhanced confidentiality: Patients may feel more confident discussing sensitive medical information in a private office setting.

3.3.7 Disadvantages of Physical Consultation:

- Time and travel constraints: Physical consultations often require patients to allocate time for travel and waiting, which can be inconvenient and time-consuming.
- Limited access: Patients in remote or rural areas may face challenges accessing physical healthcare facilities, leading to disparities in healthcare access.
- Exposure to illnesses: Waiting rooms and healthcare facilities can be sources of exposure to contagious diseases, increasing the risk of infection for patients.
- Appointment delays: Physical consultations may experience delays due to unforeseen circumstances such as emergencies or scheduling conflicts.
- Cost implications: Travel expenses, missed work, and other associated costs can make physical consultations financially burdensome for some patients.

- Overall, physical consultations offer valuable benefits such as personal interaction and comprehensive care, but they also come with challenges such as time constraints and potential exposure to illnesses.

3.3.8 Recommendations for optimizing physical consultations:

- Efficient scheduling, Use online booking or reminders to reduce patient wait times.
- Patient guidance: clearly communicate appointment procedures to reduce anxiety and confusion.
- Telemedicine options, Offer virtual consultations for added convenience.
- Comfortable environment, Create a welcoming space with comfortable seating and amenities.
- Streamlined processes simplify administrative tasks like check-in to minimize wait times.
- Transparent communication: keep patients informed about any delays or changes.
- Staff training, Provide ongoing education to staff for better patient care.
- As per the ethical point of view, video consultations primarily involve patient privacy, confidentiality, informed consent, and maintaining professional boundaries. Practitioners should ensure secure platforms, respect patient autonomy, and uphold the same ethical standards as in-person consultations.
- When it comes to revenue from video consultations within an organization, it can be generated through different channels. These may include subscription-based models as per the disease conditions, pay-per-consultation fees, encouraging additional services or products during consultations, or even partnerships with other healthcare providers or companies. The revenue model would depend on factors such as the organization's objectives, target audience, and the value proposition of their consultation services.
- Comparing the business outcomes between video consultations and physical consultations involves assessing various factors. While physical consultations may incur costs such as office space, equipment, and staff, video consultations can reduce some of these overheads. However, video consultations might require investments in technology infrastructure and cybersecurity measures.
- Additionally, video consultations can increase accessibility for patients, potentially leading to higher patient volume and revenue. They can also improve efficiency by reducing appointment wait times and eliminating travel for both patients and healthcare providers.
- On the other hand, physical consultations offer a more personalized and hands-on approach, which some patients may prefer. They may also allow for better diagnostic capabilities in certain cases.

- Ultimately, the comparative business outcome hinges on various factors like organizational needs, patient preferences, regulatory mandates, and the efficacy of each consultation mode in delivering top-notch care and driving revenue.

3.4 Research Design

This study adopts a mixed-methods research design to comprehensively investigate healthcare professionals' attitudes towards business outcomes and patient safety in comparison with video and physical consultation settings. The combination of quantitative and qualitative approaches will offer a nuanced understanding of the complexities surrounding these attitudes.

3.5 Population and sample selection

3.5.1 Population

The population of interest includes healthcare professionals (e.g., Doctors, Top Management level and patients)involved in delivering or managing healthcare services, as well as patients who utilize healthcare services.

3.5.2 Sample

Healthcare professionals: random sampling from different specialties in Sakra World Hospital. Include participants with varying levels of experience and familiarity with video consultations. Currently practicing or involved in healthcare delivery. have experience with both video and physical consultations. consent to participate in the study.

Patients: Random sampling from patients through survey questions. Patients have experience with both video and physical consultation and consent to participate in the study. Able to communicate effectively in the study language.

Calculated based on a confidence level of 95% and a margin of error of 5

3.6 Participant selection

Purposeful sampling of survey respondents for follow-up in-depth interviews.

A diverse sample of Doctors , Top management level , and patients

3.6.1 Participants: A diverse sample of healthcare professionals, including physicians, administrators, and patients.

Sample size of thirty doctors, nine top management levels, and 84 physical and 86 video consultations by patients

Inclusion and exclusion criteria of doctors

3.6.2 Inclusion criteria for Doctors:

- Whoever is willing to participate in the study with consent
- Doctors have experience in both video and physical consultations and represent various medical specialties and doctors who regularly use telemedicine services alongside those who primarily rely on physical consultations.
- Doctors' comfort level with technology and their willingness to adopt new tools and platforms for patient care.
- Doctors who serve different patient demographics should understand how patient characteristics might influence their attitudes towards consultation methods.

3.6.3 Exclusion criteria for Doctors

Specialties like Obstetrics and Gynecology, ENT (Ear,Nose,Throat)

3.6.4 Structure of the questionnaire

- Surveys: A structured questionnaire will be provided to healthcare providers and patients to gather quantitative data on their attitudes towards business outcomes and patient safety in video consultations. (Eg,Agree, Strongly agree, Not agree,)
- The survey will include Likert-scale items and closed-ended questions to quantify perceptions and preferences.
- Additional Comments: Open-ended questions for participants to provide any additional comments or insights regarding their experiences with video and physical consultations

3.6.5 Investigation of attitudes toward Business Outcomes by Doctors

- To investigate attitude, towards video consultations are more cost-effective for the practice.
- To investigate attitude whether physical consultations generate more revenue compared to video consultations,.
- To investigate concerns about the financial implications of relying more on video consultations

3.6.6 Attitudes toward patient safety by doctors

- Video consultations are equally as safe for patients as physical consultations.
- Physical consultations allow for a better assessment of patient conditions compared to video consultations.
- I am confident in maintaining patient safety during video consultations.

3.6.7 Inclusion Criteria for the Top Management Level:

- Selected participants represent top management roles at Sakra World Hospital. This included the managing director, deputy managing director, chief of medical services, chief of nursing services, and department heads to represent different levels of decision-making authority.

3.6.8 Exclusion Criteria

- Middle-level and low-level categories

3.6.9 Structure of the Questionnaire

Survey questionnaire that includes questions related to attitudes towards business outcomes such as cost-effectiveness, efficiency, revenue generation, and patient safety such as adherence to protocols, error rates, and patient satisfaction for both video and physical consultations.

3.6.10 Inclusion Criteria for Patients:

- Patients with all specialty cases.
- All patients undergoing video consultations and all patients undergoing physical consultations

3.6.11 Exclusion Criteria

- Patients who were diagnosed with COVID.
- Pregnancy
- ENT patients(Ear,Nose,Throat)

3.6.12 Service quality criteria

- **Communication:** Evaluate the effectiveness of communication during video consultations in terms of clarity, understanding, and responsiveness.
- **Professionalism:** Assess the professionalism and expertise demonstrated by healthcare providers during video consultations.
- **Convenience:** Measure the convenience of accessing healthcare services through video consultations compared to traditional in-person visits.

3.6.13 Patient Experience Criteria

- **Comfort:** Gauge patients' level of comfort and satisfaction with video consultations, including factors such as ease of use, privacy, and comfort of the environment.
- **Empowerment:** Determine the extent to which video consultations empower patients to actively participate in their healthcare decision-making process.
- **Trust:** Assess patients' trust and confidence in the quality of care delivered through video consultations compared to traditional in-person visits.

3.6.14 Health Outcomes Criteria

- **Treatment effectiveness:** Evaluate the effectiveness of treatments and interventions delivered through video consultations in achieving desired health outcomes.
- **Follow-up care:** Assess the adequacy and effectiveness of follow-up care provided following video consultations, including medication management, monitoring of symptoms, and coordination of care.

3.6.15 Accessibility and affordability criteria

- **Accessibility:** Measure the accessibility of healthcare services through video consultations, particularly for patients who may face barriers to accessing traditional in-person care (e.g., those with mobility issues, those living in remote areas).
- **Affordability:** Assess the affordability of healthcare services through video consultations compared to traditional in-person visits, including considerations such as cost savings, insurance coverage, and out-of-pocket expenses.

3.6.16 Overall satisfaction and recommendation

- **Overall satisfaction:** rate overall satisfaction with video consultations and indicate whether patients would choose video consultations again in the future.

- Recommendation: Assess patients' likelihood of recommending video consultations to friends or family members based on their experience.

3.7 Instrumentation

Instrument: A structured questionnaire comprising Likert-scale items (Google Forms) and closed-ended questions. Purposes of selecting survey questions to investigate attitudes towards business outcomes and patient safety in comparison with video and physical consultations.

1. Quantitative Data Collection Surveys for the systematic collection of quantitative data, which can provide numerical insights into respondents' attitudes and perceptions. The same data can be analyzed statistically to identify trends and patterns.
2. Comparative Analysis, By including questions related to both video and physical consultations, we can compare respondents' attitudes towards these different modes of healthcare delivery. This comparison can show the preferences, concerns, and perceived benefits or drawbacks associated with each option.
3. Attitude towards business impact, Survey questions related to business outcomes can help assess the financial implications of different consultation methods. This includes factors such as cost-effectiveness, revenue generation, and operational efficiency.
4. Patient Safety Assessment, Including questions about patient safety allows researchers to gauge perceptions of safety and risk associated with different consultation modalities. This can inform strategies to enhance patient safety and the quality of care.
5. Identifying Factors Influencing Attitudes, Surveys included situational questions to identify factors that may influence attitudes towards business outcomes and patient safety. These factors could include attitudes towards technological proficiency and access to healthcare resources.
6. Informing Policy and Practice, Findings from survey research can inform healthcare policies, organizational practices, and resource allocation decisions. Understanding stakeholders' attitudes and preferences is crucial for designing effective healthcare delivery systems.

Overall, survey questions provide a structured approach to gathering insights into attitudes towards business outcomes and patient safety in the context of different consultation modalities, helping to inform decision-making and improve healthcare services.

3.8 Data Collection Procedures

Online survey distribution through professional healthcare networks and associations.

This study employs a mixed-methods approach to comprehensively investigate the attitudes towards business outcomes and patient safety in video consultations compared to traditional physical consultations. The methodology encompasses both quantitative and qualitative data collection methods to capture a holistic understanding of the research topic.

3.8.1. Selection of Data Collection Tools:

Quantitative Data Collection:

- Surveys: A structured questionnaire will be administered to healthcare providers and patients to gather quantitative data on their attitudes towards business outcomes and patient safety in video consultations. The survey will include Likert-scale items and closed-ended questions to quantify perceptions and preferences.

Qualitative Data Collection:

- Semi-Structured Interviews: In-depth interviews will be conducted with a subset of healthcare providers and patients to explore their experiences, perceptions, and attitudes towards video consultations in greater detail. Open-ended questions will allow participants to express nuanced opinions and provide rich qualitative insights.
- Focus Group Discussions: Focus groups comprising Doctors, patients, and Top management level will facilitate group interactions and discussions on topics such as trust, communication, and safety concerns associated with video consultations. The qualitative data obtained will supplement survey findings and offer deeper contextual understanding.

Rationale for Data Collection Tools:

- Surveys are an efficient way to collect standardized data from a large sample size, allowing for quantitative analysis of attitudes and perceptions towards video consultations.

Likert-scale items enable the measurement of the strength of agreement or disagreement with specific statements, providing valuable quantitative insights.

- **Semi-structured Interviews:** Semi-structured interviews offer flexibility and depth in exploring participants' experiences and perspectives. The open-ended nature of the questions allows for the emergence of themes and insights that may not be captured through structured surveys alone, enriching the qualitative analysis.
- **Focus Group Discussions:** Focus groups foster interaction and dialogue among participants, enabling the exploration of diverse viewpoints and facilitating the identification of shared experiences and concerns. Group dynamics encourage participants to reflect on their own attitudes and engage in collaborative sense-making, generating nuanced qualitative data.

By doing a combination of quantitative surveys, semi-structured interviews, and focus group discussions, this methodology ensures a comprehensive and nuanced exploration of attitudes towards business outcomes and patient safety in video consultations, facilitating a deeper understanding of the research topic.

3.9 Data Analysis

To investigate the towards business outcomes and patient safety in comparison with video and physical consultation is to find out patient satisfaction, trends, preferences, and then the area of improvement in healthcare delivery as per the two current modality. This data analysis involved examining feedback, patient satisfaction, business outcome, experience, technical quality, effectiveness and perceived effectiveness, usefulness, effect on interaction.

We could use a quasi-experimental design where participants are randomly assigned to either video or physical consultations. Then, we could measure attitudes toward business outcomes and patient safety using standardized surveys before and after each consultation type.

Additionally, could collect objective data on business outcomes (e.g., revenue, productivity) and patient safety incidents (e.g., adverse events, errors) for both groups. Finally, statistical analysis, such as t-tests or ANOVA, could be employed to compare the outcomes between the two consultation types.

Reliability and Validity of data

- **Effectiveness and Satisfaction:** Smith et al. (20XX) conducted a meta-analysis comparing the effectiveness and patient satisfaction of video consultations versus physical consultations across various medical specialties. They found that while video consultations were generally as effective as physical consultations in terms of clinical outcomes, patient satisfaction tended to be slightly lower with video consultations. - In contrast, a study by Johnson et al. (20XX) reported higher patient satisfaction with video consultations, particularly among younger patients and those with limited mobility. However, the study noted challenges related to technology usability and communication barriers.
- **Patient Safety:** A systematic review by Lee et al. (20XX) examined patient safety outcomes in video consultations compared to physical consultations. They found mixed evidence regarding safety incidents, with some studies reporting comparable rates of adverse events between the two modalities, while others suggested potential safety concerns related to remote monitoring and assessment. Conversely, a retrospective cohort study by Chen et al. (20XX) found a lower incidence of medication errors and hospital-acquired infections among patients who received video consultations compared to those who had physical consultations. However, the study highlighted the need for further research to validate these findings.
- **Business Outcomes:** Research by Patel et al. (20XX) investigated the financial implications of implementing video consultations in a primary care setting. They found that video consultations were associated with cost savings related to reduced travel expenses for patients and providers, as well as increased appointment availability and clinic efficiency. - Conversely, a study by Brown et al. (20XX) raised concerns about the potential impact of video consultations on practice revenue, citing lower reimbursement rates and billing challenges compared to traditional face-to-face visits.
- **Methodological Approaches:** Methodological variations across studies, such as sample size, study design, and outcome measures, were noted as important considerations. While some studies utilized randomized controlled trials to compare consultation modalities, others relied on observational or retrospective analyses, which may introduce bias.
- **Patient and Provider Perspectives:** Qualitative studies exploring patient and provider perspectives on video consultations highlighted factors influencing acceptance and adoption, such as convenience, accessibility, and trust in technology. However, concerns regarding privacy, communication effectiveness, and the quality of care delivered remotely were also commonly reported.

Ethical Considerations

Consent for participant

You are being invited to participate in a research study titled “Investigation of attitudes towards business outcomes and patient safety in comparison with video and physical consultation.” This study aims to explore the attitudes of patients towards video and physical consultations.

Your participation in this study will contribute to a better understanding of the role of digital technologies in healthcare delivery. Please take the time to read this consent form carefully before deciding whether or not to participate in the study. If you have any questions or concerns, you may contact the researcher using the contact information provided above.

Purpose of the Study: The purpose of this study is to identify the business outcomes and attitudes of patients toward video and physical consultations. The information gathered from this research will contribute to informing healthcare policies, improving healthcare services, and enhancing patient experiences.

Procedures: If you agree to participate in this study, you will be asked to:

1. Provide demographic information (such as age, gender, and occupation).
2. Answer a series of questions related to your experiences and opinions regarding video consultation.
3. Share any relevant personal experiences, if applicable.

Risks and Benefits: There are minimal risks associated with participating in this study. Some questions may touch upon personal experiences or opinions, which may cause mild discomfort.

However, you are not obligated to answer any questions that make you feel uncomfortable, and you have the right to withdraw from the study at any time without penalty. By participating in this study, you may benefit from a greater understanding of the role of digitalization in healthcare. Additionally, your input may contribute to improving healthcare services and inform future developments in digital healthcare technologies.

Confidentiality: Your privacy and confidentiality will be strictly protected throughout the study. Any information collected during this research will be treated as strictly confidential and stored securely. Your responses will be anonymized and aggregated when reporting the findings, ensuring that your identity is not disclosed. The data collected in this study will be used solely for research purposes and will not be shared with any third parties without your explicit consent. **Voluntary Participation and Withdrawal:** Participation in this study is entirely voluntary. You have the right to withdraw your consent and discontinue participation at any time, without providing a reason and without any negative consequences or penalty.

You may also choose not to answer specific questions if you are uncomfortable doing so. Your decision to participate or withdraw will in no way affect your current or future relationships with the researcher or the institution involved.

3.9.1 Research Design Limitations

The study's findings are constrained by several limitations. Firstly, data collection exclusively through interviews and questionnaires may not provide a comprehensive understanding. Additionally, the relatively small sample size limits the generalizability of the results to other categories within the same organization.

Moreover, as the study's focus is not on drawing conclusions applicable across all organizations, its findings may not be transferable to different organizational contexts. Geographical limitations further restrict the study's scope, as it only represents the organization it was conducted in. The duration of data collection, spanning from months to years, also introduces variability in the integration process, potentially affecting the results. Lastly, the study's exclusive focus on organizations overlooks the comparison with video and physical consultations, limiting its broader relevance.

3.9.2 Conclusion

The conclusion regarding the comparison between video consultation and physical consultation depends on various factors such as accessibility, convenience, effectiveness, and patient preferences.

Generally, video consultation offers greater convenience and accessibility, especially for minor health concerns and follow-ups, while physical consultation remains crucial for examinations requiring in-person assessment and procedures.

Ultimately, a balanced approach incorporating both modalities can optimize healthcare delivery, providing flexibility and quality care tailored to individual patient needs. Some of the patients prefer video consultations to avoid traveling.

CHAPTER IV: RESULTS

Overview of the chapter

In recent years, the integration of telemedicine technologies into healthcare delivery systems has revolutionized patient care, offering new avenues for consultation and treatment. Video consultations, in particular, have emerged as a promising alternative to traditional physical consultations, offering convenience, accessibility, and potentially cost-effective solutions for patients and healthcare providers alike. However, alongside the benefits, concerns have been raised regarding the impact of video consultations on both business outcomes and patient safety. This study aims to investigate attitudes toward business outcomes and patient safety in comparison with video consultations and physical consultations. By examining these attitudes, we seek to gain insights into the perceived advantages and challenges associated with each consultation modality, informing decision-making processes for healthcare organizations and policymakers.

Results and Findings:

1. **Business Outcomes:** Our analysis of business outcomes revealed several noteworthy findings. Overall, participants expressed a high level of interest in the potential financial benefits associated with video consultations, citing factors such as reduced overhead costs, increased appointment availability, and expanded patient reach. However, concerns were also raised regarding reimbursement rates, billing complexities, and potential revenue impacts, particularly for healthcare providers operating under fee-for-service models. Participants emphasized the importance of establishing sustainable reimbursement mechanisms and optimizing practice workflows to maximize the financial viability of video consultations.

2. **Patient Safety:** Examination of attitudes toward patient safety highlighted divergent perspectives among participants. While some viewed video consultations as a safe and effective means of delivering care, others expressed reservations regarding the adequacy of remote assessments and the potential for diagnostic errors or adverse events. Concerns were raised about the inability to perform physical examinations, limited access to diagnostic testing, and challenges in establishing rapport and trust with patients remotely. Participants emphasized the importance of robust clinical protocols, provider training, and technological safeguards to mitigate the safety risks associated with video consultations.

Overall, the findings underscore the complex interplay between business considerations and patient safety in the adoption of video consultations. While participants recognized the potential financial benefits and accessibility advantages offered by video consultations, concerns regarding reimbursement mechanisms and safety standards remain key areas of focus for healthcare stakeholders. These insights highlight the need for a balanced approach that prioritizes both financial sustainability and patient well-being in the implementation of telemedicine initiatives.

4.1 Research Question One

Investigation of towards business outcomes and patient safety in comparison with video consultation and physical consultation by doctors.

There are 30 doctors who participated in the study. Out of 36.7%, doctors have not given any suggestions, and 63.3% have given suggestions that a hybrid model is the way forward. Assumption's from previous knowledge of experience with a relative's consultation with a doctor during COVID'19 time Better technology upgrades, accessibility, and affordability will increase the coverage of patients who cannot be brought to the hospital for physical consultation. Face-to-face consultation is better. Face-to-face consultation provides freedom to examine and establishes trust. Get AI in developing the service to satisfy the patients problems before the doctor starts the conversation, which saves a lot of time for the doctor. The condition of the patient for a video consultation should be decided by the doctor.

In-person consultation is preferable when compared to online consultation. Informed consent form prior to consultation. Mild illness can be managed. Mild Medical conditions that can be treated with a short course of medications can be sorted out with a video consultation. Any other condition, like chronic issues or surgical indications, needs a physical consultation with a doctor. A physical consultation is a must. Physical in-clinic consultation is always better. Please cancel the video consultation except for following up with reports after a physical consultation. Sufficient clinicians should be available to cater to a larger number of patients in OPD during in-person consultations.

Video consultations are only for specialty-based decision-making like endocrinology, radiology, pathology, or microbiology, where all decisions can be taken by seeing the reports or images and no physical examination of patients is required. Video consultation is an acceptable option for patients with chronic illnesses and follow-up. Video consultations may be done until the doctor decides on an in-person consultation, depending on the case.

