ANALYSIS OF CUSTOMER BEHAVIOUR TOWARDS THE HEALTH CARE PRODUCTS WITH SPECIAL REFERENCE TO MCS HOSPITAL

Dissertation submitted to Mahatma Gandhi University, Kottayam in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF BUSINESS ADMINISTRATION

By

GHEVARGHESE SAJAN

(Reg No:210021080003)

Under the guidance of

MS DRISHYA S RAJ
ASSISTANT PROFESSOR
DEPARTMENT OF BBA



BHARATA MATA COLLEGE, THRIKKAKARA, KERALA (2021-2024)



Department of Bachelor Of Business Administration

BONAFIED CERTIFICATE

This is to certify that this Project entitled, "ANALYSIS OF CUSTOMER BEHAVIOUR TOWARDS THE HEALTH CARE PRODUCTS WITH SPECIAL REFERENCE TO MCS HOSPITAL" is a record of genuine work done by GHEVARGHESE SAJAN under my guidance and supervision in partial fulfillment of the requirements for the award of the Degree of Bachelor of Business Administration programme of the Mahatma Gandhi University and it is hereby approved for submission.

Administration programme of the Manatma Gandhi University	y and it is nereby approved for submission.
MS MANJU MALATHY	MS DRISHYA S RAJ
Head of the Department	(Academic Guide)
Department of BBA Bharata	
Mata College	
Place: Thrikkakara Date:	
Name and Signature of External Examiner	
Date:	

DECLARATION

I GHEVARGHESE SAJA	AN do hereby declare that this project report entitled, "ANALYSIS OF
CUSTOMER BEHAVIOU	JR TOWARDS THE HEALTH CARE PRODUCTS WITH SPECIAL
REFERENCE TO MCS H	HOSPITAL" is a bonafide record of work done by me under the guidance and
supervision of DRISHYA	S RAJ, Assistant Professor, Department of BBA, Bharata Mata College,
Thrikkakara and this work h	as not formed the basis for the award of anyacademic qualification, fellowship
or any other similar title of a	any other University or Board.
	GHEVARGHESE SAJAN
Date:	
Place:	

ACKNOWLEDGEMENT

I am grateful to God Almighty for having blessed me with his insight and knowledge, and for guiding me during the course of the study.

First, I would like to thank the management, Bharata Mata College headed by Rev.Fr Dr Abraham Oliapurath, Manager, Dr. Johnson K M Principal, Ms. Bini Rani Jose, Vice Principal and Ms. Manju Malathy, Head of the Department, for supporting me to complete my work as part of my curriculum.

I am obliged with utmost gratitude to **DRISHYA S RAJ**, my research guide, for her timely suggestions and guidance throughout the study which had been significant in completing this research in a successful manner.