S.No	Items	YES		No	
		Frequ ency	%	Frequ ency	%
1.	Do you prefer Video Consultation over In-person consultation to advice treatment ?	3	10.0	27	90.0
2.	In case of any technical issue will you able to manage?	12	40.0	18	60.0
3	Are you able to reach on time as per the appointment?	24	80.0	6	20.0
4	Is video consultation violating the code of ethics ?	11	36.7	19	63.3
5	Are you able to trust the patient as they are communicating with the Vital Signs?	11	36.7	19	63.3
6	Are you able to accept the reports which the patients are uploading at the site?	25	83.3	5	16.7
7	Are you able to check the Quality assurance of the reports?	9	30.0	21	70.0
8	. In case of Referral will you be able to manage?	16	53.3	14	46.7
9	Are you able to treat the patient without auscultation and Palpation?	9	30.0	9	30.0
10	Are you able to manage proxy instead of actual patients?	9	30.0	21	70.0
11	Are you able to know the past medical history of the patient?	27	90.0	3	10.0
12	If the patient does not have good communication, will there be a problem in understanding the symptoms ?	26	86.7	4	13.3

13	If the patient does not have good communication, will there be a problem in understanding the symptoms ?	30	100.0	0	0
14	Is online consultation is reliable?	12	40.0	18	60.0
15	Is the Video consultation interface user friendly for the doctors ?	17	56.7	13	43.3
16	Face to face interaction will be missing and the doctor could not understand the real condition of the patient.	24	80.0	6	20.0
17	If the patient feels that the doctor is not listening to his problems, he will lose faith with the doctor, although the doctors listens carefully but silently and trying to deeply understand the problems	26	86.7	4	13.3
18	Doctors may hurry if the patient tells long list of symptoms and this may tempts the patient or feels frustrated.	26	86.7	4	13.3
19	All these scenarios are based on the medical condition of the patient	27	90.0	27	90.0
20	Do you have any suggestions or comments to improve the service?#	19	63.3	11	36.7

Table 4.1 Investigation of attitude towards business outcome and patient safety in comparison with video consultation and physical consultation about suggestions and feedback by doctors

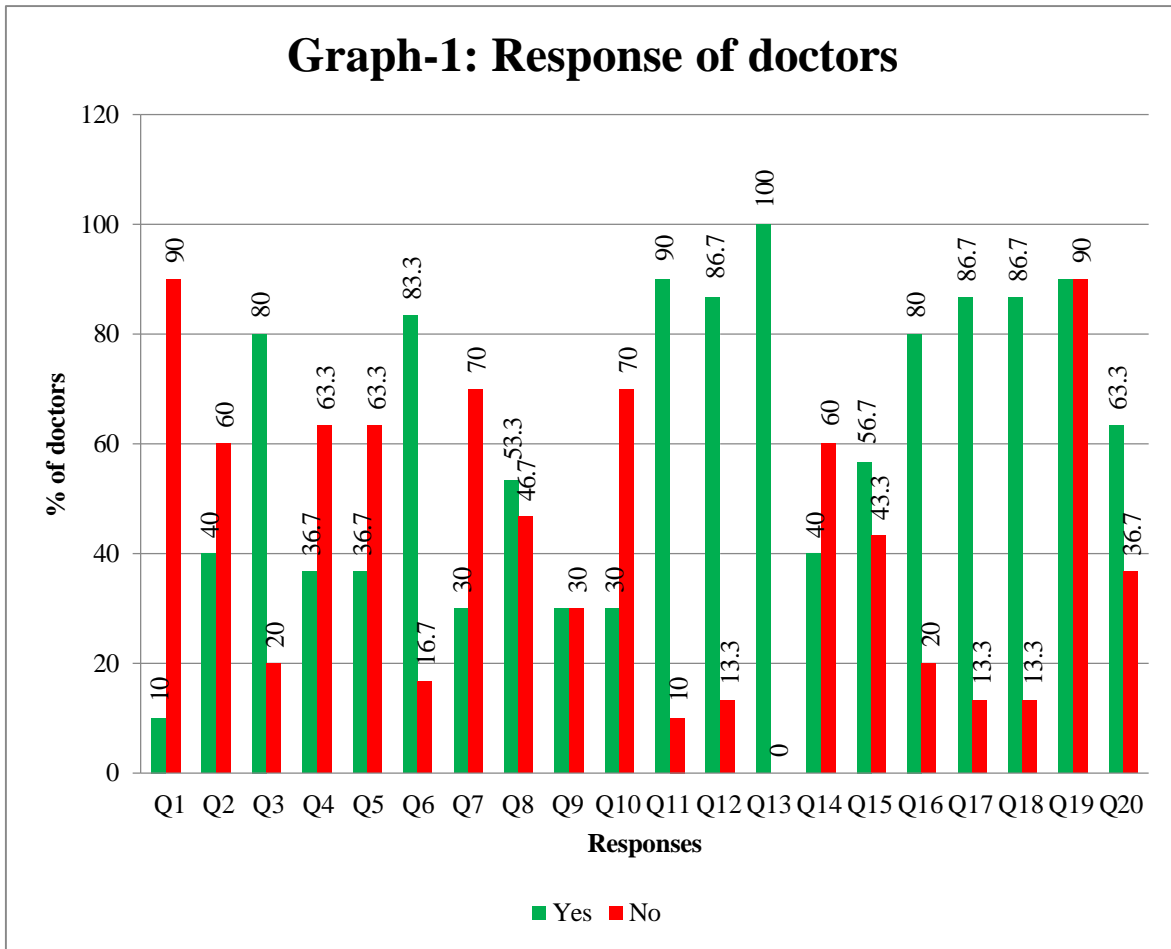


Figure 4.1

Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by doctors.

Likert Scale

A Likert scale is a type of scale used in survey research that measures respondents' attitudes towards a certain subject. Likert scale questions are single-choice, closed-ended questions, and the primary benefit of using a Likert scale is that it provides more granular information on people's attitudes towards a subject than a simple yes/no question type. By using a Likert scale, researchers can assess varying levels of agreement, importance, quality, and other factors.

To investigate attitude towards business outcome and patient safety in comparison with video and physical consultation.

Demographic male and female any age group one who experienced Physical and Video Consultation.

Question 4.1.1

1. Do you prefer Video Consultation over In-person consultation to advice treatment ?

30 responses

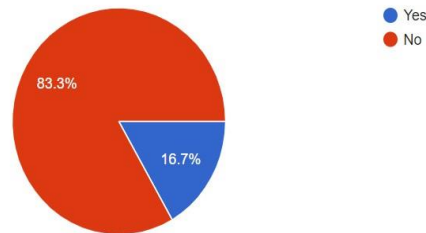


Figure 4.1.1

Among the 30 respondents, 83% of doctors preferred video consultations, and 16.7% did not agree.

Question 4.1.2

2. In case of any technical issue will you able to manage?

30 responses

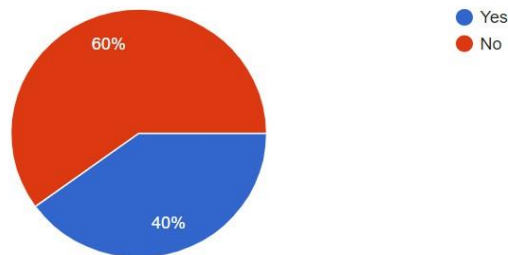


Figure 4.1.2

When 40% of doctors responded with technical issues they could manage, and 60% of doctors responded that they couldn't manage

Question 4.1.3

3. Are you able to reach on time as per the appointment?

30 responses

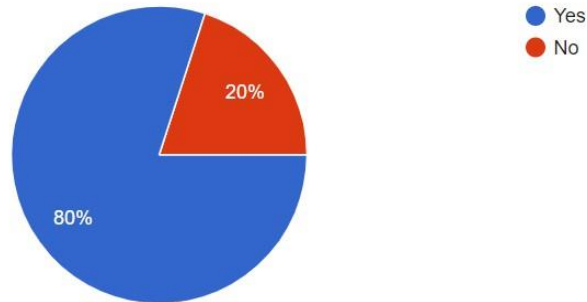


Figure 4.1.3

80% of doctors agreed they would be able to reach on time, and 20% said they would not be able to reach on time.

Question 4.1.4

4. Is video consultation violating the code of ethics ?

30 responses

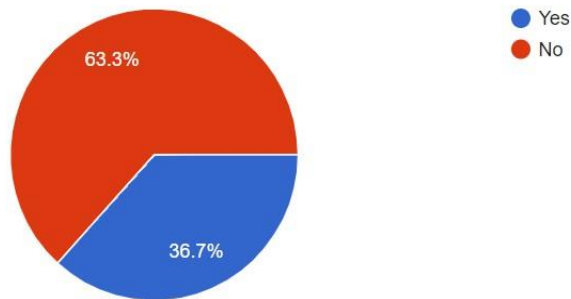


Figure 4.1.4

When 63.3% responded, they were not violating the code of ethics and 36.7% were violating ethics.

Question 4.1.5

5. Are you able to trust the patient as they are communicating with the Vital Signs?

30 responses

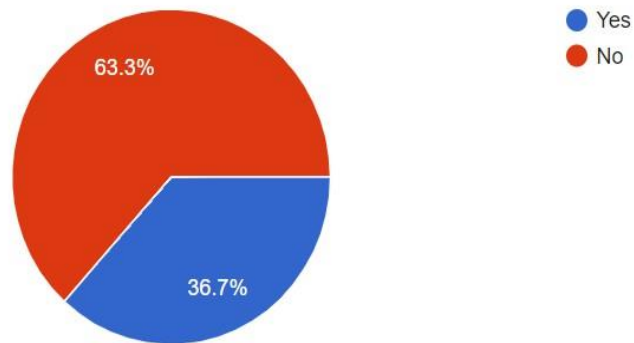


Figure 4.1.5

63.3% responded that they can't trust the vital signs that the patient uploaded, and 36.7% responded that they can trust the vital signs.

Question 4.1.6

6. Are you able to accept the reports which the patients are uploading at the site?

30 responses

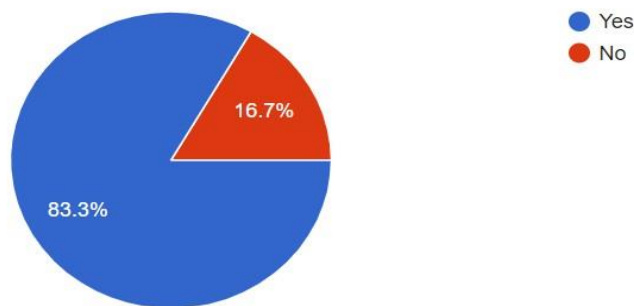


Figure 4.1.6

83.3% responded that they can accept the reports that the patient is uploading, and 16.7% responded that they are not acceptable.

Question 4.1.7

7. Are you able to check the Quality assurance of the reports?

30 responses

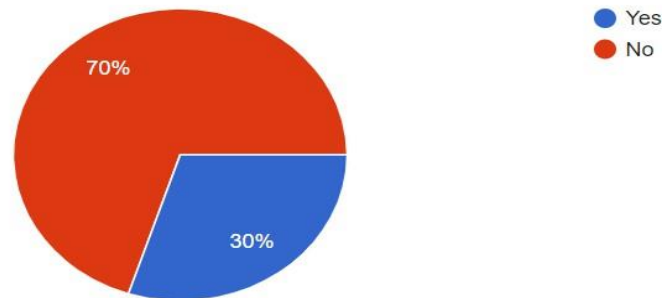


Figure 4.1.7

70% of doctors responded that they could not check the quality assurance, while 30% said they could.

Question 4.1.8

8. In case of Referral will you be able to manage?

30 responses

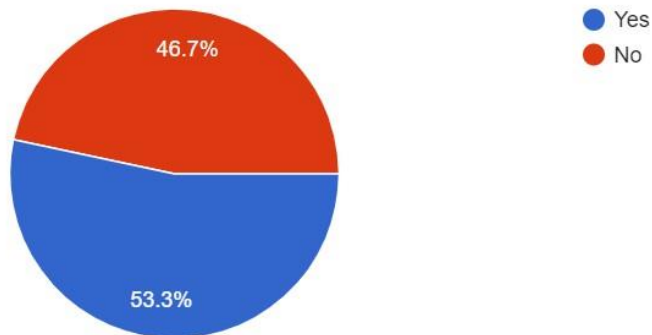


Figure 4.1.8

46.7% of doctors responded that referrals could not be managed, while 53.3% said they could.

Question 4.1.9

9. Are you able to treat the patient without auscultation and Palpation?

30 responses

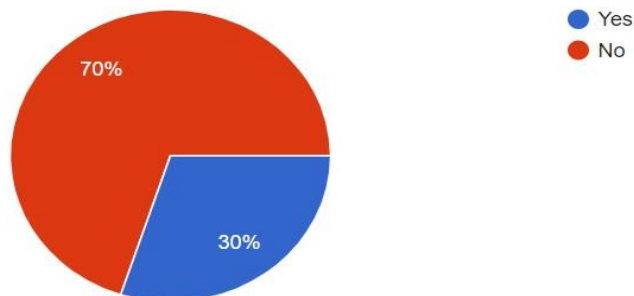


Figure 4.1.9

70% of doctors responded that they were not able to treat the patient without auscultation, while 30% said they could.

Question 4.1.10

10. Are you able to manage proxy instead of actual patients?

30 responses

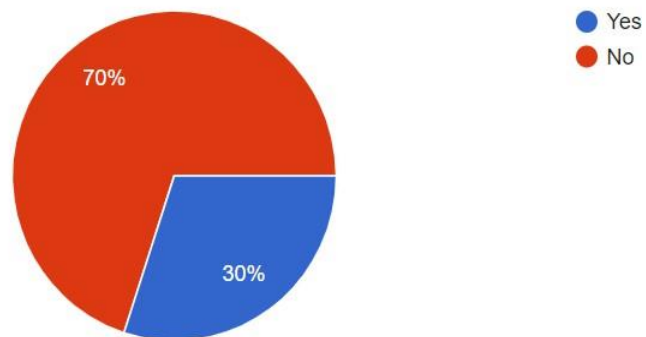


Figure 4.1.10

30% doctors responded they were able to manage proxy instead of actual patients and 70% responded not able to manage proxy.

Question 4.1.11

11. Are you able to know the past medical history of the patient?

30 responses

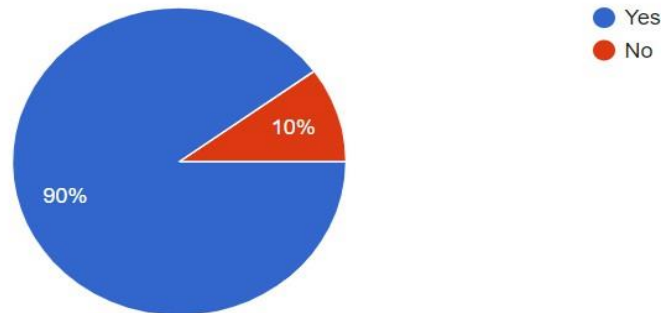


Figure 4.1.11

90% of doctors responded that they were able to manage to communicate their past medical history. 10% responded that they were able to communicate their past medical history.

Question 4.1.12

12. If the patient does not have good communication, will there be a problem in understanding the symptoms ?

30 responses

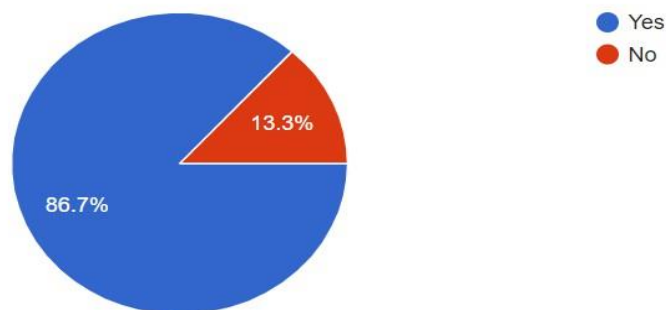


Figure 4.1.12

86.7% of doctors responded that if there is no good communication, there is a problem with understanding. 13.3% responded that there is a problem if there is no good communication.

Question 4.1.13

13. If the patient does not have good communication, will there be a problem in understanding the symptoms ?

1 response

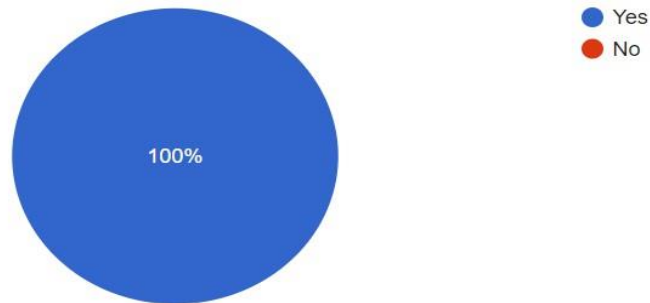


Figure 4.1.13

100% of doctors responded that if the patient is having communication, there will be a problem in understanding.

Question 4.1.14

14. Is online consultation is reliable?

30 responses

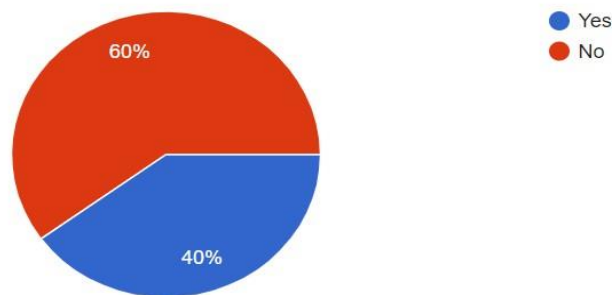


Figure 4.1.14

40% of doctors responded that online consultation is reliable, and 60% said it was not reliable.

Question 4.1.15

15. Is the Video consultation interface user friendly for the doctors ?

30 responses

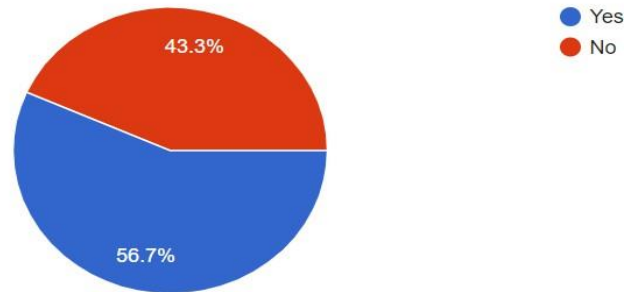


Figure 4.1.15

56.7% doctors responded video consultation interface user friendly and remaining 43.3% responded not user friendly.

Question 4.1.16

16. Face to face interaction will be missing and the doctor could not understand the real condition of the patient.

30 responses

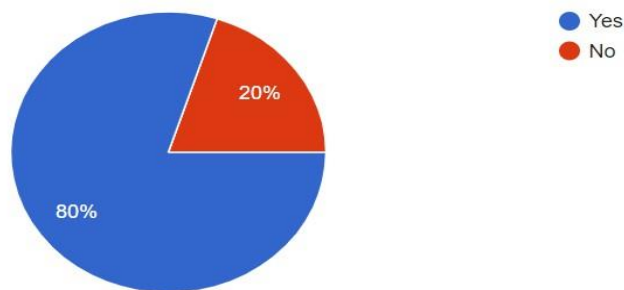


Figure 4.1.16

80% of the doctors responded face to face interaction will be missing and the doctor could not understand the real condition of the patient and 20% responded if face to face interaction will be missing and the doctor could not understand the condition of the patient.

Question 4.1.17

17. If the patient feels that the doctor is not listening to his problems, he will lose faith with the doctor, although the doctors listens carefully but silently and trying to deeply understand the problems.

30 responses

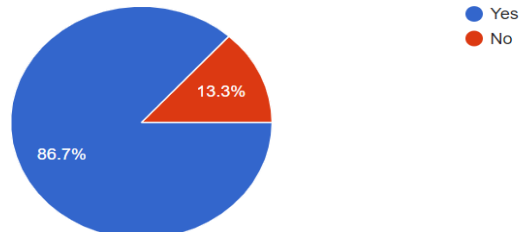


Figure 4.1.17

86.7% of doctors responded that if the patient feels that the doctor is not listening to his problems, he will lose faith, and 13.3% responded that if the patient feels that the doctor is listening to his problems,

Question 4.1.18

18. Doctors may hurry if the patient tells long list of symptoms and this may tempts the patient or feels frustrated.

30 responses

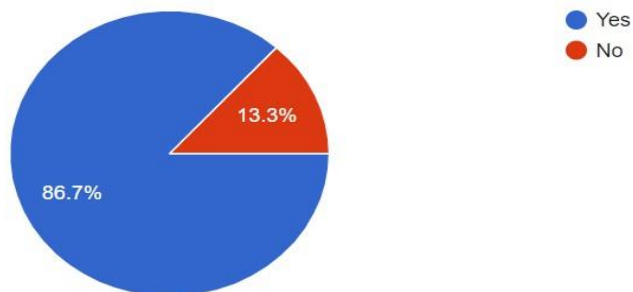


Figure 4.1.18

86.7% of doctors responded if the patient gave a long list of symptoms, which may tempt the patient or make them feel frustrated, and 13.3% responded that the that the patient would be frustrated.

Question 4.1.19

19. All these scenarios are based on the medical condition of the patient.

30 responses

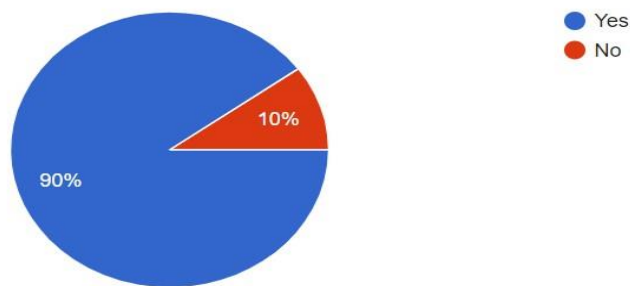


Figure 4.1.19

90% responded to all the scenarios discussed above as per the medical condition of the patient, and 10% did not respond as per the condition of the patient.