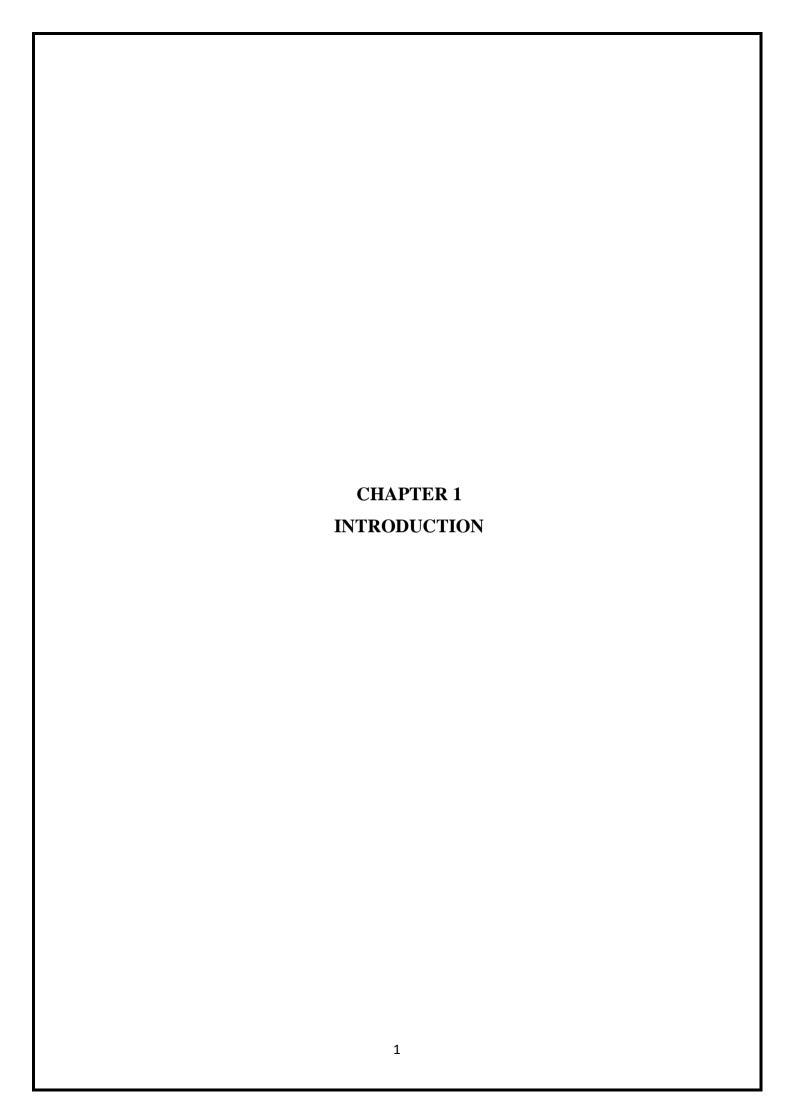
I would also like to extend a heartfelt thanks to all my respondents who participated in my study, whose sincere co-operation and support made this venture possible.

Last but not the least, I express my sincere and utmost gratitude towards my teachers, family and friends for supporting and encouraging me all throughout the study. I am also grateful to all who have in one way or the other helped me in accomplishing my goal by contributing their valuable comments and suggestions.

GHEVARGHESE SAJAN

TABLE OF CONTENTS

Sl No.	CHAPTER	Page No.
	S	
1	INTRODUCTION	1
	1.1 Introduction	2
	1.2 Problem Definition	5
	1.3 Objectives of the Study	6
	1.4 Scope of the Study	6
	1.5 Limitations of the study	6
2	LITERATURE REVIEW	7
3	INDUSTRY PROFILE	15
	3.1 History of Hospital Industry	15
	3.2 Hospital Industry in India	16
	3.3 Industrial Performance	17
	3.4 Challenges Faced By The Industry	18
4	COMPANY PROFILE	20
	4.1 Brief History of the Organization & Current Board of Directors	20
	4.2 Mission, Vision Statement and Quality Policy Followed	22
	4.3 Business Process of the Organization – Product Profile	22
	4.4 Strategies – Business, Pricing, Management	24
	4.5 SWOT Analysis of the company	25
5	RESEARCH METHOLOGY	27
	5.1 Statement of the Problem	27
	5.2 Research Design	27
	5.3 Sample Design	27
	5.3.1 Population	27
	5.4Data Collection Design	27
	5.4.1 Data Source	28
	5.4.2 Data Collection Tool	28
6	DATA INTERPRETATION & ANALYSIS	29
7	FINDINGS, SUGGESTIONS & CONCLUSION	45



1.1 Introduction to the topic

Healthcare is a critical and multifaceted system designed to provide medical services, maintain and improve the health of individuals and communities. It encompasses a vast array of services aimed at preventing, diagnosing, and treating illnesses, injuries, and various medical conditions. The healthcare sector includes diverse professionals, facilities, technologies, and regulatory frameworks, all working cohesively to deliver optimal care. It is a dynamic and ever-evolving field that is influenced by advancements in medical research, societal needs, technological innovations, and governmental policies. At its core, healthcare is built on the foundation of promoting well-being and addressing health concerns. This involves an array of primary, secondary, and tertiary care services. Primary care, often the first point of contact for individuals, focuses on preventive measures, routine check-ups, and basic medical treatment. Secondary care involves specialized medical services provided by medical specialists and healthcare professionals in response to specific health conditions, often requiring more specialized expertise or facilities. Tertiary care is highly specialized, typically involving complex procedures, surgeries, and treatments provided in hospitals or specialized medical centers.