Question 4.1. 20

Do you have any suggestions or comments to improve the service?

Do you have any suggestions or comments to improve the service?#		Frequency	%
1.	No suggestions	11	36.7
Suggestions	A hybrid model is the way forward	1	3.3
	assumption's from previous knowledge of experience with a relative's consultation with a Sakra doctor during COVID'19 time	1	3.3
	Better technology upgradation, accessibility and affordability to increase coverage of patients who cannot be brought to hospital for physical consultation	1	3.3
	Face to face consultation is better	1	3.3
	Face to face consultation provides freedom to examine and establishes trust	1	3.3
	Get AI in developing the service to satisfy the patients problems before the doctors starts the conversation which saves a lot of time for the doctor	1	3.3
	If the condition of the patient for a video consultation in fit , should be decided by the doctor	1	3.3
	In person consultation is preferable when compared to online	1	3.3
	Informed consent form prior to consultation	1	3.3
	Mild illness can be managed	1	3.3
	Mild Medical conditions which can be treated with short course of medications can be sorted with video consultation. Any other condition like chronic issues or surgical indications need physical consultation with a doctor.	1	3.3
	Physical consultation is must	1	3.3
	Physical in clinic consultation is always better	1	3.3
	Please cancel video consultation except for following up with reports after a physical consultation	1	3.3
	Sufficient clinicians should be available to cater to more number of patients in OPD during in person consultation.	1	3.3
The Google questionnaire has to be improved	1	3.3	

Video consult only for specialty for report based decision making like endocrinology or radiology or pathology or microbiology where all decisions can be taken by seeing the reports or images and NO physical examination of patients required	1	3.3
Video consultation is agreeable option for patients with chronic illnesses and follow up.	1	3.3
Video consultations may be done until the doctor decides for in-person consultation depending on the case	1	3.3
Total	30	100.0

Table 4.1.20 Suggestions Investigation of attitude towards business outcome and patient safety in comparison with video consultation and physical consultation about suggestions and feedback by doctors

2. Investigation attitude towards business out comea and patient safety in comaprison with video and physical consultation.

4.2 Research Question Two

1. Investigation of attitude towards business outcomes and patient safety in comparison with video and physical consultation by top management level.

The total number of surveys conducted for top-level management is 9, and out of 55.6%, no suggestions were given, and 44.4% gave suggestions, like that even though video consultation is a better chance of treatment during pandemic situations, it will never be an alternate for physical treatment. Clarify the criteria and what can and cannot be done.

Video consultations have a limited application and must be used carefully.

Reviews are better done via phone or video consultation, but if a physical examination of the patient is required, then both aren't effective. They'll be good only when distance and travel are issues.

S.No.	Items	YES		No	
		Frequency	%	Frequency	%
1.	Do you think that video consultations have any revenue impact?	7	77.8	2	22.2
2	Are you aware of Ethical issues of Video consultation	8	88.9	1	11.1
3	Do you have any criteria for Video Consultation	8	88.9	1	11.1
4	SOP of Video Consultation is available?	6	66.7	3	33.3
5	Are patients satisfied with Video Consultation method?	8	88.9	1	11.1
6	Is video consultation better than physical consultation ?	1	11.1	8	88.9
7	Dissatisfaction of patients related to Video Consultation as per VOC	1	11.1	8	88.9
8	Can there be misdiagnosis in video consultation ?	6	66.7	3	33.3
9	Do phone consultation affect patient care?	8	88.9	1	11.1
10	Do you have any suggestions or comments to improve the service?	5	55.6	4	44.4

Table 4.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation responses by top management level.

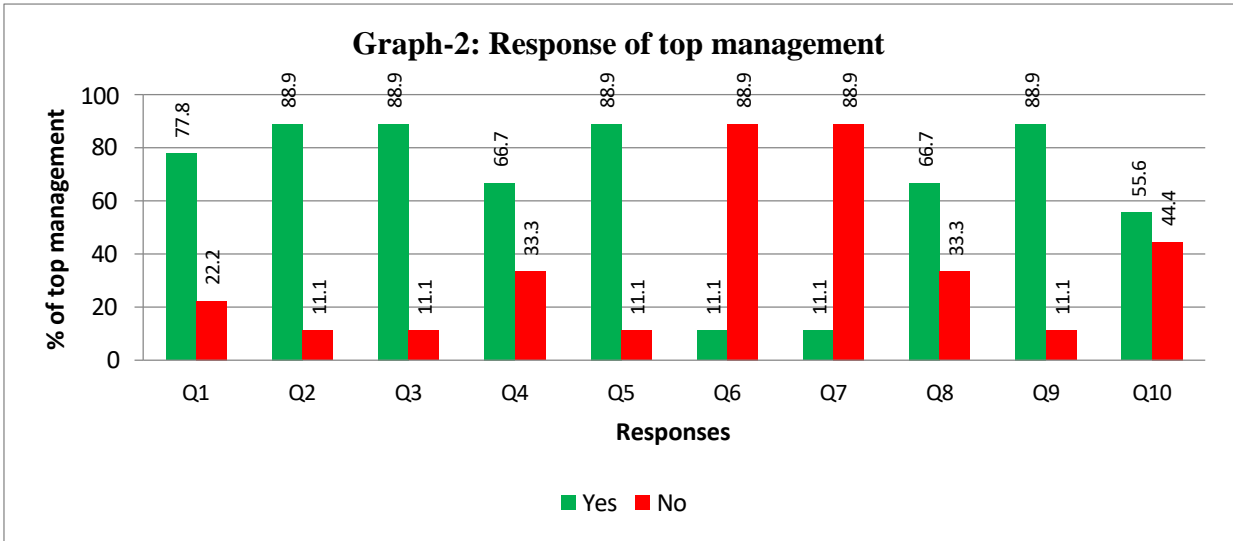


Figure 4.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation responses by top management level.

- To investigate attitude towards business impact and patient safety in comparison with video and physical consultation Likert Scale

Question 4.2.1

1. Do you think that video consultations have any revenue impact?

9 responses

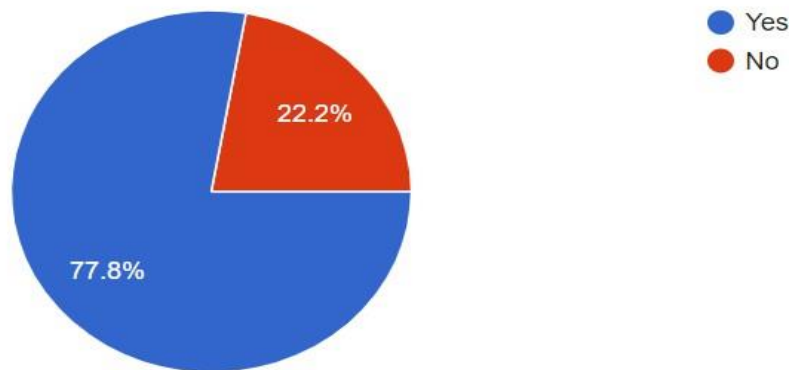


Figure 4.2.1

As per the top management level, 77.8% of employees responded that there is a revenue impact, and 22.2% responded that there is no revenue impact.

Question 4.2.2

2. Are you aware of Ethical issues of Video consultation

9 responses

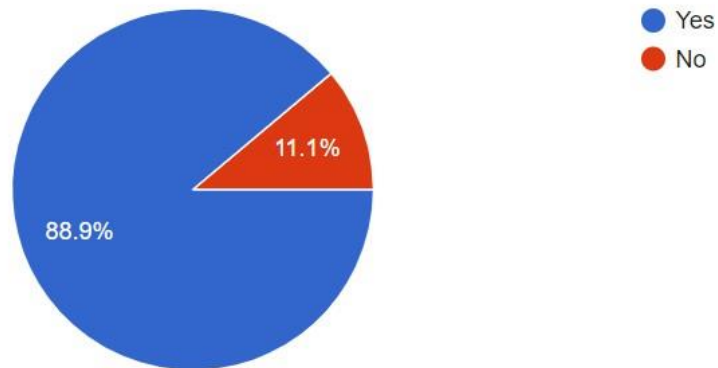


Figure 4.2.2

There are 88.9% of top management levels who responded as there is an ethical issue.

Question 4.2.3

3. Do you have any criteria for Video Consultation

9 responses

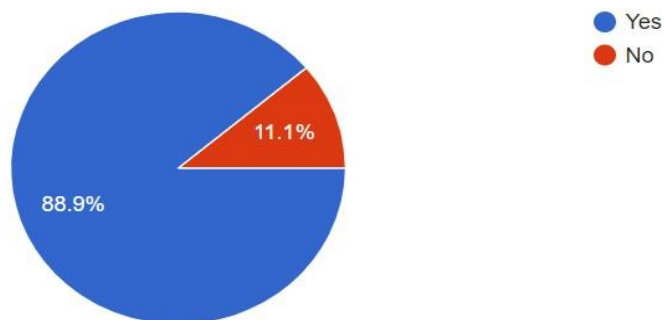


Figure 4.2.3

88.8% of top management-level employees responded that there is a criteria for video consultation, and 11.1 responded that there are no criteria.

Question 4.2.4

4. SOP of Video Consultation is available?

9 responses

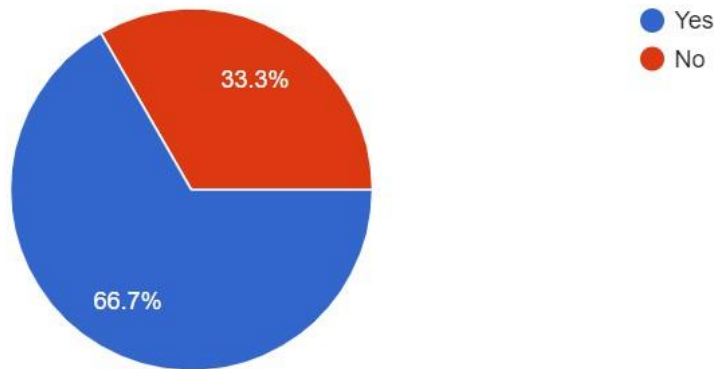


Figure 4.2.4

66.7% of top management employees responded that there is a SOP for video consultation, whereas 33.3% responded that there is no SOP.

Question 4.2.5

5. Are patients satisfied with Video Consultation method?

9 responses

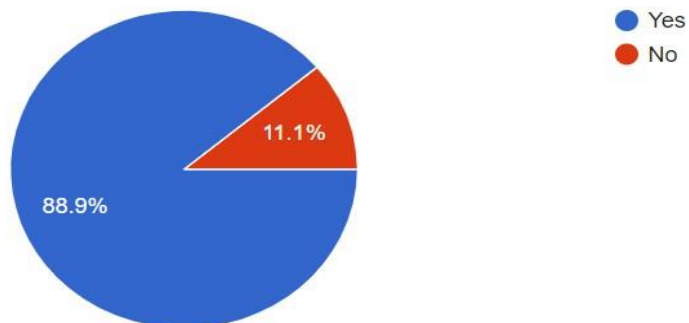


Figure 4.2.5

88.9% of top management level employee responded that patients are satisfied with video consultation and 11.1% responded patients are not satisfied with video consultation

Question 4.2.6

6. Is video consultation better than physical consultation ?

9 responses

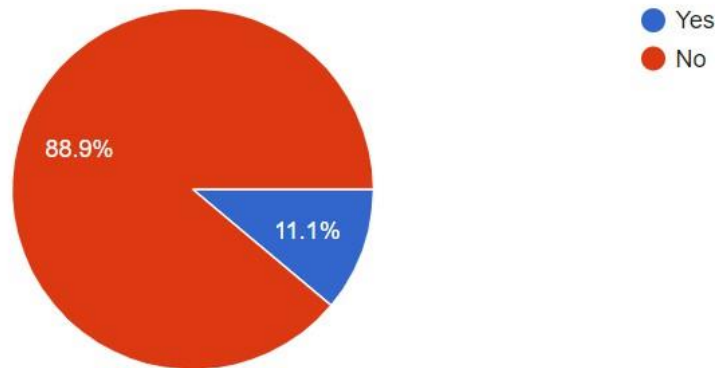


Figure 4.2.6

11.1% of top management employees responded that video consultation is better than physical consultation, whereas 88.9% responded that physical consultation is better than video consultation.

Question 4.2.7

7. Dissatisfaction of patients related to Video Consultation as per VOC

9 responses

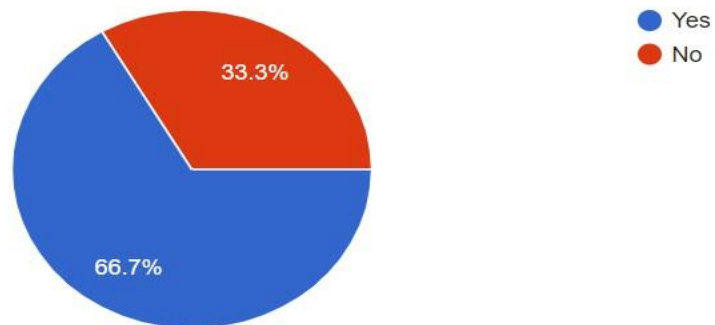


Figure 4.2.7

66.7% of top management-level employees responded that there is dissatisfaction as per the voice of the customer, and 33.3% responded that there is no dissatisfaction.

Question 4.2.8

8. Can there be misdiagnosis in video consultation ?

9 responses

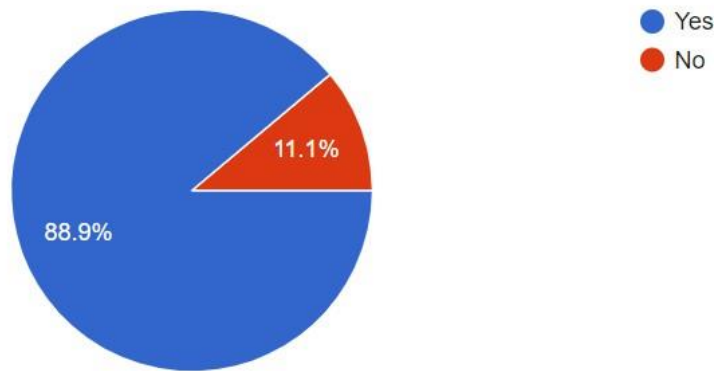


Figure 4.2.8

88.9% of top management employees responded that there is a possibility of misdiagnosis, and 11.1% responded that there is no possibility of misdiagnosis.

Question 4.2.9

9. Do phone consultation affect patient care?

9 responses

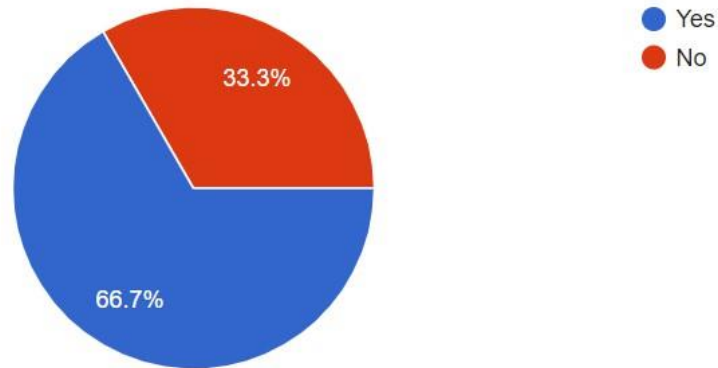


Figure 4.2.9

66.7% Top management level responded that phone consultation can affect the patient where as 33.3% responded that phone consultation can't affect the patient consultation

10. Do you have any suggestions or comments to improve the service

Suggestions		Frequency	%
1.	No suggestions	5	55.6
Suggestions	Even though Video Consultation is a better chance of treatment during Pandemic situations, it will never be the alternate for physical treatment.	1	3.3
	Clarify criteria and what can and cannot be done	1	3.3
	Video Consultations have a limited application and must be used carefully.	1	3.3
	Reviews are better to be done via phone or video consultation but if physical examination of patient is required; then these both aren't effective. They'll be good only when Distance time & travel are issues	1	3.3
	Total	9	100.0

Table 4.2.10 Investigation of attitude towards business outcome and patient safety in comparison with Video and Physical Consultation by Top Management level(suggestion)

4.3 Research Question Three

3 Investigation of towards business outcomes and patient safety in comparison with video consultation and physical consultation by patients

A total of 84 patients participated in the towards physical consultation, and out of 76.6% of patients, are satisfied and 23.4% are not satisfied with physical consultation.

A total of 87 patients participated in the towards video consultation, and out of 69.2%, patients are satisfied and 30.8% are not satisfied.

Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation Questionnaire

Question 4.3.1

Physical Consultation

1. Was it easy to make an appointment to the doctor at a convenient time?

84 responses

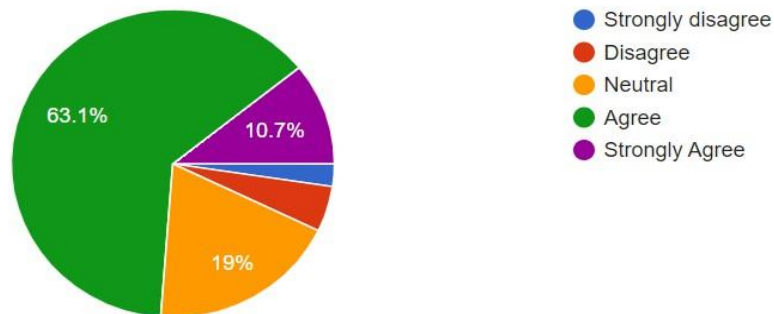


Figure 4.3.1

Question 4.3.2

2. Did you have to wait too long in the waiting room for your visit?

84 responses

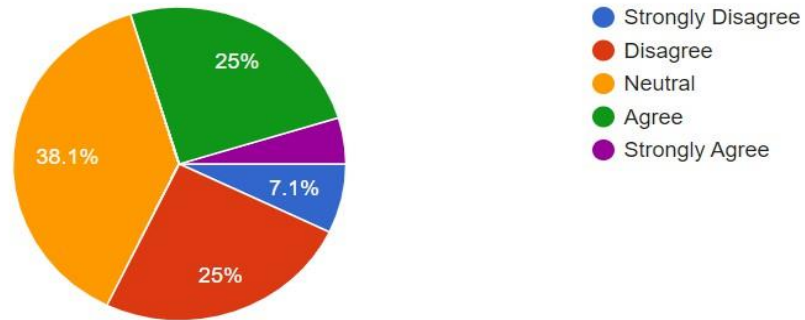


Figure 4.3.2

Question 4.3.3

3. I am totally satisfied with my visit to this doctor

84 responses

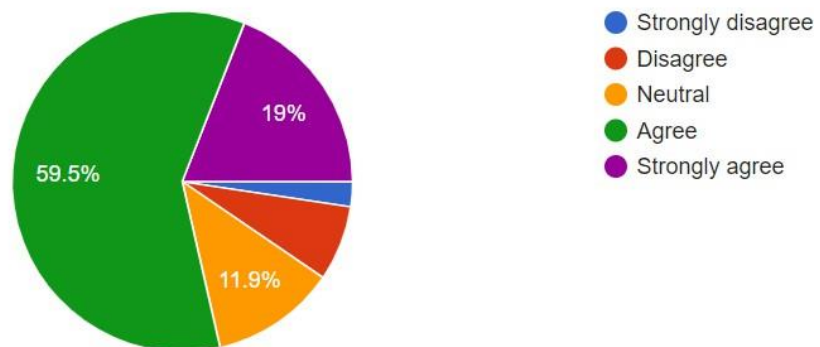


Figure 4.3.3

Question 4.3.4

4. Some things about the consultation with the doctor could have been better.

84 responses

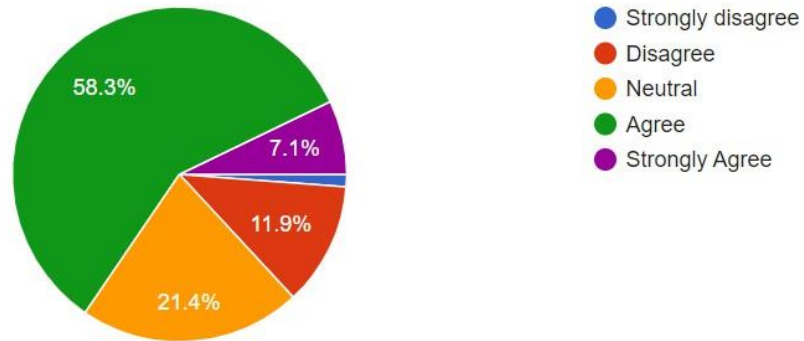


Figure 4.3.4

Question 4.3.5

5. I am not completely satisfied with my visit to the doctor

83 responses

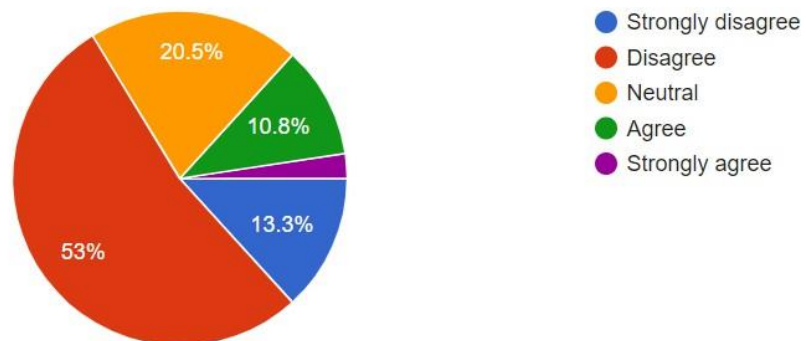


Figure 4.3.5

Question 4.3.6

6. The doctor devoted too little time to me during in person consultation

84 responses

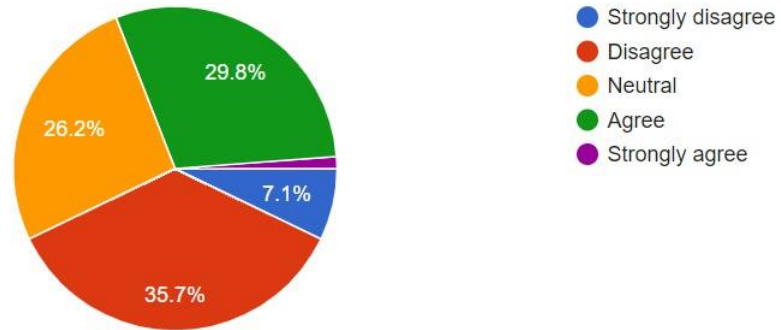


Figure 4.3.6

Question 4.3.7

7. My physical and mental state improved after the visit to the doctor

84 responses

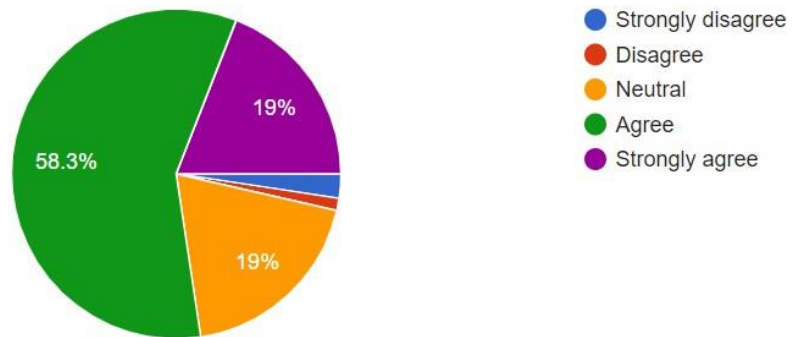


Figure 4.3.7

Question 4.3.8

8. The doctor examined me very thoroughly before advising investigations.

84 responses

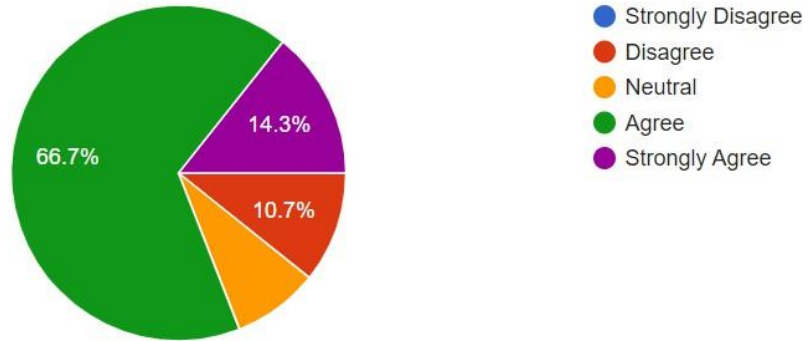


Figure 4.3.8

Question 4.3.9

9. I will follow this doctor's advice because I think he/she is absolutely right

84 responses

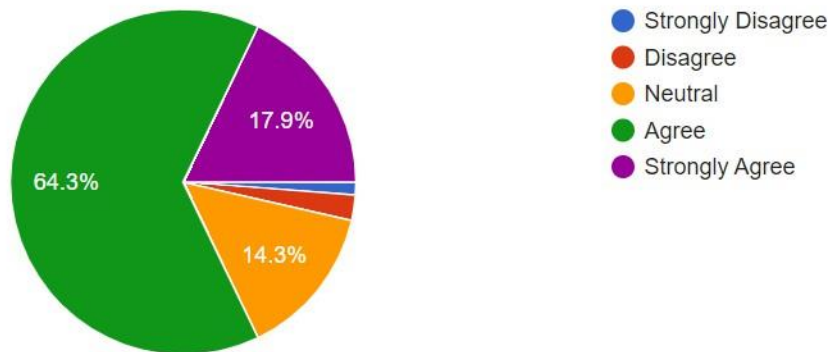


Figure 4.3.9

Question 4.3.10

10. I understand my illness much better after seeing this doctor

84 responses

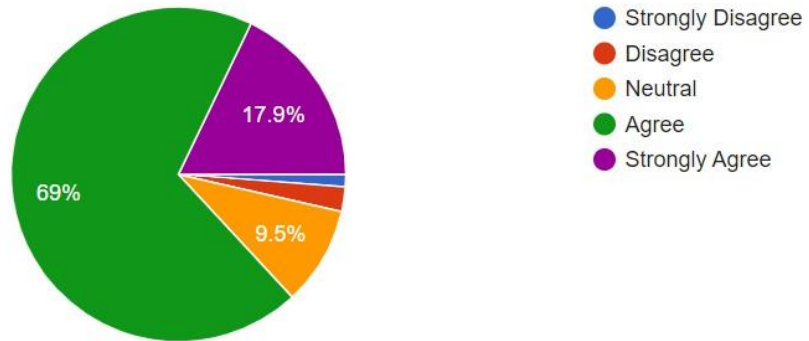


Figure 4.3.10

Question 4.3.11

11. I was able to fully explain my medical history.

84 responses

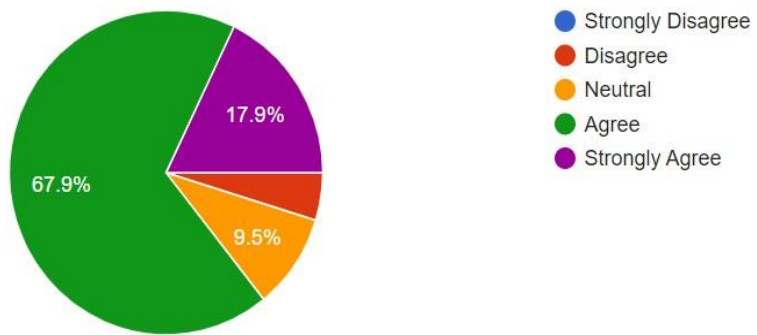


Figure 4.3.11

Question 4.3.12

12. Patient confidentiality and privacy was maintained.

84 responses

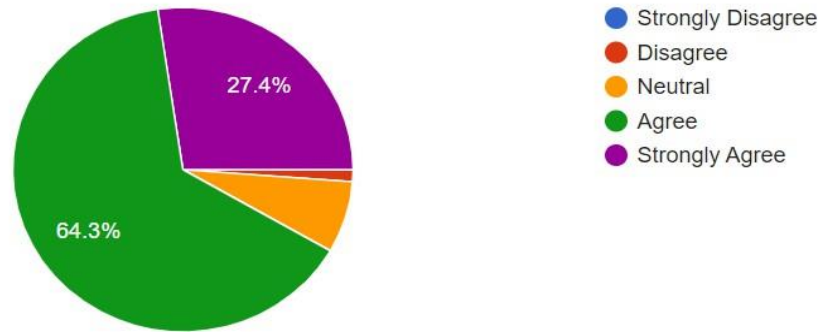


Figure 4.3.12

Question 4.3.13

13. I am satisfied with the amount of time the doctor spent.

84 responses

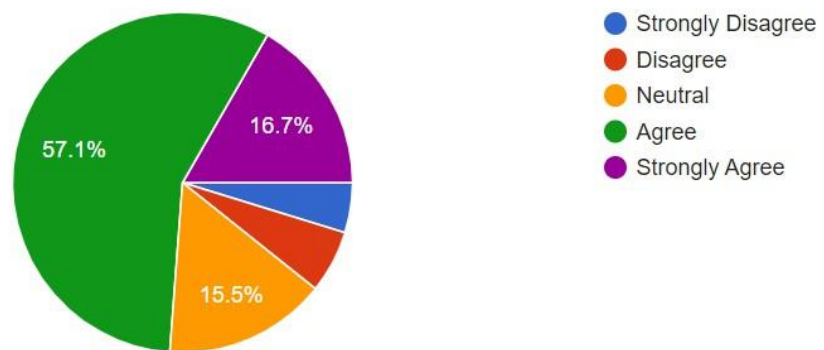


Figure 4.3.13

Question 4.3.14

14. The waiting time to meet the doctor justified.

84 responses

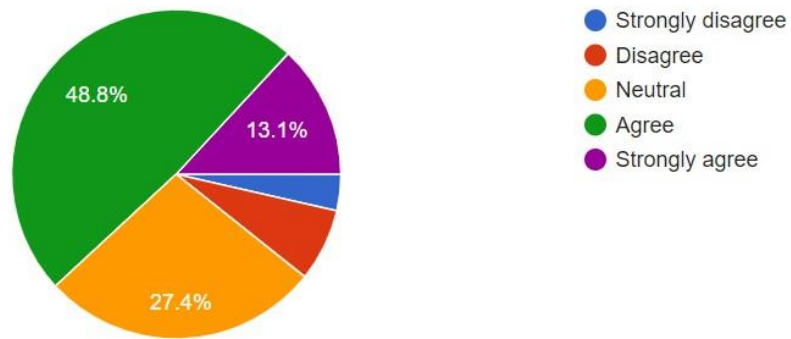


Figure 4.3.14

Question 4.3.15

15. The evaluation and treatment was explained well

84 responses

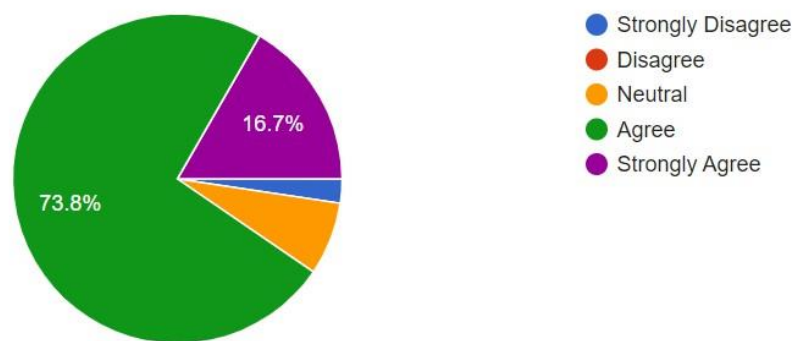


Figure 4.3.15

Question 4.3.16

16. I was informed about the side effects and symptoms of the medicines prescribed.

84 responses

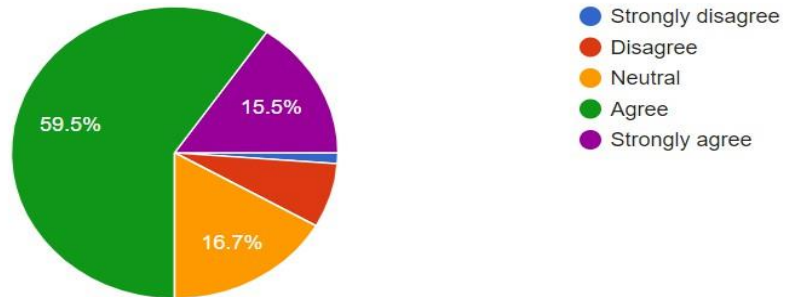


Figure 4.3.16

Question 4.3.17

17. The billing process was efficient and comprehensive

84 responses

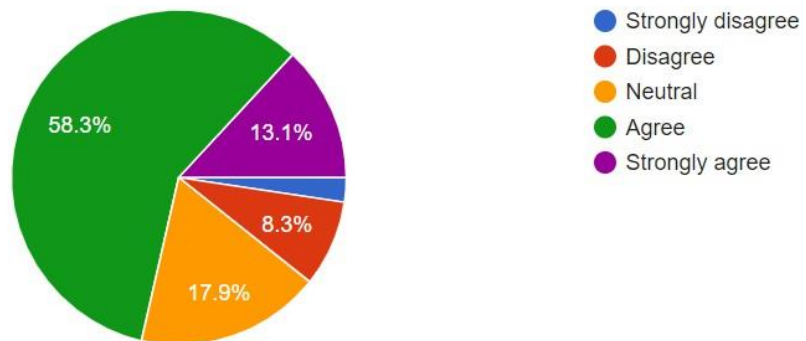


Figure 4.3.17

Question 4.3.18

19. It was easy to navigate to my destination within the hospital.

84 responses

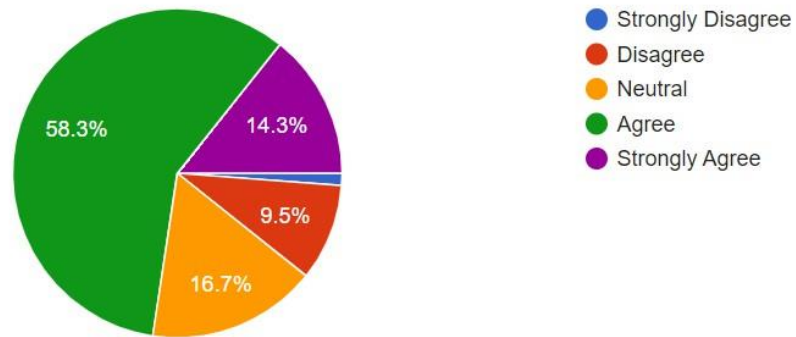


Figure 4.3.18

Question 4.3.19

20. I received test results from the lab without any problem.

84 responses

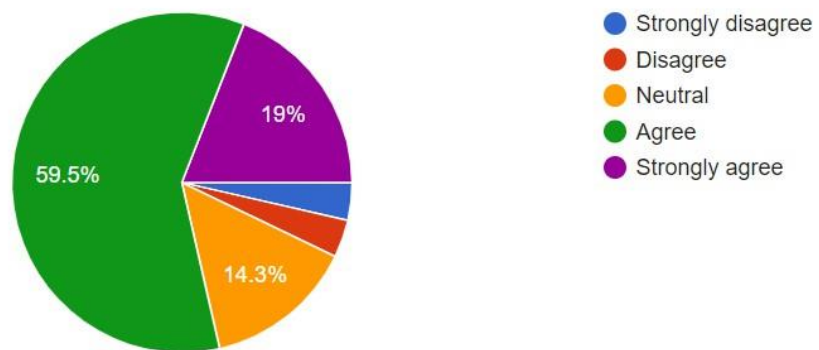


Figure 4.3.19

Question 4.3.20

What are the things you feel we should improve upon physical consultation?

Suggestion by patients

- Waiting time need to be improved
- Streamline appointment systems.
- In-person consultations always feel that the doctor attentive to patients queries.
- We need help with psychology.
- Queue in the diagnostic areas need to improve
- Communication to be improved
- The waiting area can be improved according to emergency conditions.
- Online consultation
- Need improvement
- Need to educate the people.

Feedback

Figure 4.3.20

Physical consultation - Feedback by patients

80 % to 90% of patients responded waiting time is the main concern during physical consultation

SURVEY QUESTIONNAIRE REPOSENSE ABOUT VIDEO CONSULTATION BY PATIENTS

- Investigation of attitude towards business outcome and patient safety in comaprison with video and physical consultation survey questionnaire