The healthcare industry is a complex ecosystem that involves a multitude of stakeholders. It includes healthcare providers such as physicians, nurses, pharmacists, therapists, and other allied health professionals who work directly with patients. Additionally, it encompasses institutions such as hospitals, clinics, nursing homes, and rehabilitation centers where healthcare services are delivered. Moreover, pharmaceutical companies, medical equipment manufacturers, insurance companies, and governmental bodies are pivotal contributors to the healthcare landscape, each playing a crucial role in its functionality and effectiveness.

The accessibility and quality of healthcare services vary globally, often influenced by socioeconomic factors, geographic locations, and governmental policies. Disparities exist in different regions, leading to inequities in healthcare access and outcomes. Addressing these inequalities remains a persistent challenge, prompting ongoing discussions and initiatives focused on improving healthcare accessibility, affordability, and quality for all individuals.

Technological advancements continually reshape the healthcare landscape, introducing innovations that enhance diagnostics, treatment, and patient care. From electronic health records (EHR) to telemedicine, artificial intelligence (AI) applications, and wearable health monitoring devices, technology plays a pivotal role in revolutionizing healthcare delivery, improving efficiency, and expanding access to medical services. Embracing these advancements while addressing associated challenges remains a constant focus within the healthcare industry.

Healthcare is a fundamental and essential aspect of human society, encompassing a wide range of services, professionals, and institutions dedicated to promoting and maintaining the well-being of individuals and communities. It plays a crucial role in ensuring that people have access to the necessary medical attention, preventive care, and treatment for various health conditions. The healthcare sector is a complex and multifaceted industry that continues to evolve to meet the ever-changing needs of a growing global population. In this introduction, we will explore the significance of healthcare, its historical development, the various components of the healthcare system, the challenges it faces, and its critical role in modern society.

Healthcare has a profound impact on the quality of life for individuals and communities. It involves the prevention, diagnosis, treatment, and management of diseases, injuries, and other health-related issues. By providing access to healthcare services, societies can enhance the overall health and well-being of their citizens, leading to improved productivity, a higher quality of life, and increased life expectancy. Healthcare is not limited to medical treatment; it also encompasses public health initiatives, health education, and wellness programs that aim to prevent diseases and promote healthier lifestyles.

In the rapidly evolving landscape of healthcare, the proficiency and adaptability of healthcare professionals are integral to providing quality patient care and ensuring continuous improvements in the sector. Training and development initiatives play a pivotal role in equipping healthcare professionals with the necessary skills, knowledge, and competencies. This study endeavors to explore and evaluate the effectiveness of various training and development tools within the healthcare domain.

Healthcare, being a multifaceted field, requires a diverse set of skills, ranging from medical expertise to communication and leadership abilities. Training and development programs cater to these varying needs, aiming to enhance clinical proficiency, update knowledge on emerging technologies, and improve patient care strategies. The efficacy of these tools directly impacts the quality of healthcare delivery and patient outcomes.

This research will examine a spectrum of training and development tools utilized in healthcare, including but not limited to traditional classroom-based training, simulation exercises, online modules, mentorship programs, workshops, and hands-on practical experiences. By scrutinizing the impact of these tools on healthcare professionals' performance, satisfaction, and patient care quality, the study aims to offer insights into the most effective methods of skill development and knowledge retention. Moreover, the study will address the challenges encountered in implementing these training and development programs, such as resource constraints, adaptability to technological advancements, and individual learning preferences among healthcare professionals. Understanding these challenges will aid in proposing recommendations for optimizing the effectiveness of training and development initiatives within the healthcare sector. The significance of this study lies in its potential to guide healthcare institutions, policymakers, and training program developers in tailoring effective, evidence-based strategies for continuous professional development. Ultimately, the goal is to improve the overall standard of care, patient satisfaction, and healthcare outcomes through the implementation of robust training and development methodologies.

Through a comprehensive examination of the effectiveness of various training and development tools within the healthcare sector, this study endeavors to contribute valuable insights and recommendations for the enhancement of healthcare practices and the professional growth of healthcare workers.

In the ever-evolving landscape of healthcare, the pursuit of excellence and the provision of high-quality patient care are paramount. One critical factor that significantly contributes to the quality of healthcare services is the continuous training and development of healthcare professionals. Training and development in the healthcare sector are not only essential for maintaining and improving the skills and knowledge of healthcare personnel but also for ensuring the safety and well-being of patients. This study delves into the exploration of the effectiveness of various training and development

tools in the healthcare industry, seeking to address the pressing need for evidence-based practices in this crucial field.

The healthcare sector is marked by constant advancements in medical knowledge, technology, and treatment methods. This rapid pace of change necessitates ongoing training and development to keep healthcare professionals up-to-date with the latest best practices, procedures, and innovations. However, not all training methods are equally effective, and healthcare organizations often face the challenge of choosing the most appropriate tools and strategies for enhancing the competence of their staff.

This study aims to assess the impact of various training and development tools, such as traditional classroom education, e-learning platforms, simulation- based training, and hands-on clinical experience, on healthcare professionals' knowledge, skills, and overall performance. By evaluating the effectiveness of these tools, healthcare organizations can make informed decisions about their training and development investments, ultimately leading to improved patient outcomes, increased safety, and enhanced staff satisfaction.

As we progress in this study, we will examine the key factors that influence the effectiveness of different training methods, including the role of technology, learner engagement, resource allocation, and the specific needs of healthcare professionals in diverse roles. Additionally, we will explore case studies and real-world examples from healthcare organizations that have successfully implemented innovative training and development strategies to attain their desired outcomes.

1.2 Problem definition

The healthcare industry is a dynamic and rapidly evolving sector that places significant demands on its workforce to continuously update their knowledge and skills. Training and development are crucial components to ensure that healthcare professionals provide high-quality care, adapt to technological advancements, and address the evolving needs of patients. However, there is a need to evaluate the effectiveness of various training and development tools in healthcare to optimize their use.

The primary problem is the lack of a comprehensive understanding of which training and development tools are most effective in the healthcare sector, considering the diverse needs and contexts within this industry.

1.3 Objective of the study

- To Evaluate the comparative effectiveness of traditional in-person training sessions versus modern e-learning or virtual training platforms in enhancing the skill acquisition and knowledge retention of healthcare professionals.
- To Assess the impact of simulation-based training techniques on improving the practical skills and critical decision-making abilities of healthcare practitioners across different specialties within the healthcare sector.
- To Investigate the correlation between ongoing professional development programs and the quality of patient care, focusing on how these programs contribute to improved patient outcomes, safety, and overall satisfaction.
- To Compare the effectiveness of mentorship and coaching programs in healthcare as means to facilitate continuous learning and skill development among healthcare workers, evaluating their influence on professional growth and retention rates.
- To Analyze the cost-effectiveness of various training and development tools in the healthcare industry, examining their return on investment (ROI) and cost

efficiency in improving the overall quality of care, reducing medical errors, and enhancing operational efficiency within healthcare institutions.

1.4 SCOPE OF THE STUDY

- Training Tool Analysis: The study will explore a range of training tools, such as workshops, seminars, e-learning modules, simulators, mentorship programs, and more, used in different healthcare settings.
- Healthcare Professions Inclusion: It will cover a broad spectrum of healthcare
 professions, including nurses, doctors, allied health professionals, administrators,
 and support staff, to assess the impact of training tools across diverse roles.
- Skill Enhancement and Knowledge Acquisition: The focus will be on evaluating how these tools affect skill development, knowledge acquisition, and professional competency within healthcare, considering both technical and soft skills.
- Patient Care and Safety Impact: The study will analyze the influence of these tools on patient care, safety, and outcomes, assessing any improvements in healthcare service delivery, reduced medical errors, and patient satisfaction.
- Cost-Benefit Analysis: It may include an economic analysis, evaluating the costeffectiveness of these training tools in terms of investment required and the resultant improvements in healthcare quality and operational efficiency.
- Technology Integration: The scope may encompass an investigation into how technological advancements and innovations in training tools, such as virtual reality, AI-driven simulations, or mobile applications, are impacting healthcare training.
- Comparative Assessment: The study may compare the effectiveness of different tools in terms of learning outcomes, retention, and adaptability across various healthcare institutions, taking into account differences in settings and demographics.