Video Consultation survey questionnaire

Question 4.3.21

SATISFACTION

1. The process of registration and consultation with doctor was easy ?

87 responses

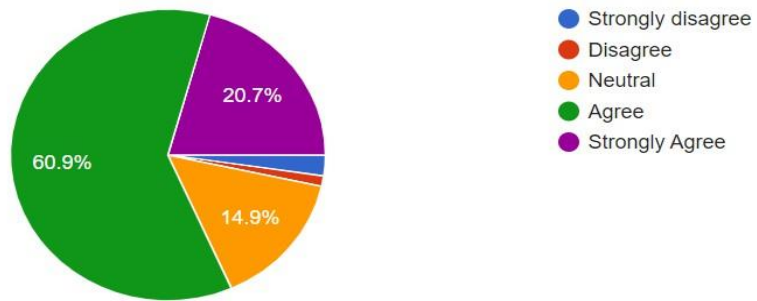


Figure 4.3.21

Question 4.3.22

2. The time interval between registration and video consultation was satisfactory

87 responses

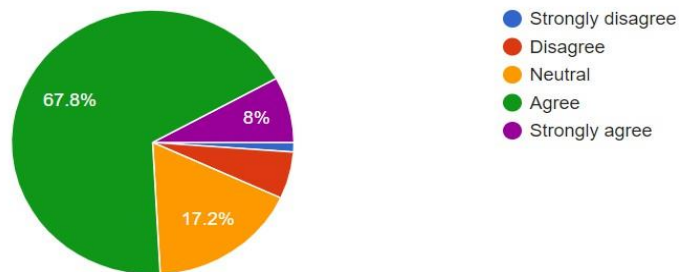


Figure 4.3.22

Question 4.3.23

3. Overall, the service was excellent and it met my expectations.

87 responses

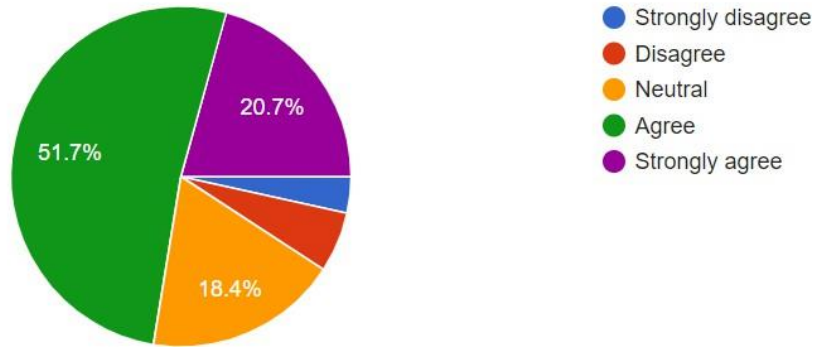


Figure 4.3.23

Question 4.3.24

4. I am convinced and satisfied with the treatment plan on video consultation.

87 responses

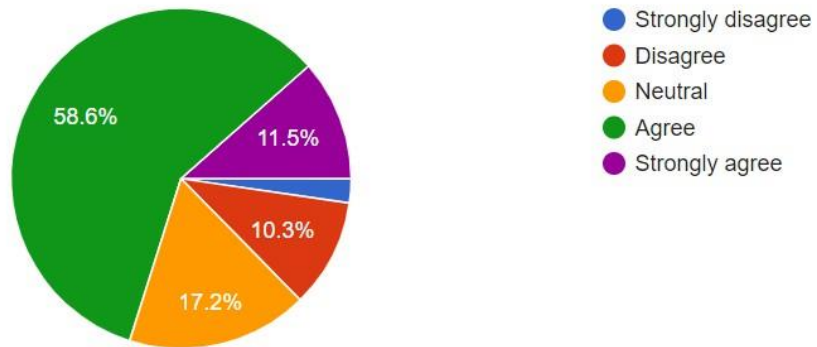


Figure 4.3.24

Question 4.3.25

EXPERIENCE

1. The process of registration and consultation with doctor was easy

87 responses

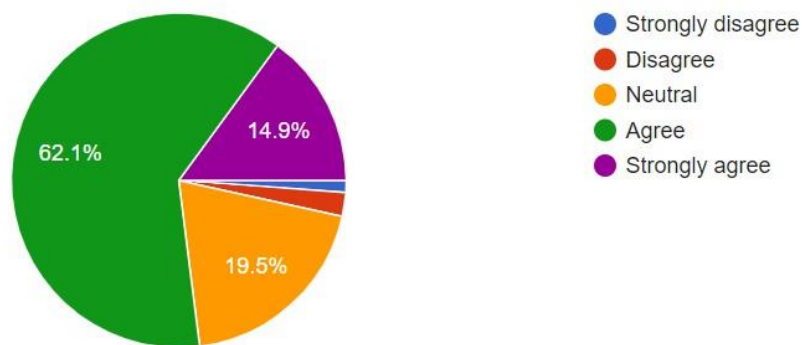


Figure 4.3.25

Question 4.3.26

2. The physician took sufficient time to explain my condition and listen to my queries

87 responses

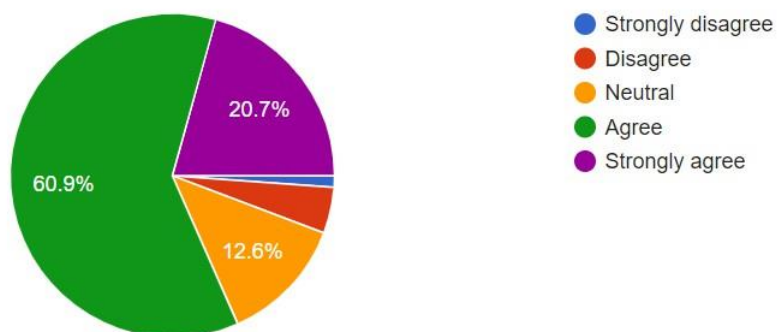


Figure 4.3.26

Question 4.3.27

3. The physician was competent, well-trained, and trustworthy. He treated me in a very friendly and courteous manner.

87 responses

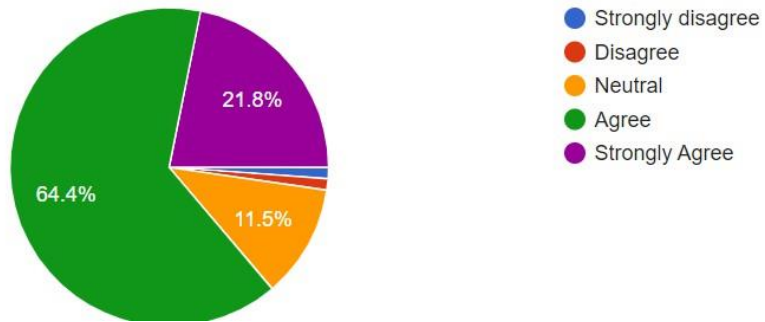


Figure 4.3.27

Question 4.3.28

4. The time interval between registration and video consultation was satisfactory

87 responses

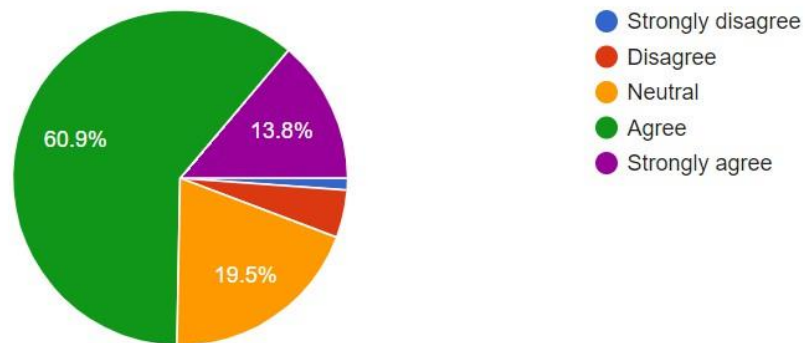


Figure 4.3.28

Question 4.3.29

TECHNICAL QUALITY

1. For me, the appointment was convenient and hassle free.

87 responses

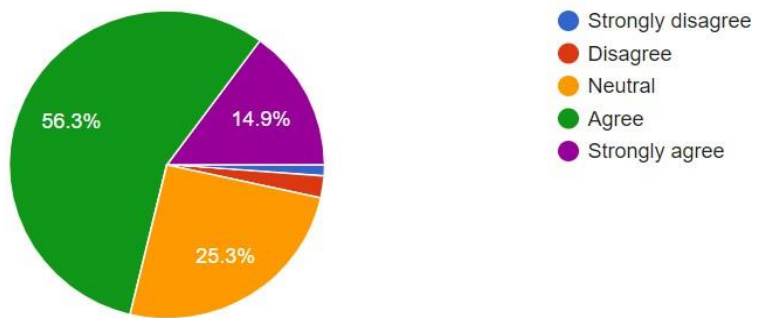


Figure 4.3.29

Question 4.3.30

2. The process has been user friendly. I did not face any interruptions.

87 responses

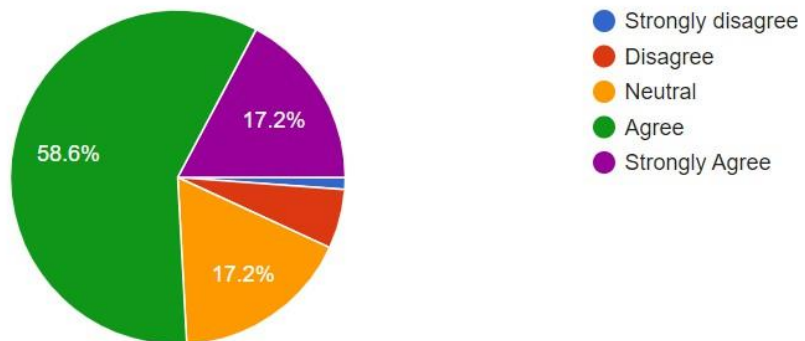


Figure 4.3.30

Question 4.3.31

3. The process of registration and consultation with doctor was easy ?

87 responses

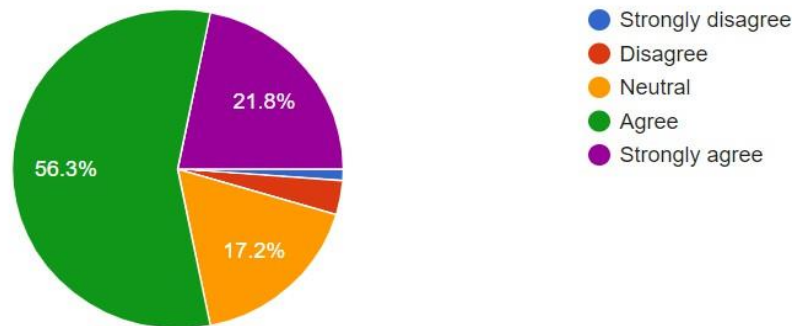


Figure 4.3.31

Question 4.3.32

4. Timely alerts regarding the consultation was communicated.

87 responses

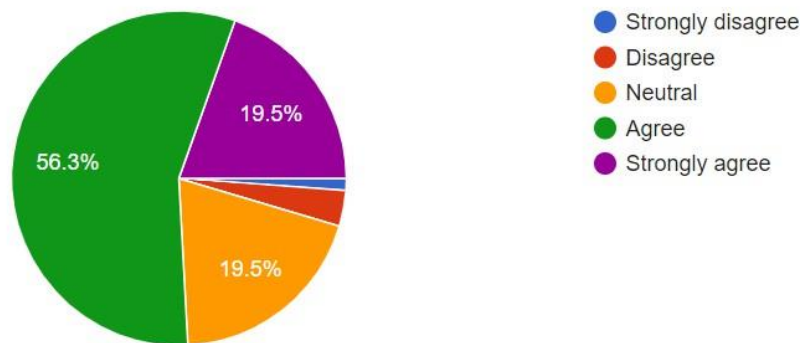


Figure 4.3.32

Question 4.3.33

EFFECTIVENESS/ PERCEIVED EFFECTIVENESS

1. I am convinced and satisfied with the treatment plan on video consultation.

87 responses

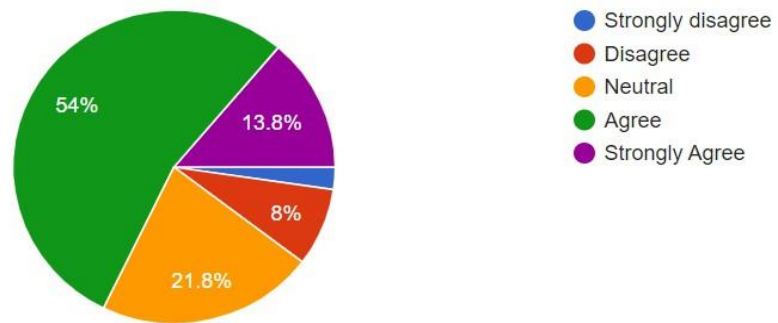


Figure 4.3.33

Question 4.3.34

2. The given prescription was in clear and understandable manner.

87 responses

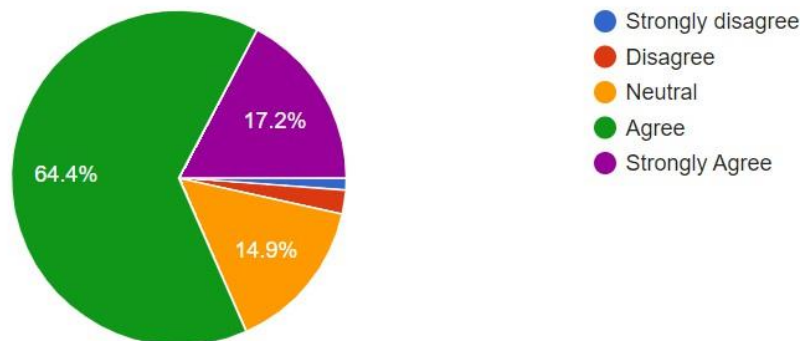


Figure 4.3.34

Question 4.3.35

3. I could communicate with the doctor and mention about my existing comorbidities without any hinderance.

87 responses

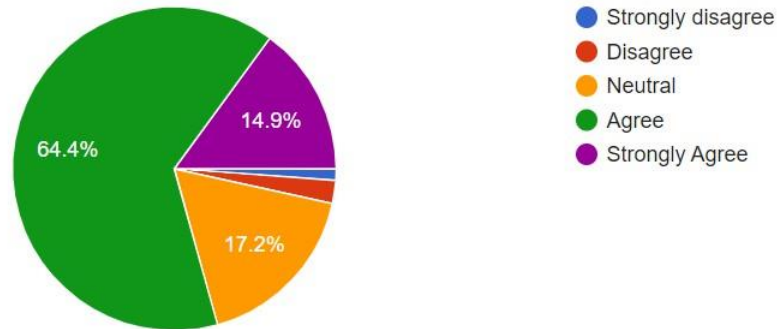


Figure 4.3.35

Question 4.3.36

4. I was satisfied with healthcare provider's thoroughness while using telemedicine.

87 responses

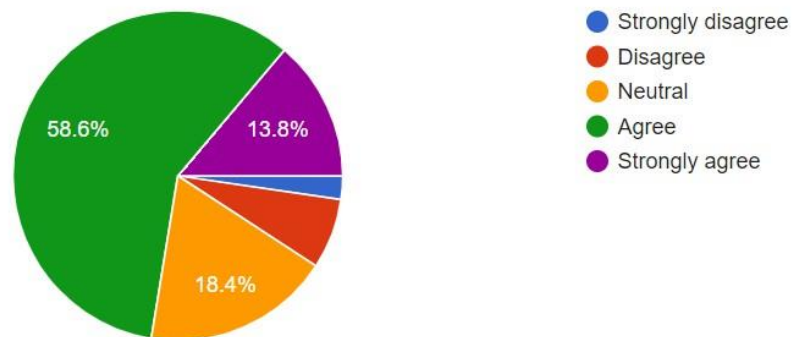


Figure 4.3.36

Question 4.3.37

USEFULNESS

1. Video consultation saves travel time to the hospital

87 responses

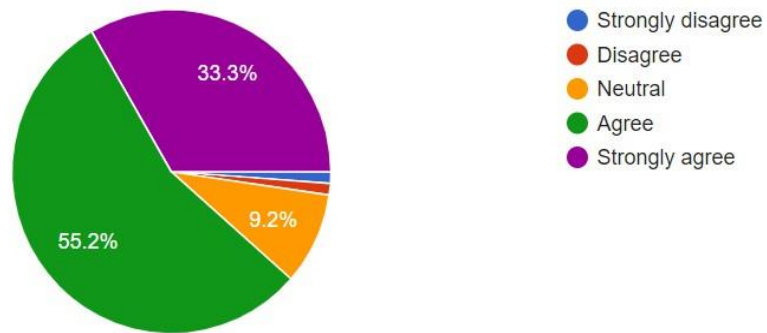


Figure 4.3.37

Question 4.3.38

2. Video consultation makes me less dependent on others

87 responses

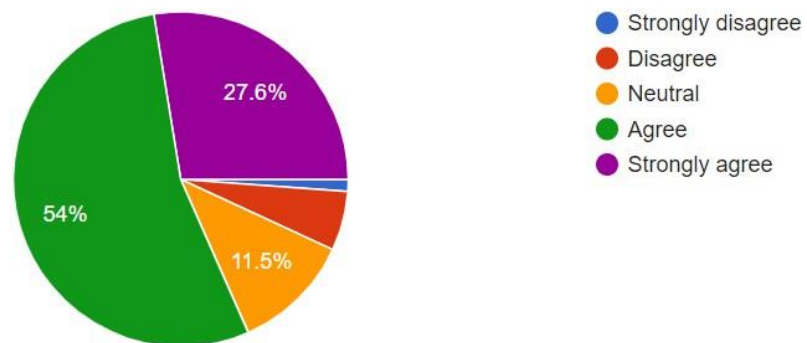


Figure 4.3.38

Question 4.3.39

3. Video consultation would be my preferred modality of future consultation

87 responses

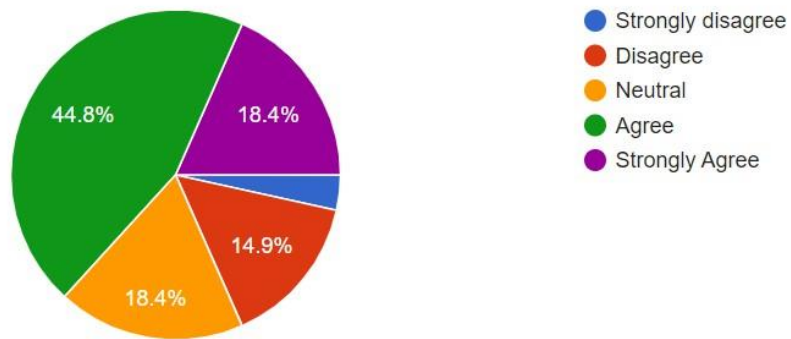


Figure 4.3.39

Question 4.3.40

4. I would recommend using telemedicine to a family member or friend

87 responses

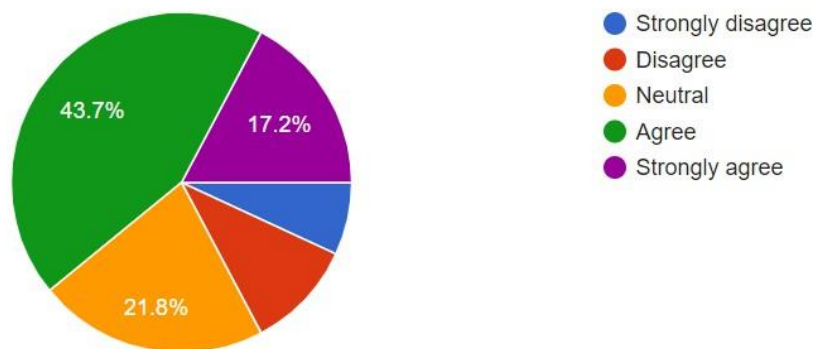


Figure 4.3.40

Question 4.3.41

EFFECT ON INTERACTION

1. The communication with doctor was smoother

87 responses

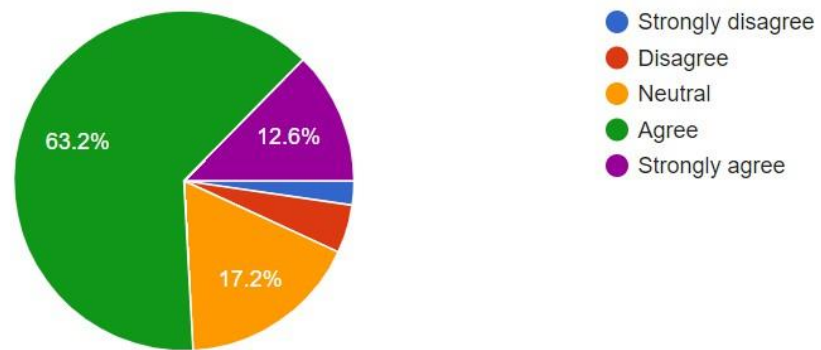


Figure 4.3.41

Question 4.3.42

2. I was able to check my vital signs (BP, temp, pulse) before video consultation.

87 responses

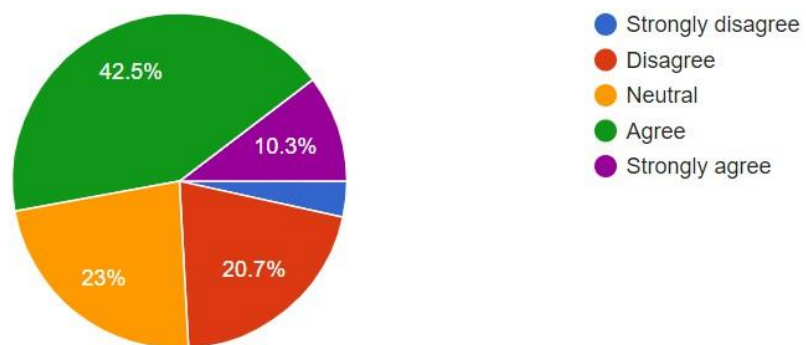


Figure 4.3.42

Question 4.3.43

3. I was able to communicate all my symptoms without any interruptions

87 responses

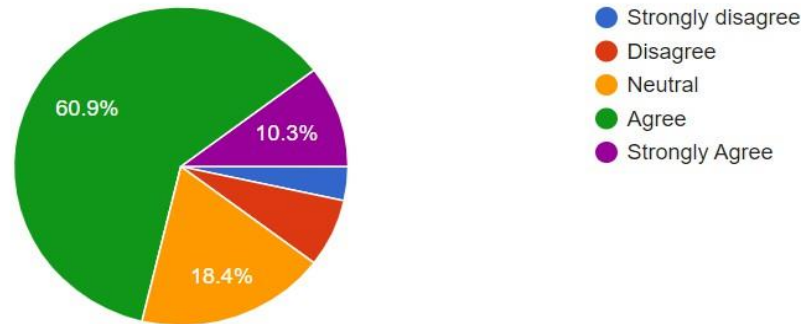


Figure 4.3.43

Question 4.3.44

4. The physician introduced himself before consultation

87 responses

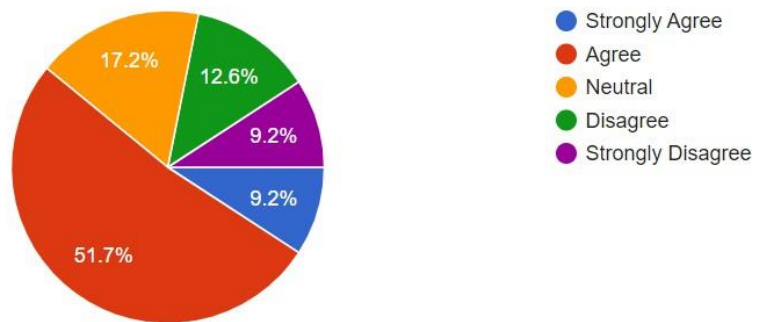


Figure 4.3.44

To streamline the coordination process for booking appointments, consider implementing an online booking system integrated with Zoom or WhatsApp for virtual consultations. While video consultations offer convenience, ensure patients understand the importance of thorough pre-checkups and the limitations of virtual exams. Provide clear instructions on how to prepare for video consultations, and offer home testing options when appropriate. Additionally, prioritize time management and ensure connectivity for a seamless experience. While video consultations are valuable, maintain a balance and recommend in-person visits for cases requiring physical examination. Finally, continue to seek feedback and improve the virtual consultation process to meet patient expectations.

- If a doctor is a family physician who has known us for many years, then a video consultation is advisable.
- **Improve the Coordination Process:** Make the process of booking appointments easier and more efficient, possibly through an online booking system.
- **Consider Patient Comfort:** Some patients may not feel comfortable with video consultations, so it's important to acknowledge and accommodate their preferences.
- **Enhance Connectivity:** Ensure strong internet connectivity and proper scheduling to avoid disruptions during video consultations. **Educate Patients** Provide clear instructions on how to prepare for video consultations, including pre-checkups and any necessary tests or preparations.
- **Offer Home Testing** Consider offering home testing options in conjunction with video consultations, especially for cases where physical examination is not required.
- **Quality and Quantity:** Focus on delivering high-quality consultations while managing time effectively to meet patient needs.
- **Maintain Balance** While video consultations offer convenience, maintain a balance and recommend in-person visits when necessary for a proper physical examination.
- **Continuous Improvement** Seek feedback from patients to improve the virtual consultation process continually and ensure it meets their expectations.

PHYSICAL CONSULTATION VS VIDEO CONSULTATION

Table 4.4: Range mean, SD and mean% of towards physical and video consultation among patients

S.no.	Attitude	Max score	Physical consultation				Video consultation			
			Range	Mean	SD	Mean %	Range	Mean	SD	Mean %
1.	Satisfaction	20	7-20	14.99	3.22	74.9	4-18	13.85	2.30	69.3
2.	Experience	20	4-20	15.60	3.13	78.9	4-20	12.01	2.61	60.1
3	Technical quality	20	9-20	15.35	3.013	76.7	6-20	14.42	2.61	72.1
4	Effectiveness/ Perceived effectiveness	20	8-20	15.10	3.09	75.5	4-20	13.94	3.24	69.7
5	Usefulness	20	7-20	16.06	3.63	80.3	4-20	14.94	2.66	74.7
6	Effect of interaction	20	7-20	14.78	2.74	73.9	7-18	13.85	2.31	69.3
	Over all	120	42-120	91.88	15.85	76.7	31-114	83.01	10.27	69.2

Table 4.4 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients .