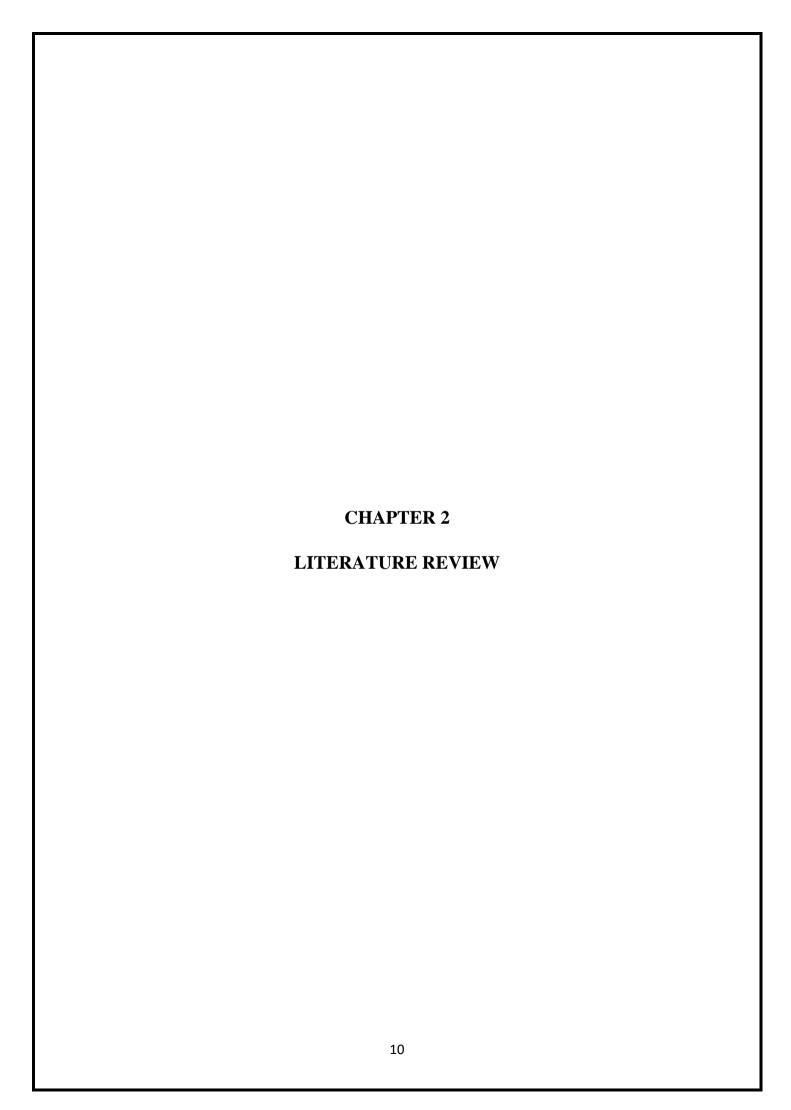
• Long-term Impact and Sustainability: The study may examine the sustainability of the skills acquired through these training tools, considering the long-term impact on professional growth, staff retention, and ongoing healthcare quality.

1.5 Limitation of the study

- Sample Bias: The study might be limited by the choice of participants, potentially leading to a bias in the results if certain healthcare specialties, levels of expertise, or demographics are over or underrepresented.
- External Factors: The study might not account for external influences such as changes in healthcare policies, technological advancements, or other concurrent training programs that could impact the effectiveness of the assessed training tools.
- Resource Constraints: Limitations in funding, time, or access to diverse training
 programs might restrict the comprehensiveness of the study, potentially leading to
 an incomplete evaluation of available training tools.
- Ethical Considerations: Ethical constraints might hinder certain types of training interventions or limit the ability to conduct randomized controlled trials, especially if there are concerns about fairness or patient safety during experimental training programs.
- Long-term Evaluation Challenges: Assessing the sustained impact of training tools over an extended period might be challenging within the scope of the study, especially tracking the long-term effects on patient outcomes and healthcare quality.
- Variability in Implementation: Variations in how different training tools are implemented across healthcare settings might affect the study's ability to draw

direct comparisons, given the potential differences in trainers, facilities, or resources available.

• Subjective Evaluation Measures: Utilization of self-reported measures or subjective assessments by participants might introduce biases or inaccuracies in evaluating the actual effectiveness of training tool.



2.1 review of literature

1. A model to measure the efficiency of hospital performance:

Caballer-Tarazona, M., Moya-Clemente, I., Vivas-Consuelo, D., & Barrachina-Martínez, I. (2010) Stated that the primary goal of this research project is to provide intuitive instruments to measure effectiveness in Valencian hospitals. Community. The Introduction emphasized the significance of measuring operational effectiveness in hospital units. Nevertheless, if we use this kind of efficiency study in the context of the Valencian Community because the DEA Model and the development of efficiency indicators are both still incredibly cutting-edge and pertinent operational performance analysis techniques for hospitals. In Valencian hospitals, efficiency analysis is still an issue that hasn't been adequately tackled. With these findings, it is advised that healthcare administrations give hospitals the mean and standard deviation of the efficiency indicators so that they can use them as benchmarks for their own operations. For each hospital service to precisely determine whether it is efficient or not, hospitals may also be given the previously determined discriminant functions. We come to the conclusion that the levels of efficiency of the services examined were above the mean with reference to this sort of management approach. Further comparisons should be made in the future to examine other hospitals and services that are managed using the Administrative Allowance Model.

2 Efficiency of hospitals in Germany: a DEA-bootstrap approach.

Staat, M.(2006). Stated that the German hospital system has mostly resisted attempts by policy makers to impose more efficiency, the study's findings are still substantially applicable today. The biggest barrier was that hospitals had a legal right to complete expense reimbursement, which was just recently eliminated. The study's key finding is that practically identical hospitals with significantly different sexist productivity levels. However, the bias- corrected results imply a significantly bigger inefficiency than the results from earlier DEA studies using German data. These differences are less determined than certain findings in other studies on German hospitals.

3 Filtration efficiency of hospital face mask alternatives available for use during the COVID-19 pandemic.

Sickbert-Bennett, E. E., Samet, J. M., Clapp, P. W., Chen, H., Berntsen, J., Zeman, K. L., Bennett, W. D. (2020). Stated that according to data from earlier studies, even face masks with less than 95% FFE (such as surgical masks) are effective in preventing the spread of epidemic coronaviruses (such as severe acute respiratory syndrome coronavirus 1, or SARSCoV-2) among doctors and other healthcare professionals, with the possible exception of procedures that produce aerosols.9-11 N95 respirators did not outperform surgical masks in terms of prevention of a related coronavirus, severe acute respiratory syndrome coronavirus 1.10 However, as long as the supplies are accessible, the CDC and Infectious Diseases Society of America advise using N95 respirators, particularly during aerosol-generating procedures. To protect doctors and other medical professionals during a pandemic, hospital epidemiologists, supply chain managers, and healthcare administrators might use the quantitative findings of this evaluation to guide their decisions.

4 4Improving productive efficiency in hospitals: findings from a review of the international evidence.

Rumbold, B. E., Smith, J. A., Hurst, J., Charlesworth, A., & Clarke, A. (2015). Stated that the evidence regarding the factors that affect hospital productivity and areas where improvements can be made, without making any statements regarding whether such policies are preferable or undesired for other causes. Within these constraints, we have identified five areas that require action, including focusing on efficiency across all hospitals, addressing variation, carefully considering how payer organizations and national planning bodies can use incentives, ensuring accurate measurement of the appropriate metrics, and using international comparisons with care. At both the policy and operational levels, we have also identified several areas where the evidence basis needs to be strengthened.

5 Efficiency determinants and capacity issues in Brazilian for-profit hospitals.

Araújo, C., Barros, C. P., & Wanke, P. (2014) stated that by developing separate rules for each hospital cluster, in decision-making on funding hospital improvement projects and assigning priorities in terms of infrastructure or human resources. The basic concept is to

define both short-term (increased efficiency levels) and long-term goals and activities (input expansion) to handle future demand increase.