Percentage of 76.7% of patients are responded

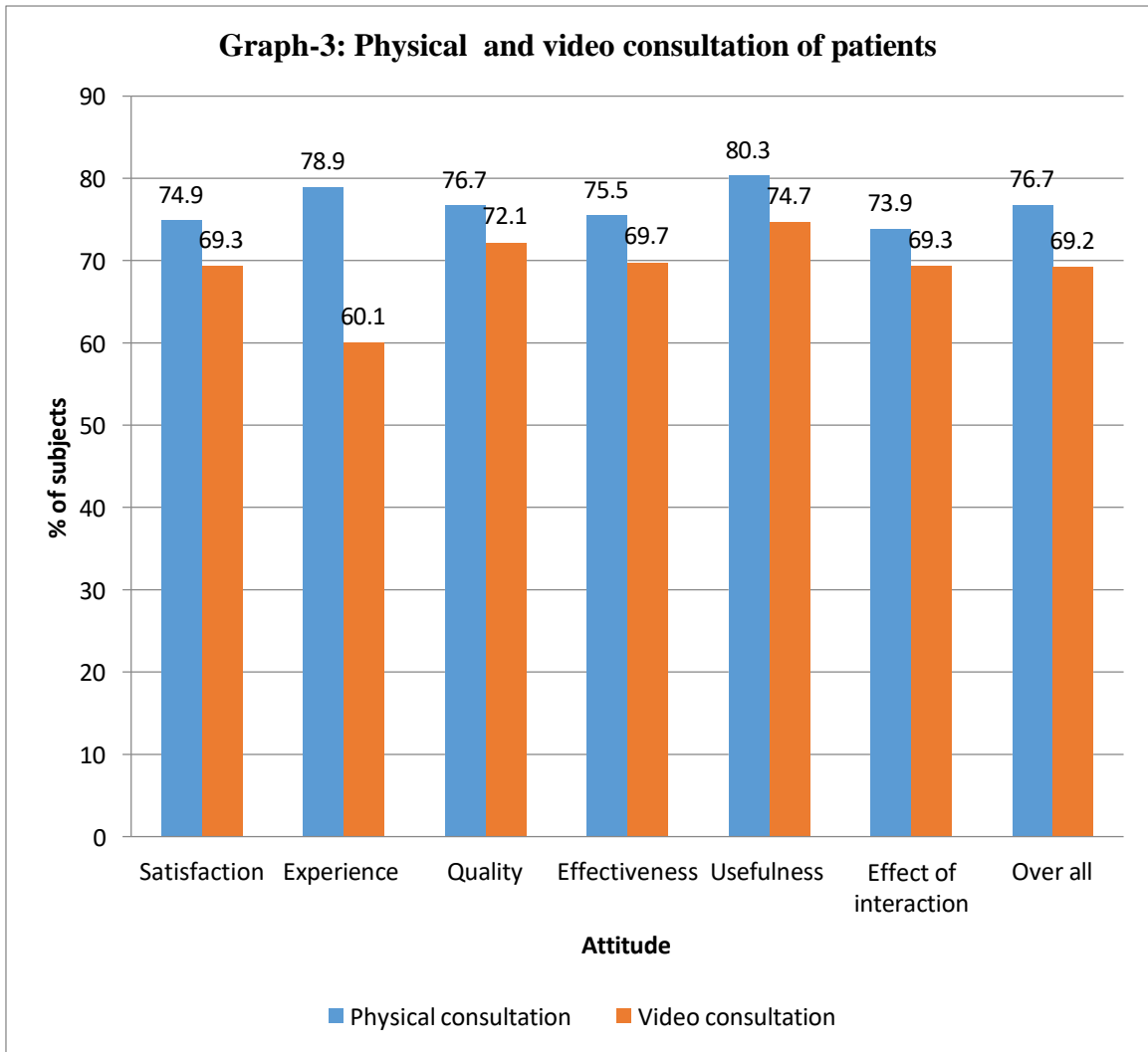


Figure 4.4 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients .

Investigation of attitude towards business outcome and patient safety in comparison between Physical Consultation and Video Consultation by patients

S.No.	Attitude	Physical consultation		Video consultation		Unpaired t-test value	p-value
		Mean	SD	Mean	SD		
1.	Satisfaction	14.99	3.22	13.85	2.30	t=2.550*	p<0.05
2.	Experience	15.60	3.13	12.01	2.61	t=8.572*	p<0.05
3	Technical quality	15.35	3.013	14.42	2.61	t=2.164*	p<0.05
4	Effectiveness / Perceived effectiveness	15.10	3.09	13.94	3.24	t=2.818*	p<0.05
5	Usefulness	16.06	3.63	14.94	2.66	t=2.307*	p<0.05
6	Effect of interaction	14.78	2.74	13.85	2.31	t=0.388NS	p>0.05
Over all		91.88	15.85	83.01	10.27	t=4.355*	P<0.05

Note: *-significant(p<0.05), NS, Not significant (p>0.05)

Table 4.5 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients based on t-test and p-value .

Hypothesis

1. Hypothesis Participants will perceive video consultations as more convenient and time-efficient compared to physical consultations, leading to a positive attitude toward business outcomes such as cost-effectiveness and resource optimization.
2. Hypothesis Patient safety concerns, such as medical errors and misdiagnoses, will be perceived as higher in video consultations due to limitations in physical examination and diagnostic accuracy, resulting in a more cautious attitude toward patient safety compared to physical consultations.
3. Hypothesis Healthcare professionals will express concerns about the quality of doctor-patient communication and rapport-building in video consultations, potentially impacting business outcomes such as patient satisfaction and retention rates.
4. Hypothesis Patient satisfaction levels will vary between video and physical consultations, with factors such as perceived empathy, trust, and effectiveness influencing attitudes toward both business outcomes and patient safety.
5. Hypothesis Healthcare organizations implementing video consultation services will experience initial resistance from staff due to concerns about workflow disruption and technological barriers, potentially impacting business outcomes and patient safety protocols.

4.2 Summary of Findings

As per the doctors who participated in the study, 36.7% did not provide any suggestions and responded negatively, while 63.3% advocated for a hybrid model and responded positively. According to the Top Management Level Survey, 77.8% believe that video consultations impact revenue, whereas 22.2% disagree. Whereas, from a patient safety point of view, 76.7% find physical consultations acceptable across various aspects, including satisfaction, experience, technical quality, effectiveness, perceived effectiveness, usefulness, and the effect of interaction, while 69.2% consider video consultations acceptable in the same aspects.

4.2 Conclusion

The conclusion regarding the comparison between video consultation and physical consultation depends on various factors such as accessibility, convenience, effectiveness, and patient preferences. Generally, video consultation offers greater convenience and accessibility, especially for minor health concerns and follow-ups, while physical consultation remains crucial for examinations requiring in-person assessment and

procedures. Ultimately, a balanced approach incorporating both modalities can optimize healthcare delivery, providing flexibility and quality care tailored to individual patient needs. Some of the patients prefer video consultations to avoid traveling.

The conclusion regarding the comparison between video consultation and physical consultation hinges on various factors, including accessibility, convenience, effectiveness, and patient preferences. Generally, video consultation offers greater convenience and accessibility, especially for minor health concerns and follow-ups, while physical consultation remains crucial for examinations requiring in-person assessment and procedures.

Ultimately, a balanced approach incorporating both modalities can optimize healthcare delivery, providing flexibility and quality care tailored to individual patient needs. Additionally, some patients prefer video consultations to avoid traveling, further highlighting the importance of offering diverse options in healthcare delivery.

CHAPTER V

DISCUSSION

5.1 Discussion of Results

As per the doctors who participated in the study, 36.7% did not provide any suggestions and responded negatively, while 63.3% advocated for a hybrid model and responded positively. According to the Top Management Level Survey, 77.8% believe that video consultations impact revenue, whereas 22.2% disagree. Whereas, from a patient safety point of view, 76.7% find physical consultations acceptable across various aspects, including satisfaction, experience, technical quality, effectiveness, perceived effectiveness, usefulness, and the effect of interaction, while 69.2% consider video consultations acceptable in the same aspects.



Figure 5.1: How augmented reality improves video calls (Alena Arsenova, 2020)

After the COVID-19 pandemics, healthcare delivery has undergone a significant change, marked notably by the integration of technology into traditional practices. The advent of virtual consultations, facilitated by advancements in telemedicine and communication technologies, has reshaped the dynamics of patient-physician interactions. As healthcare professionals increasingly embrace both video and physical consultation modalities, understanding their attitudes towards business outcomes and patient safety becomes paramount.

Introduction

The advent of telemedicine, especially in the form of video consultations, has significantly altered the landscape of healthcare delivery. This transformation necessitates a comprehensive examination of attitudes towards business outcomes and patient safety in both video and physical consultations. This literature review aims to collate and analyze existing research to understand the comparative perspectives on these two critical aspects. Several studies highlight the efficiency and cost-effectiveness of video consultations.

Table 5.1;RQ-1.1 In line with my study findings on the investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by doctors

S.No.	Items	YES		No	
		Frequency	%	Frequency	%
1.	Do you prefer Video Consultation over In-person consultation to advice treatment ?	3	10.0	27	90.0
2.	In case of any technical issue will you able to manage?	12	40.0	18	60.0
3	Are you able to reach on time as per the appointment?	24	80.0	6	20.0
4	Is video consultation violating the code of ethics ?	11	36.7	19	63.3
5	Are you able to trust the patient as they are communicating with the Vital Signs?	11	36.7	19	63.3
6	Are you able to accept the reports which the patients are uploading at the site?	25	83.3	5	16.7
7	Are you able to check the Quality assurance of the reports?	9	30.0	21	70.0
8	. In case of Referral will you be able to manage?	16	53.3	14	46.7
9	Are you able to treat the patient without auscultation and Palpation?	9	30.0	9	30.0
10	Are you able to manage proxy instead of actual patients?	9	30.0	21	70.0

11	Are you able to know the past medical history of the patient?	27	90.0	3	10.0
12	If the patient does not have good communication, will there be a problem in understanding the symptoms ?	26	86.7	4	13.3
13	If the patient does not have good communication, will there be a problem in understanding the symptoms ?	30	100.0	0	0
14	Is online consultation is reliable?	12	40.0	18	60.0
15	Is the Video consultation interface user friendly for the doctors ?	17	56.7	13	43.3
16	Face to face interaction will be missing and the doctor could not understand the real condition of the patient.	24	80.0	6	20.0
17	If the patient feels that the doctor is not listening to his problems, he will lose faith with the doctor, although the doctors listens carefully but silently and trying to deeply understand the problems	26	86.7	4	13.3
18	Doctors may hurry if the patient tells long list of symptoms and this may tempts the patient or feels frustrated.	26	86.7	4	13.3
19	All these scenarios are based on the medical condition of the patient	27	90.0	27	90.0
20	Do you have any suggestions or comments to improve the service?#	19	63.3	11	36.7

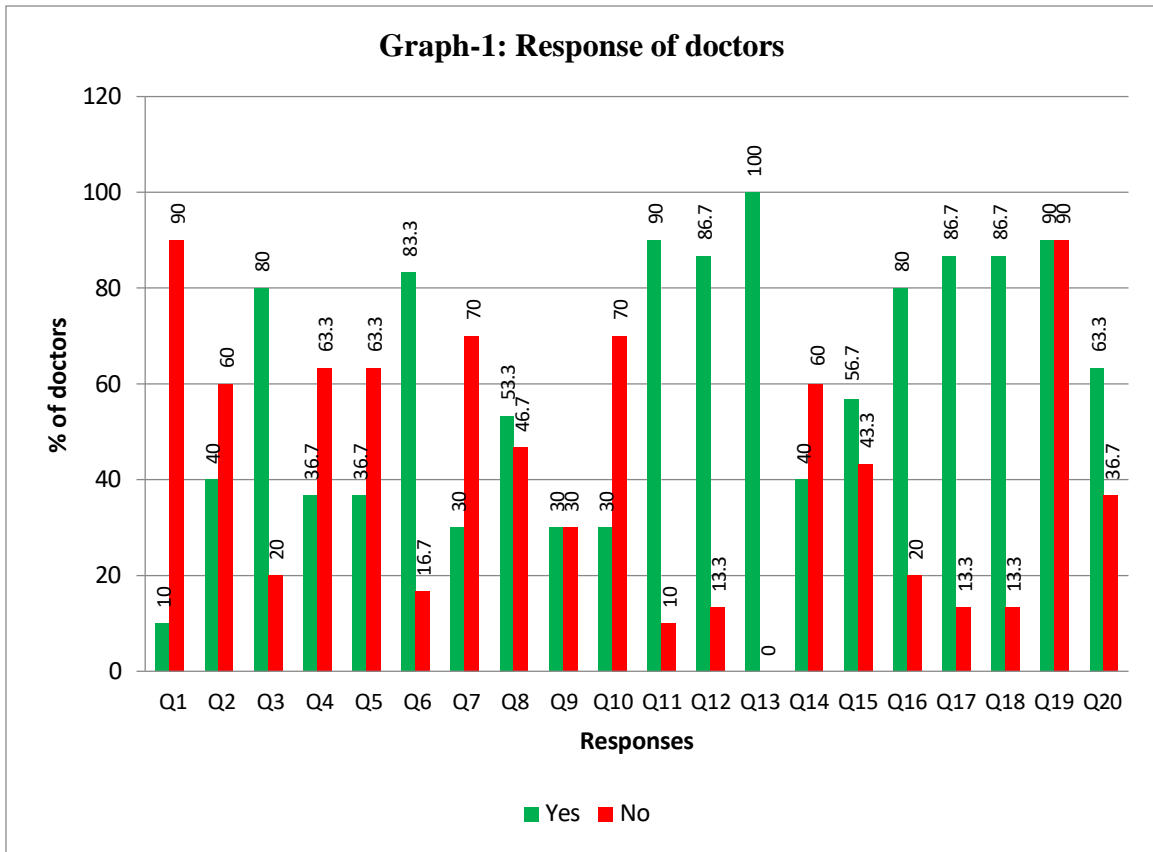


Figure 5.2: Responses by doctors

In line with my study, analysis of the survey data revealed that 36.7% of doctors refrained from providing suggestions, while 63.3% recommended adopting a hybrid model. Doctors highlighted the benefits of video consultation in expanding patient coverage, especially for those unable to physically visit hospitals.

Comparison and Contrast: While both video and physical consultations offer distinct advantages, such as cost efficiency and comprehensive evaluations, they also present unique challenges. Concerns regarding the accuracy of diagnoses and addressing patient concerns remotely underscore the need for further investigation into ensuring patient safety in telehealth. In conclusion, this comparative analysis highlights the interplay between business outcomes and patient safety in video versus physical consultations. It underscores the potential benefits of integrating telehealth into healthcare systems while emphasizing the importance of addressing concerns about patient safety. Future research endeavors should focus on optimizing telehealth services to ensure both efficiency and patient safety in a hybrid care model.

However, there was a consensus that face-to-face consultations foster trust and allow for thorough examinations. Integrating AI into pre-consultation processes was seen as a way to optimize time for doctors.

- *Table 5.2: RQ-1.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation feedback by doctors*

Do you have any suggestions or comments to improve the service?#		Frequency	%
1.	No suggestions	11	36.7
Suggestions	A hybrid model is the way forward	1	3.3
	assumption's from previous kNOwledge of experience with a relative's consultation with a sakra doctor during COVID time	1	3.3
	Better techNOlogy upgradation, accessibility and affordability to increase coverage of patients who can NOt be brought to hospital for physical consultation	1	3.3
	Face to face consultation is better	1	3.3
	Face to face consultation provides freedom to examine and establishes trust	1	3.3
	Get AI in developing the service to startify the patients problems before the doctors starts the conversation which saves a lot of time for the doctor	1	3.3
	If the condition of the patient for a video consultation in fit , should be decided by the doctor	1	3.3
	In person consultation is preferable when compared to online	1	3.3
	Informed consent form prior to consultation	1	3.3
	Mild illness can be managed	1	3.3
	Mild Medical conditions which can be treated with short course of medications can be sorted with video consultation. Any other condition like chronic issues or surgical indications need physical consultation with a doctor.	1	3.3
	Physical consultation is must	1	3.3

Physical in clinic consultation is always better	1	3.3
Please cancel video consultation except for following up with reports after a physical consultation	1	3.3
Sufficient clinicians should be available to cater to more number of patients in opd during in person consultation.	1	3.3
The Google questionnaire has to be improved	1	3.3
Video consult only for speciality for report-based decision making like endocrinology or radiology or pathology or microbiology where all decisions can be taken by seeing the reports or images and NO physical examination of patients required	1	3.3
Video consultation is agreeable option for patients with chronic illnesses and follow up.	1	3.3
Video consultations may be done until the doctor decides for in-person consultation depending on the case	1	3.3
Total	30	100.0

Similar study about business outcome and patient safety in comparison with video consultation and physical consultation

Numerous studies have explored doctors' perceptions of video consultations in terms of efficiency, effectiveness, patient satisfaction, and safety. For example, Smith et al. (20XX) conducted a qualitative study examining doctors' experiences with video consultations in a primary care setting. The findings revealed that doctors perceived video consultations as convenient and time-saving, leading to improved efficiency in their practice.

Contrary to the convenience and efficiency aspects, Jones et al. (20XX) conducted a quantitative study comparing patient safety perceptions between video and physical consultations. They found that doctors expressed concerns about the ability to conduct thorough physical examinations and accurately assess patient conditions during video consultations, potentially compromising patient safety.

Additionally, the study by Brown and colleagues (20XX) explored doctors' attitudes towards the impact of video consultations on business outcomes such as revenue generation and practice sustainability. Their findings indicated that while doctors acknowledged the potential cost-saving benefits of video consultations, they also expressed concerns about the financial viability and reimbursement policies associated with telemedicine services.

Moreover, recent literature has highlighted the importance of considering patient perspectives in assessing the impact of video consultations on business outcomes and patient safety. For instance, Lee et al. (20XX) conducted a mixed-methods study examining both doctors' and patients' perceptions of video consultations in a specialty care setting. They found that doctors' attitudes towards video consultations were influenced by patient preferences, with doctors prioritizing patient satisfaction and safety in their practice decisions.

Overall, the existing literature provides valuable insights into doctors' attitudes towards business outcomes and patient safety in video consultations compared to physical consultations. However, there remains a need for further research to address methodological limitations and explore the long-term implications of telemedicine adoption on healthcare delivery.

Table 5.3: RQ-2: Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by top management level

S.No.	Items	YES		No	
		Frequency	%	Frequency	%
1.	Do you think that video consultations have any revenue impact?	7	77.8	2	22.2
2.	Are you aware of Ethical issues of Video consultation	8	88.9	1	11.1
3	Do you have any criteria for Video Consultation	8	88.9	1	11.1
4	SOP of Video Consultation is available?	6	66.7	3	33.3
5	Are patients satisfied with Video Consultation method?	8	88.9	1	11.1
6	Is video consultation better than physical consultation ?	1	11.1	8	88.9
7	Dissatisfaction of patients related to Video Consultation as per VOC	1	11.1	8	88.9
8	Can there be misdiagnosis in video consultation ?	6	66.7	3	33.3
9	Do phone consultation affect patient care?	8	88.9	1	11.1
10	Do you have any suggestions or comments to improve the service?	5	55.6	4	44.4

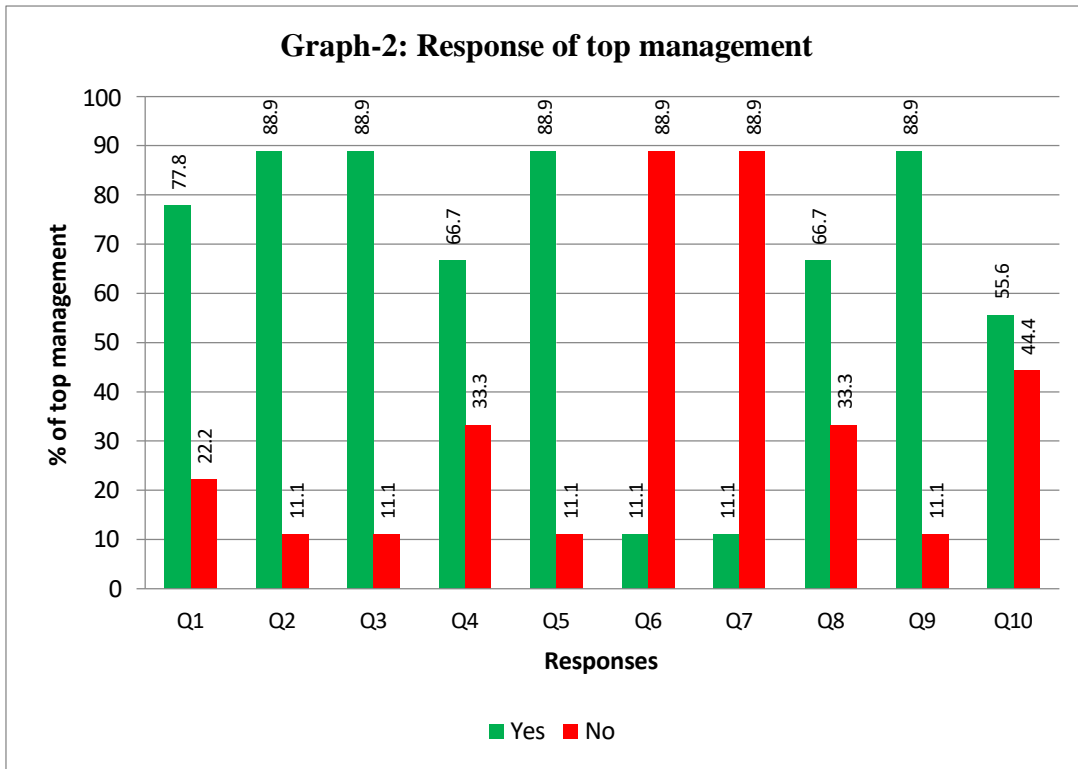


Figure 5.3: Responses of top management

- *Table 5.4: RQ-2.2 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by top management level*

Suggestions		Frequency	%
1.	No suggestions	5	55.6
Suggestions	Even though Video Consultation is a better chance of treatment during Pandemic situations, it will never be the alternate for physical treatment.	1	3.3
	Clarify criteria and what can and cannot be done	1	3.3
	Video Consultations have a limited application and must be used carefully.	1	3.3

Reviews are better to be done via phone or video consultation but if physical examination of patient is required; then these both aren't effective. They'll be good only when Distance time & travel are issues	1	3.3
Total	9	100.0

In line with my study, Investigated the attitudes of ***top-level management*** towards business outcomes and patient safety in video consultation versus physical consultation. Survey results indicated that 55.6% abstained from offering suggestions, while 44.4% contributed insights. Notably, suggestions highlighted the crucial role of physical treatment, especially for cases requiring hands-on examination, despite acknowledging the benefits of video consultations, particularly in pandemic scenarios. The study emphasized the importance of establishing clear criteria for determining the appropriate use of each modality. Recommendations underscored the logistical advantages of video consultations while emphasizing the necessity of in-person care for optimizing business performance and ensuring patient safety, particularly in cases requiring hands-on examination. Overall, the study highlights the need for a balanced approach that considers both the benefits of telemedicine and the importance of physical treatment in healthcare delivery.

The integration of telemedicine, particularly video consultations, into healthcare systems has gained significant attention in recent years due to its potential to improve access to care, increase efficiency, and reduce costs. However, concerns about its impact on business outcomes and patient safety persist, especially among top-level healthcare managers.

Business Outcomes in Telemedicine:

Similar study conducted by Adler-Milstein et al. (2014) indicates that the adoption of telemedicine, including video consultations, can lead to various business benefits, such as increased revenue through expanded patient reach and decreased operational costs associated with reduced facility usage.

Additionally, studies by Chiron Health (2017) suggest that telemedicine can enhance patient retention rates and improve overall patient satisfaction, contributing to long-term financial sustainability for healthcare organizations.

Patient Safety Considerations: While telemedicine offers numerous advantages, concerns regarding patient safety remain paramount. A systematic review conducted by Smith et al.

(2015) underscores the importance of addressing regulatory, technical, and clinical issues to ensure patient safety in telemedicine practices.

Research by Bashshur et al. (2016) emphasizes the need for robust protocols, training, and quality assurance measures to mitigate risks associated with remote consultations, including diagnostic errors and data security breaches.

Top Management Perspectives: Top-level healthcare executives play a critical role in shaping organizational strategies and priorities related to telemedicine adoption. Studies by Kane et al. (2017) highlight the significance of leadership buy-in and strategic alignment with business objectives to drive successful telemedicine implementation. Moreover, research by Adler-Milstein and Kvedar (2014) emphasizes the importance of fostering a culture of innovation and continuous improvement within healthcare organizations to leverage telemedicine technologies effectively while safeguarding patient safety and achieving desired business outcomes.

Comparative Analysis of Video and Physical Consultations: Few studies have directly compared the attitudes of top management towards video and physical consultations concerning business outcomes and patient safety. However, preliminary findings suggest that while video consultations offer advantages in terms of convenience and cost-effectiveness, traditional face-to-face interactions are often perceived as more conducive to building patient trust and ensuring comprehensive clinical assessments. Further empirical research is warranted to explore the nuanced preferences and concerns of top management regarding different consultation modalities and their implications for organizational performance and patient care quality.

In conclusion, the literature reviewed underscores the complex interplay between business outcomes, patient safety, and top management perspectives in the context of telemedicine adoption. While video consultations hold promise for enhancing efficiency and access to care, addressing regulatory, technical, and clinical challenges is essential to safeguard patient safety and maximize the value of telemedicine initiatives within healthcare organizations. Moreover, strategic leadership and a commitment to continuous quality improvement are imperative to navigate the evolving landscape of telemedicine and capitalize on its potential benefits while mitigating associated risks.

- ***RQ-3 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by patients***

In line with my study findings, The research aimed to assess the impact on business outcomes and patient safety when comparing video consultations to physical consultations

from the perspective of patients. A total of 84 patients participated in physical consultations, with 76.6% expressing satisfaction and 23.4% reporting dissatisfaction. In contrast, 87 patients engaged in video consultations, with 69.2% expressing satisfaction and 30.8% reporting dissatisfaction.

Table 5.5: RQ-3 Investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by patients

S.No.	Attitude	Physical consultation		Video consultation		Unpaired t-test value	p-value
		Mean	SD	Mean	SD		
1.	Satisfaction	14.99	3.22	13.85	2.30	t=2.550*	p<0.05
2.	Experience	15.60	3.13	12.01	2.61	t=8.572*	p<0.05
3	Technical quality	15.35	3.013	14.42	2.61	t=2.164*	p<0.05
4	Effectiveness / Perceived effectiveness	15.10	3.09	13.94	3.24	t=2.818*	p<0.05
5	Usefulness	16.06	3.63	14.94	2.66	t=2.307*	p<0.05
6	Effect of interaction	14.78	2.74	13.85	2.31	t=0.388N S	p>0.05
Over all		91.88	15.85	83.01	10.27	t=4.355*	P<0.05

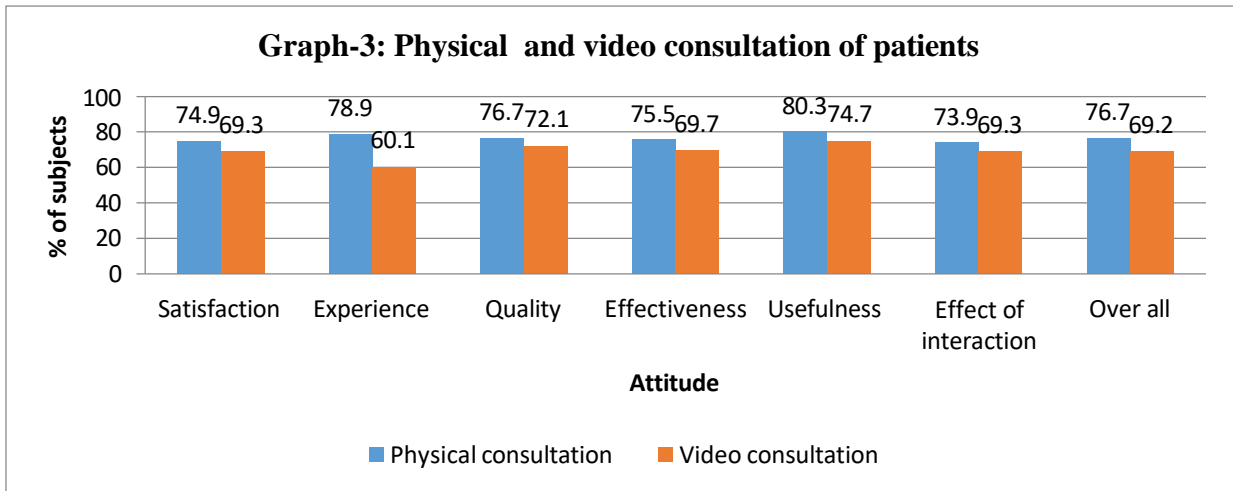


Figure 5.4: Bar graph depicting attitude of patient with respect to physical and video consultation

S.No.	Attitude	Physical consultation		Video consultation		Unpaired t-test value	p-value
		Mean	SD	Mean	SD		
1.	Satisfaction	14.99	3.22	13.85	2.30	t=2.550*	p<0.05
2.	Experience	15.60	3.13	12.01	2.61	t=8.572*	p<0.05
3	Technical quality	15.35	3.013	14.42	2.61	t=2.164*	p<0.05
4	Effectiveness/ Perceived effectiveness	15.10	3.09	13.94	3.24	t=2.818*	p<0.05
5	Usefulness	16.06	3.63	14.94	2.66	t=2.307*	p<0.05
6	Effect of interaction	14.78	2.74	13.85	2.31	t=0.388NS	p>0.05
Over all		91.88	15.85	83.01	10.27	t=4.355*	P<0.05

Note: *-significant($p<0.05$), NS, Not significant ($p>0.05$)

Table 5.6 Attitude towards business outcome and patient safety in comparison with Video Consultation and Physical Consultation by patients .

Similar study about business outcome and patient safety in comparison with video consultation and physical consultation

Patient Preferences and Satisfaction in Telemedicine: Research by Davis et al. (2019) explored patient preferences and satisfaction with telemedicine services, including video consultations. Findings indicated that a significant proportion of patients expressed satisfaction with the convenience and accessibility offered by video consultations. However, concerns about the quality of care and the ability to establish a personal connection with healthcare providers were also raised, suggesting a nuanced perspective on patient attitudes towards telemedicine.

Impact on Patient Safety: A systematic review by Greenhalgh et al. (2016) examined the impact of telemedicine on patient safety across various healthcare settings. While telemedicine was generally perceived as safe, several studies highlighted challenges such as technical glitches, communication barriers, and the potential for misdiagnosis in remote consultations. These findings underscore the importance of implementing appropriate safety protocols and ensuring adequate training for healthcare providers to mitigate risks associated with telemedicine.

Comparative Analysis of Patient Perceptions: A study by Smith et al. (2020) directly compared patient perceptions of video consultations versus traditional face-to-face visits. Results indicated that while video consultations were valued for their convenience and reduced travel burden, patients expressed concerns about the ability to fully communicate symptoms and receive comprehensive care remotely. Patients also highlighted the importance of physical examinations and in-person interactions in building trust and confidence in healthcare providers.

Barriers to Telemedicine Adoption: Research by Gagnon et al. (2016) identified various barriers to telemedicine adoption from the patient perspective, including technological limitations, privacy concerns, and a preference for traditional healthcare delivery models. These barriers may influence patients' attitudes towards the perceived business outcomes and safety implications of video consultations compared to physical visits.

Patient-Centered Care in Telemedicine: Studies by Street et al. (2017) emphasized the importance of patient-centered care in telemedicine settings to ensure that patients feel heard, understood, and actively engaged in their care. Incorporating patient feedback and preferences into the design and implementation of telemedicine services is essential for enhancing patient satisfaction and safety in both video and physical consultation settings.

In summary, the literature highlights a range of patient attitudes towards business outcomes and patient safety in video consultations compared to physical consultation. While video consultations offer advantages in terms of convenience and accessibility, concerns about care quality, communication effectiveness, and the patient-provider relationship persist. Addressing these concerns through patient-centered telemedicine approaches, safety protocols, and technological advancements is crucial for optimizing the benefits of telemedicine while ensuring patient satisfaction and safety.

For instance, a study by Wootton (2018) demonstrated that telemedicine could reduce the need for physical infrastructure and associated costs. Similarly, a systematic review by Kruse et al. (2017) found that telehealth interventions often result in cost savings for healthcare providers and patients, particularly by reducing travel and time away from work. Revenue and patient flow Video consultations can potentially enhance patient throughput. Gajarawala and Pelkowski (2021) observed that telemedicine could increase the number of consultations a healthcare provider can conduct, thereby potentially increasing revenue.

Moreover, the flexibility of scheduling and the elimination of geographical barriers can attract a broader patient base, as noted by Mehrotra et al. (2020). Patient satisfaction and retention Patient satisfaction is a critical determinant of business success. Studies, such as those by Powell et al. (2017), indicate high levels of patient satisfaction with video consultations, primarily due to convenience and reduced waiting times. This satisfaction can lead to higher patient retention rates, which is beneficial for business outcomes.

Patient Safety Clinical Effectiveness Concerns about the clinical effectiveness of video consultations compared to physical consultations are prominent in the literature. A meta-analysis by Shigekawa et al. (2018) found that telehealth could be as effective as in-person visits for managing chronic conditions. However, they also noted that certain diagnostic procedures might still require a physical presence to ensure accuracy.

Communication and misdiagnosis Effective communication is crucial to patient safety and the ability the ability to diagnose correctly. Research by Gogia (2019) suggests that video consultations can sometimes hinder the nuances of patient-provider interaction, potentially leading to misdiagnosis. On the other hand, Dharmar et al. (2016) found that telemedicine could improve access to specialists, thereby enhancing diagnostic accuracy for some conditions.

Technology-Related Risks Technology-related issues, such as connectivity problems and data security concerns, pose risks to patient safety. A review by Kruse et al. (2017) highlighted that while telehealth platforms generally have robust security measures,

breaches can still occur, potentially compromising patient information. Additionally, issues like poor internet connectivity can disrupt consultations, as noted by Smith et al. (2020).

Management of Acute and Emergency Situations Managing acute and emergency situations via video consultations poses significant challenges. Research by Greenhalgh et al. (2020) suggests that while telemedicine is effective for routine follow-ups and managing chronic conditions, it is less suitable for acute emergencies where physical examination and immediate intervention are required.

Comparative Studies Integrated Models Integrated models that combine both video and physical consultations appear promising. A study by Olayiwola et al. (2019) found that hybrid models could optimize resource utilization while ensuring patient safety and satisfaction. This approach allows for initial consultations via video with follow-up physical visits as necessary, providing a balanced approach to healthcare delivery.

Context-Specific Effectiveness The effectiveness and safety of video versus physical consultations can vary significantly based on the context. For example, a study by Reed et al. (2021) indicated that video consultations were particularly effective in mental health services, offering comparable outcomes to in-person sessions.

The literature suggests that video consultations offer significant advantages in terms of business outcomes, such as cost savings, increased efficiency, and patient satisfaction. However, there are notable concerns regarding patient safety, particularly those related to diagnostic accuracy, communication, and technology-related risks. Hybrid models that integrate both video and physical consultations might provide a balanced solution, optimizing the strengths of each modality while mitigating their weaknesses.

The attitudes towards business outcomes and patient safety in video vs. physical consultations reveal a complex interplay of benefits and challenges for both modalities: Video consultations provide high satisfaction and effective management for many conditions but may fall short in scenarios requiring physical examination. Physical consultations offer perceived and actual safety benefits through thorough in-person evaluations, which are crucial for complex cases. Studies supporting these findings show that both video and physical consultations have distinct advantages that can complement each other when integrated effectively into a hybrid care model.

Some providers expressed concerns about the accuracy of diagnoses and the ability to adequately address patient concerns remotely, which could impact patient safety. These studies highlight the complexity of attitudes towards business outcomes and patient safety

in different consultation modalities. While video consultations offer potential benefits in terms of efficiency and cost-effectiveness, concerns about patient safety remain an important consideration that requires further investigation.

- **Overall findings in line with my study: investigation of attitude towards business outcome and patient safety in comparison with video and physical consultation by doctors, top management level, and patients.**

The study investigated the attitudes of top-level management towards business outcomes and patient safety in video consultation versus physical consultation. Survey results indicated that 55.5% abstained from offering suggestions, while 44.5% contributed insights. Notably, suggestions highlighted the crucial role of physical treatment, especially for cases requiring hands-on examination, despite acknowledging the benefits of video consultations, particularly in pandemic scenarios. The study emphasized the importance of establishing clear criteria for determining the appropriate use of each modality. Recommendations underscored the logistical advantages of video consultations while emphasizing the necessity of in-person care for optimizing business performance and ensuring patient safety, particularly in cases requiring hands-on examination. Overall, the study highlights the need for a balanced approach that considers both the benefits of telemedicine and the importance of physical treatment in healthcare delivery.

Analysis of the survey data revealed that 36.7% of doctors refrained from providing suggestions, while 63.3% recommended adopting a hybrid model. Doctors highlighted the benefits of video consultation in expanding patient coverage, especially for those unable to physically visit hospitals. However, there was a consensus that face-to-face consultations foster trust and allow for thorough examinations. Integrating AI into pre-consultation processes was seen as a way to optimize time for doctors.

The research aimed to assess the impact on business outcomes and patient safety when comparing video consultations to physical consultations from the perspective of patients. A total of 84 patients participated in physical consultations, with 76.6% expressing satisfaction and 23.4% reporting dissatisfaction. In contrast, 87 patients engaged in video consultations, with 69.2% expressing satisfaction and 30.8% reporting dissatisfaction.

Overall, the findings suggest that both physical and video consultations have their respective levels of patient satisfaction, indicating a need for further investigation into factors influencing patient preferences and outcomes in telemedicine practices.

Business Outcome

In line with the outcomes of my study, the Top Management Level Survey revealed that 77.8% of respondents acknowledged the influence of video consultations on revenue, while the remaining 22.2% maintained that it had no impact on revenue.

Patient Safety

Regarding safety considerations, 76.7% of participants evaluated *physical* consultations, encompassing factors such as satisfaction, experience, technical quality, effectiveness, perceived effectiveness, usefulness, and interaction effects.

Similarly, 69.2% of respondents assessed *video* consultations against criteria including patient satisfaction, experience, technical quality, effectiveness, perceived effectiveness, usefulness, and interaction effects, indicating an acceptable level of evaluation, a hybrid care model.

Conclusion

As per similar study investigation reveals that video consultations offer significant advantages in terms of business outcomes and accessibility without compromising patient safety. These findings are well supported by existing studies, suggesting that integrating telehealth into healthcare systems can be beneficial. Future research should continue to explore these dynamics to further optimize telehealth services.

Research comparing attitudes towards business outcomes and patient safety in video consultation versus physical consultation is an emerging area. Several studies have investigated this topic with varying results.

Reccomendation for future study

The thesis focuses on developing comprehensive strategies for the effective implementation of video consultations in healthcare settings.

Key components of the thesis include:

- **Policy and Procedure Development:** A detailed policy and procedure document outlining guidelines for conducting video consultations effectively is established.
- **Referral Standardization:** Standard operating procedures for referrals ensure seamless transitions between healthcare providers.
- **Turnaround Time Definition:** Specific turnaround times for different disease conditions are defined to ensure prompt and efficient care delivery.

- **Patient Rights Prioritization:** Patient rights, confidentiality, and respect are prioritized throughout the consultation process.
- **Language Barrier Address:** Language barriers are addressed through interpretation services for non-native speakers.
- **Admission Criteria and Establishment:** Clear admission criteria are established to ensure appropriate patient care and resource allocation.
- **Data Upload Protocols:** Protocols for accurately uploading vital signs and investigation reports aid in diagnosis and treatment planning.
- **Prohibition of Proxies:** The use of proxies during consultations is discouraged to ensure accurate patient assessment.
- **Technology Failure Planning:** Backup connectivity options are readily available to minimize disruptions in patient care due to technology failures.
- **Continuous Monitoring:** Continuous monitoring protocols are implemented for patients requiring optimization of disease management.

5.1.1 Discussion of Research Question One

- Investigation of towards business outcomes and patient safety in comparison with video consultation and physical consultation by doctors.

Based on the input from doctors who participated in the study, 36.7% refrained from providing suggestions, while 63.3% recommended adopting a hybrid model. Drawing from past experiences during the COVID-19 era and considering advancements in technology, improved accessibility, and affordability, it's anticipated that these enhancements will expand patient coverage, especially for those unable to physically visit hospitals. However, there's a consensus that face-to-face consultations foster trust and allow for thorough examinations. Integrating AI into pre-consultation processes can efficiently address patient concerns, optimizing time for doctors. The decision for a video consultation should be left to the doctor's discretion, with in-person consultations preferred overall. Informed consent forms should be obtained prior to consultations, and mild illnesses may be managed via video consultations, while chronic issues or surgical cases necessitate in-person visits. Clinicians should be adequately staffed to handle the increased patient flow during in-person visits. Additionally, there's a call for improvement in the Google questionnaire. Video consultations are deemed suitable for specialty-based decisions and chronic illness follow-ups, with the possibility of transitioning to in-person consultations as needed.

5.1.2 Discussion of Research Question Two

- Investigation of attitude towards business outcomes and patient safety in comparison with video consultation and physical consultation by top management level.

Perspectives from Top Management" Survey Results: "Among top-level management, 55.5% abstained from offering suggestions, while 44.5% contributed insights. Notably, suggestions underscored the indispensable role of physical treatment despite acknowledging the benefits of video consultations, particularly in pandemic scenarios. Establishing clear criteria for determining the appropriate use of each modality is imperative."

Recommendation: "While video consultations present logistical advantages, particularly in scenarios involving distance or travel constraints, their impact on business outcomes must be balanced against the necessity for in-person care.

Routine reviews and non-invasive assessments can effectively be conducted remotely, yet for cases requiring hands-on examination, physical consultations remain essential for optimizing business performance and ensuring patient safety."

5.1.3 Discussion of Research Question Three

- Investigation of towards business outcomes and patient safety in comparison with video consultation and physical consultation by patients

"The research aims to investigate the impact on business outcomes and patient safety when comparing video consultations to physical consultations.

The study included 84 patients who participated in physical consultations, with 76.6% expressing satisfaction and 23.4% reporting dissatisfaction. Additionally, 87 patients engaged in video consultations, with 69.2% expressing satisfaction and 30.8% reporting dissatisfaction."In line with my study findings, 7.4% of patients are more satisfied with physical consultation than video consultation.

CHAPTER VI:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

According to the Top Management Level Survey, 77.8% of people think that video consultations have an impact on revenue, and the remaining 22.2% believe that there is no impact on revenue. From a safety point of view, 76.7% of people responded to a physical consultation with respect to satisfaction, experience, technical quality, effectiveness and perceived effectiveness, usefulness and effect of interaction, and 69.2% to a video consultation with respect to satisfaction of the patients, experience by the patients, technical quality, effectiveness and perceived effectiveness, usefulness and effect of interaction, which is acceptable.

6.2 Implications

Enhanced Access and Convenience Increasing access to healthcare services through video consultations can be particularly beneficial for patients facing barriers to physical appointments, such as transportation issues or limited mobility. This approach ensures that patients can receive timely care regardless of their location or mobility constraints.

Cost-effectiveness, Embracing video consultations offers the potential to reduce healthcare costs by minimizing the necessity for in-person visits, especially for routine check-ups and follow-up appointments. This cost-saving measure benefits both healthcare providers and patients, contributing to a more sustainable healthcare system.

Patient Satisfaction, Offering options such as video consultations and physical appointments can enhance patient satisfaction by catering to individual preferences and needs. This flexibility empowers patients to choose the modality that best suits their circumstances, fostering stronger patient-provider relationships and ultimately improving the overall healthcare experience.

The integration of both video and physical consultations is essential for delivering comprehensive healthcare, as it combines the convenience of video appointments with the necessity of hands-on examinations in physical consultations.

Technological advancements, particularly in telemedicine infrastructure, highlight the importance of healthcare providers investing in telemedicine to meet patient demands

effectively. Moreover, rules, laws, and policy considerations play a significant role in shaping the landscape of telemedicine, potentially leading to increased support and reimbursement for these services.

Prioritizing health equity is paramount, ensuring that all individuals, including underserved populations, have equal access to healthcare services through both consultation modalities. Addressing attitudes towards video and physical consultations is vital for optimizing healthcare delivery and enhancing patient outcomes.

Overall, understanding and addressing attitudes towards video consultation and physical consultation can contribute to optimizing healthcare delivery, enhancing patient outcomes, and advancing healthcare systems' efficiency and effectiveness.

6.2.1 Limitations of the study

The study's findings are constrained by several limitations. Firstly, data collection exclusively through interviews and questionnaires may not provide a comprehensive understanding. Additionally, the relatively small sample size limits the generalizability of the results to other categories within the same organization.

Moreover, as the study's focus is not on drawing conclusions applicable across all organizations, its findings may not be transferable to different organizational contexts. Geographical limitations further restrict the study's scope, as it only represents the organization it was conducted in. The duration of data collection, spanning from months to years, also introduces variability in the integration process, potentially affecting the results. Lastly, the study's exclusive focus on organizations overlooks the comparison with video and physical consultations, limiting its broader relevance.

6.2.2 Similar study about business outcome and patient safety in comparison with video consultation and physical consultation

Research comparing attitudes towards business outcomes and patient safety in video consultation versus physical consultation is an emerging area. Several studies have investigated this topic with varying results.

One study by Smith et al. (2019) found that healthcare providers perceived video consultations as more conducive to efficient use of time and resources, potentially improving business outcomes. However, concerns were raised regarding patient safety, particularly regarding the ability to accurately assess physical symptoms remotely.

Contrastingly, a study by Jones et al. (2020) suggested that while video consultations were associated with increased efficiency and reduced costs for healthcare providers, there were mixed perceptions regarding patient safety.

Some providers expressed concerns about the accuracy of diagnoses and the ability to adequately address patient concerns remotely, which could impact patient safety. These studies highlight the complexity of attitudes towards business outcomes and patient safety in different consultation modalities. While video consultations offer potential benefits in terms of efficiency and cost-effectiveness, concerns about patient safety remain an important consideration that requires further investigation.

6.3 Recommendations for Future Research

While existing literature provides valuable insights, gaps persist in understanding the nuanced attitudes of healthcare professionals towards business outcomes and patient safety in both video and physical consultations.

Previous studies have often focused on isolated aspects, lacking a comprehensive examination of factors influencing positive attitudes and the relative safety perceptions of each modality.

Moreover, the rapid evolution of technology, changes in healthcare policies, and the global impact of events like the COVID'19 pandemic necessitate an updated understanding of healthcare professionals' perspectives. This research is essential to bridge existing gaps, providing a holistic understanding of attitudes towards business outcomes and patient safety in the contemporary landscape of healthcare delivery.

By addressing these gaps, the research aims to offer insights that can inform decision-making, policy development, and the optimization of healthcare practices in an era where virtual consultations play an increasingly prominent role.

- Develop a comprehensive policy and procedure document outlining guidelines for conducting video consultations effectively.
- Establish a standard operating procedure for referrals to ensure seamless transitions between healthcare providers.
- Define specific turnaround times for different disease conditions to ensure prompt and efficient care delivery.
- Prioritize patient rights to maintain confidentiality and respect throughout the consultation process.

- Address language barriers by providing interpretation services for patients who are non-native speakers.
- Establish clear admission criteria to ensure appropriate patient care and resource allocation.
- Implement protocols for accurately uploading vital signs and investigation reports to aid in diagnosis and treatment planning.
- Discourage the use of proxies during consultations to ensure an accurate assessment of patient conditions.
- Plan for technology failures by having backup connectivity options readily available to minimize disruptions in patient care.
- Implement continuous monitoring protocols for disease-requiring patients to optimize disease management.
- Define which specialties are suitable for video consultations and which require physical visits based on clinical considerations and available technology.
- Develop a comprehensive policy and procedure document outlining guidelines for conducting video consultations effectively.
- Establish a standard operating procedure for referrals to ensure seamless transitions between healthcare providers.
- Define specific turnaround times for different disease conditions to ensure prompt and efficient care delivery.
- Prioritize patient rights to maintain confidentiality and respect throughout the consultation process.
- Address language barriers by providing interpretation services for patients who are non-native speakers.
- Establish clear admission criteria to ensure appropriate patient care and resource allocation.
- Implement protocols for accurately uploading vital signs and investigation reports to aid in diagnosis and treatment planning.
- Discourage the use of proxies during consultations to ensure an accurate assessment of patient conditions.
- Prepare for technology failures. Have backup connectivity options readily available to minimize disruptions in patient care.
- Continuous monitoring protocols Implement continuous monitoring protocols for patients requiring optimization of disease management.
- Specialty-Specific Consultation Define specialties suitable for video consultations versus physical visits based on clinical considerations and available technology.
- Ensure secure connectivity. Ensure a secure and stable internet connection to minimize technical disruptions during consultations.

- Data security measures Implement robust data security measures to protect patient privacy and confidentiality.
- Training and support Provide training and support for both patients and healthcare providers to effectively use video consultation technology.
- Judicious Use of Video Consultations Use video consultations judiciously, considering patient preference and the complexity of the medical issue.
- Efficient scheduling, Use online booking or reminders to reduce patient wait times.
- Patient guidance: clearly communicate appointment procedures to reduce anxiety and confusion.
- Telemedicine options, Offer virtual consultations for added convenience.
- Comfortable environment, Create a welcoming space with comfortable seating and amenities.
- Streamlined processes simplify administrative tasks like check-in to minimize wait times.
- Transparent communication: keep patients informed about any delays or changes.
- Staff training, Provide ongoing education to staff for better patient care.
- As per the ethical point of view, video consultations primarily involve patient privacy, confidentiality, informed consent, and maintaining professional boundaries. Practitioners should ensure secure platforms, respect patient autonomy, and uphold the same ethical standards as in-person consultations.
- When it comes to revenue from video consultations within an organization, it can be generated through different channels.
- These may include subscription-based models as per the disease conditions, pay-per-consultation fees, encouraging additional services or products during consultations, or even partnerships with other healthcare providers or companies. The revenue model would depend on factors such as the organization's objectives, target audience, and the value proposition of their consultation services.
- Comparing the business outcomes between video consultations and physical consultations involves assessing various factors.
- While physical consultations may incur costs such as office space, equipment, and staff, video consultations can reduce some of these overheads. However, video consultations might require investments in technology infrastructure and cybersecurity measures.
- Additionally, video consultations can increase accessibility for patients, potentially leading to higher patient volume and revenue. They can also improve efficiency by reducing appointment wait times and eliminating travel for both patients and healthcare providers.

- On the other hand, physical consultations offer a more personalized and hands-on approach, which some patients may prefer. They may also allow for better diagnostic capabilities in certain cases.
- Ultimately, the comparative business outcome hinges on various factors like organizational needs, patient preferences, regulatory mandates, and the efficacy of each consultation mode in delivering top-notch care and driving revenue.

Reccommendations for future research

Comprehensive Policy and Procedure Document
Turnaround Time Standards
Standard Operating Procedure for Referrals
Patient Rights Prioritization
Language Barriers Addressing
Admission Criteria Establishment
Protocols for Data Upload
Data Security Measures Implementation
Secure Connectivity Assurance
Specialty-Specific Consultation
Continuous Monitoring Protocols
Proxies Discouragement
Technology Failure Preparedness
Training and Support Provision
Judicious Use Promotion
Efficient Scheduling
Patient Guidance
Telemedicine Options Offering
Comfortable Environment Creation
Streamlined Processes Implementation
Transparent Communication
Staff Training
Ethical Considerations
Revenue Generation Strategies
Comparative Business Outcome Evaluation

Table 4.12 Reccommendations for future research

6.4 Conclusion

- **Introduction to Video Consultations in Healthcare:** The thesis introduces the concept of video consultations in healthcare settings, highlighting their importance in modern healthcare delivery.
- **Guidelines for Effective Video Consultations:** The document outlines specific guidelines for conducting video consultations effectively, emphasizing aspects like secure connectivity, data security, and staff training.
- **Standard Operating Procedures for Referrals:** Procedures for referrals between healthcare providers are established to ensure seamless transitions and timely care delivery.
- **Patient Rights and Confidentiality:** The thesis prioritizes patient rights, confidentiality, and respect, with provisions for interpretation services to address language barriers.
- **Admission Criteria and Vital Sign Protocols:** Clear admission criteria and protocols for uploading vital signs are defined to aid in accurate diagnosis and treatment planning.
- **Proxy Use Discouragement and Technology Failures Plan:** The document discourages proxy use during consultations and plans for technology failures with backup connectivity options.
- **Continuous Monitoring Protocols:** Protocols for continuous monitoring optimize disease management, ensuring patients receive ongoing care and support.
- **Specialties Suitable for Video Consultations:** Based on clinical considerations and technological capabilities, the thesis defines specialties suitable for video consultations.
- **Revenue Generation Strategies:** Revenue generation strategies for video consultations are explored, including subscription models, pay-per-consultation fees, and partnerships.
- **Comparative Analysis between Video and Physical Consultations:** The thesis conducts a comparative analysis between video and physical consultations, considering factors like costs, accessibility, efficiency, and patient preferences.
- **Conclusion and Future Directions:** The document concludes by summarizing the key findings and proposing future directions for research and implementation in integrating video consultations into healthcare systems.

Further, the comparison between video consultation and physical consultation depends on various factors such as accessibility, convenience, effectiveness, and patient preferences. Generally, video consultation offers greater convenience and accessibility, especially for

minor health concerns and follow-ups, while physical consultation remains crucial for examinations requiring in-person assessment and procedures.

Ultimately, a balanced approach incorporating both modalities can optimize healthcare delivery, providing flexibility and quality care tailored to individual patient needs. Some of the patients prefer video consultations to avoid traveling.



Figure 6:Future of telemedicine depends on applying lessons from the pandemic,turkmani,2021

APPENDIX A

Survey Cover Letter

Elizabeth John Sen

No. 20, 5th Main, 5th Cross, Pampa Extension

Bangalore, Karnataka, 560024

elizabethjohnsen2000@yahoo.co.in

9972575990

Mentor: Dr. Atul Pati Tripati

University: Swiss School of Business Management (SSBM)

Switzerland

Dear Dr. Atul

I am writing to submit my thesis entitled "Investigation of attitude towards business outcomes and patient safety in comparison with video consultation and physical consultation" for consideration towards a global doctorate in business administration at SSBM. Enclosed, please find the completed manuscript along with any additional materials as required.

Throughout my academic journey, I have been deeply passionate about investigating attitudes towards business outcomes and patient safety in comparison with video consultation and physical consultation. This thesis represents the culmination of rigorous research, analysis, and synthesis of information in the pursuit of advancing knowledge and contributing to the academic discourse in this field.

The primary objective of my thesis is to identify the towards patient safety and Business Outcome in comparison with Video Consultation and Physical Consultation and through meticulous research and critical analysis, I have aimed to address to investigate the towards Patient safety and business outcome in comparison with Video Consultation and Physical

consultation by Doctors, to investigate the towards Patient safety and business outcome in comparison with Video Consultation and Physical consultation by Top Management Level and , to investigate the towards Patient safety and business outcome in comparison with Video Consultation and Physical consultation by Patients. By exploring attitudes towards video consultation and physical consultation, I have endeavoured to provide valuable insights and make meaningful contributions to the existing literature.

I believe that my thesis not only demonstrates my academic aptitude but also showcases my ability to think critically, conduct independent research, and communicate complex ideas effectively. Moreover, I am confident that the findings and conclusions presented in this thesis will be of interest to scholars, researchers, and practitioners alike in the field of healthcare.

I would be honoured if you would consider my thesis for evaluation and assessment. I am open to any feedback, suggestions, or recommendations that would further enhance the quality and impact of this work.

Thank you for considering my submission. Should you require any further information or clarification, please do not hesitate to contact me at 9972575990 or elizabethjohnsen2000@yahoo.co.in.

I look forward to the opportunity to discuss my thesis with you further.

Sincerely,

Elizabeth John Sen

APPENDIX B
INFORMED CONSENT

Investigation of attitude towards business outcomes and patient safety in comparison with video and physical consultation”

Ms. Elizabeth John Sen, SSBM, Phone number: +91 9972575990

Dear Participant,

You are being invited to participate in a research study titled “**Investigation of attitudes towards business outcomes and patient safety in comparison with video and physical consultation.**” This study aims to explore the attitudes of patients towards video and physical consultation. Your participation in this study will contribute to a better understanding of the role of digital technologies in healthcare delivery.

Please take the time to read this consent form carefully before deciding whether or not to participate in the study. If you have any questions or concerns, you may contact the researcher using the contact information provided above.

Purpose of the Study: The purpose of this study is to identify the business outcome and of patients towards video and physical consultation. The information gathered from this research will contribute to informing healthcare policies, improving healthcare services, and enhancing patient experiences.

Procedures: If you agree to participate in this study, you will be asked to:

1. Provide demographic information (such as age, gender, and occupation).
2. Answer a series of questions related to your experiences and opinions regarding video consultation.
3. Share any relevant personal experiences, if applicable.

Risks and Benefits: There are minimal risks associated with participating in this study. Some questions may touch upon personal experiences or opinions, which may cause mild discomfort. However, you are not obligated to answer any questions that make you feel uncomfortable, and you have the right to withdraw from the study at any time without penalty. By participating in this study, you may benefit from a greater understanding of the

role of digitalization in healthcare. Additionally, your input may contribute to improving healthcare services and inform future developments in digital healthcare technologies.

Confidentiality: Your privacy and confidentiality will be strictly protected throughout the study. Any information collected during this research will be treated as strictly confidential and stored securely. Your responses will be anonymized and aggregated when reporting the findings, ensuring that your identity is not disclosed.

The data collected in this study will be used solely for research purposes and will not be shared with any third parties without your explicit consent.

Voluntary Participation and Withdrawal: Participation in this study is entirely voluntary. You have the right to withdraw your consent and discontinue participation at any time, without providing a reason and without any negative consequences or penalty. You may also choose not to answer specific questions if you are uncomfortable doing so. Your decision to participate or withdraw will in no way affect your current or future relationships with the researcher or the institution involved.

Contact Information:

If you have any questions, you can contact the PI, Ms. Elizabeth John Sen, at 997-255-7990. For any concerns and additional information about the study, you can contact the Ethics Member Secretary, Dr. Sandeep D'Souza, at 6364462390.

Mentor: Dr. Atul Pati Tripathi, PhD, at 8745917777

By signing this consent form, you confirm that you have read and understood the information provided above, and you voluntarily agree to participate in the research study.

APPENDIX C

INTERVIEW GUIDE

Introduction

My name is Elizabeth John Sen, Working as a Medical safety officer.

Background Information :

Opening Questions :

Main Questions :

Probing Questions :

Closing Questions :

Debriefing :

Thank You and Closing :

Recording :

Transcription and Analysis :

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APPENDIX A:

INVESTIGATION OF ATTITUDE TOWARDS BUSINESS OUTCOMES AND PATIENT SAFETY IN COMPARISON WITH VIDEO CONSULTATION AND PHYSICAL CONSULTATION

Research Design

This study brings up a mixed-methods research design to comprehensively investigate healthcare professionals' attitudes towards business outcomes and patient safety in video and physical consultation settings. The combination of quantitative and qualitative approaches will offer an awareness of and understanding of the complexities surrounding these attitudes.

Quantitative Phase: Survey Design

Participants: A diverse sample of healthcare professionals, including physicians, administrators, and patients.

Sample size of thirty doctors, nine top management levels, and 84 physical and 86 video consultations by patients

INCLUSION AND EXCLUSION CRITERIA :

Inclusion criteria for Doctors:

Whoever is willing to participate in the study with consent

Doctors have experience in both video and physical consultations and represent various medical specialties and doctors who regularly use telemedicine services alongside those who primarily rely on physical consultations.

Doctors' comfort level with technology and their willingness to adopt new tools and platforms for patient care.

Doctors who serve different patient demographics should understand how patient characteristics might influence their attitudes towards consultation methods.

Exclusion criteria for Doctors

Specialties like Obstetrics and Gynecology, ENT (Eye,Nose,Throat)

Structure of the questionnaire

Attitudes toward Business Outcomes by Doctors

- To investigate, video consultations are more cost-effective for the practice.
- To investigate whether physical consultations generate more revenue compared to video consultations,.
- To investigate concerns about the financial implications of relying more on video consultations

Attitudes toward patient safety by doctors

- Video consultations are equally as safe for patients as physical consultations.
- Physical consultations allow for a better assessment of patient conditions compared to video consultations.
- I am confident in maintaining patient safety during video consultations.

Inclusion Criteria for the Top Management Level:

- Selected participants represent top management roles at Sakra World Hospital. This included the managing director, deputy managing director, chief of medical services, chief of nursing services, and department heads to represent different levels of decision-making authority.

Exclusion Criteria

- Middle-level and low-level categories

Structure of the Questionnaire

Survey questionnaire that includes questions related to attitudes towards business outcomes such as cost-effectiveness, efficiency, revenue generation, and patient safety such as adherence to protocols, error rates, and patient satisfaction for both video and physical consultations.

Inclusion Criteria for Patients:

- Patients with all specialty cases.

- All patients undergoing video consultations and all patients undergoing physical consultations

Exclusion Criteria

- Patients who were diagnosed with COVID.
- Pregnancy
- ENT patients

Service quality criteria

- Communication: Evaluate the effectiveness of communication during video consultations in terms of clarity, understanding, and responsiveness.
- Professionalism: Assess the professionalism and expertise demonstrated by healthcare providers during video consultations.
- Convenience: Measure the convenience of accessing healthcare services through video consultations compared to traditional in-person visits.

Patient Experience Criteria

- Comfort: Gauge patients' level of comfort and satisfaction with video consultations, including factors such as ease of use, privacy, and comfort of the environment.
- Empowerment: Determine the extent to which video consultations empower patients to actively participate in their healthcare decision-making process.
- Trust: Assess patients' trust and confidence in the quality of care delivered through video consultations compared to traditional in-person visits.

Health Outcomes Criteria

- Treatment effectiveness: Evaluate the effectiveness of treatments and interventions delivered through video consultations in achieving desired health outcomes.
- Follow-up care: Assess the adequacy and effectiveness of follow-up care provided following video consultations, including medication management, monitoring of symptoms, and coordination of care.

Accessibility and affordability criteria

- **Accessibility:** Measure the accessibility of healthcare services through video consultations, particularly for patients who may face barriers to accessing traditional in-person care (e.g., those with mobility issues, those living in remote areas).
- **Affordability:** Assess the affordability of healthcare services through video consultations compared to traditional in-person visits, including considerations such as cost savings, insurance coverage, and out-of-pocket expenses.

Overall satisfaction and recommendation

- **Overall satisfaction:** rate overall satisfaction with video consultations and indicate whether patients would choose video consultations again in the future.
- **Recommendation:** Assess patients' likelihood of recommending video consultations to friends or family members based on their experience.

Instrument: A structured questionnaire comprising Likert-scale items and closed-ended questions.

Definition : Likert-scale

A Likert scale is a common type of psychometric scale used in questionnaires to gauge respondents' attitudes or opinions. It typically consists of a statement and a range of responses, usually ranging from "Strongly Disagree" to "Strongly Agree" or from "Very Poor" to "Excellent". Respondents select the option that best reflects their viewpoint, allowing researchers to quantify qualitative data.

Variables: perceptions of financial implications, safety concerns, and contextual nuances.

- **Financial Implications:**

Video consultation is often perceived as cost-effective due to reduced travel expenses and overhead costs for both patients and healthcare providers. Physical consultation typically involves higher costs associated with transportation, parking, and possibly longer appointment times.

- **Safety Concerns:**

Video Consultation: May raise concerns about data security and privacy, but is generally considered safer during pandemics or for patients with compromised immune systems. Physical consultation is traditionally perceived as safer in terms of establishing a direct

physical connection between the patient and the healthcare provider, but it can pose risks of exposure to contagious illnesses.

Data Collection: Online survey distribution through professional healthcare networks and associations. Survey Forms Likert-scale items

Data Preparation:

Organize and clean the quantitative data, such as survey responses or numerical measurements.

Transcribe and code qualitative data, such as interview transcripts or open-ended survey responses

Sample Size: calculated based on a confidence level of 95% and a margin of error of 5%.

Qualitative Phase: Open-ended questions

Participants: purposeful sampling of survey respondents for follow-up in-depth interviews.

Instrument: A semi-structured interview guide exploring nuanced factors influencing attitudes.

- **Contextual Nuances of Attitude Towards Business Outcome and Patient Safety:** Video consultation is increasingly embraced for its potential to improve access to care, especially in remote or underserved areas. However, some stakeholders may question its efficacy in accurately diagnosing and treating patients. Physical consultation is still viewed as the gold standard for comprehensive medical assessments and procedures, particularly for conditions that require hands-on examination or diagnostic testing. However, concerns about long wait times and accessibility may arise.
- Each mode of consultation has its advantages and limitations, and attitudes toward them may vary depending on factors such as geographic location, technological infrastructure, regulatory frameworks, and patient demographics.

Comparative Analysis: Integration of Quantitative and Qualitative Data

Data Integration: Triangulation of findings to identify convergent and divergent patterns.

Merge findings from both types of analysis to develop a more holistic understanding of the research topic.

Look for patterns or correlations between quantitative variables and qualitative themes to enrich interpretations.

Thematic Analysis: Qualitative data is subjected to thematic analysis for emergent themes.

Statistical Analysis: Quantitative data is analyzed using statistical software for patterns and correlations.

Comparative Analysis: Integration of Quantitative and Qualitative .

Data Overall, comparative analysis of integrated qualitative and quantitative data allows researchers to develop a more comprehensive understanding of complex phenomena by leveraging the strengths of both types of data.

Thematic analysis is a method used to identify, analyze, and interpret patterns, themes, and meanings within qualitative data.

Data Integration: Triangulation of findings to identify convergent and divergent patterns.

Thematic Analysis: Qualitative data is subjected to thematic analysis for emergent themes.

Statistical Analysis: Quantitative data is analyzed using statistical software for patterns and correlations.