6 Efficiency of US hospitals between 2001 and 2011

Choi, J. H., Fortsch, S. M., Park, I., & Jung, I. (2017). stated that study examined the efficiency scores of several hospital groups using SFA and DEA. Though the correlations of efficiency scores obtained by two approaches were not strong enough, the comparative findings show comparable indicators when control type and size are taken into account. When teaching and nonteaching status are included, the SFA and DEA produce different outcomes. Future researchers must consider the qualities of quality of care in addition to efficiency in the healthcare industry Future research on this area should help hospital administrators and policymakers measure hospital efficiency.

7 Efficiency, ownership, and financing of hospitals: The case of Austria.

Czypionka, T., Kraus, M., Mayer, S., & Röhrling, G. (2014). Stated that in financial hazards, there is a clear distinction in Austria between public and private non-profit hospitals. If the operating deficit coverage does not cover all remaining expenditures in the case of a public hospital, they are borne by the federal state as the ultimate owner of the public hospitals. Several federal states, in fact, have some type of public bailout.

8 Energy efficiency in hospitals: Historical development, trends and perspectives.

Papadopoulos, A. M. (2015). Stated that significant changes have begun to affect the public sector, both public and private, with the demand to minimise operational expenses serving as a common denominator. As a result, solutions that provide the required indoor environmental quality while lowering energy costs must be developed. The research activity has been intense and prolific, with several studies and publications available, allowing valuable expertise to be disseminated. This is not a reason to abandon attempts to enhance a hospital's energy performance, but it needed to be said to clear the air.

9 An analysis of efficiency and productivity in Swiss hospitals

Mehdi Farsi & Massimo Filippini states that the hospital's outpatient income and the number of hospitalizations adjusted for DRGs serve as primary output indicators. Capital services, medical professionals, and other staff are regarded as input components. The cost frontier study reveals that there is tremendous room for increasing productivity. The outcomes also indicate that the bulk of the sample contains untapped scale economies.

The variations among the various ownership subsidization types are not statistically significant, according to an examination of inefficiency estimates.

10 Farsi, M., & Filippini, M. (2005). An analysis of efficiency and productivity in Swiss hospitals. Università della Svizzera italiana.

BRENDA GANNON states that the differences in technical efficiency levels amongst hospitals and offer the first estimates of average technical efficiency in Ireland's hospital sector. The findings add to the expanding body of research comparing DEA and SFA techniques internationally.

11 The productive efficiency of Chinese hospitals:

Ying Chu NG states that according to the Malmquist Index calculation and the panel structure of the data, hospitals' productivity increased between 2004 and 2008. The driving reason for the growth of technology, which mirrored how hospitals operated, it was discovered that efficiency change had both increased and declined. The data broken down by area showed that there was no direct correlation between the hospital's efficiency performance and its economic growth stage.

12 EFFICIENCY OF HOSPITALS IN THE CZECH REPUBLIC

Jana Votápková & Lenka Šťastná states that larger, not-for-profit teaching, and hospitals located in communities with a higher proportion of the elderly all have a tendency to be less effective. Smaller hospitals, those in larger communities, and those located in areas with intense hospital rivalry all appear to be more effective

- 13 Efficiency of hospitals in the Czech Republic: Conditional efficiency approach
 Camilla Mastromarco, Lenka Stastna & Jana Votapkova states that the outputs include
 both quantitative measures, such as (i) acute patients adjusted for DRG case mix index,
 (ii) nursing patients, and (iii)publications representing a hospital's research activities, as
 well as (iv) the ratio of nurses to beds. In general, university hospitals, non-profit
 hospitals, and hospitals with specialized centers are less effective.
- 14 Efficiency analysis in the management of COVID-19 pandemic in India based on data envelopment analysis

Kshitish Kumar Mohantaa, Deena Sunil Sharanappaa & Abha Aggarwal states that the findings of the Undesirable model showed that 16 (or 50%) of the 32 Indian states and UTs were effective. Chandigarh is the most effective DMU, while Meghalaya is the least effective among the effective DMUs. The most often mentioned state for ineffective states was Rajasthan.

15 Comparative Efficiency Measurement of Indian Hospitals Using Data Envelopment Analysis: A Proposed Model

Dilip Kushwaha & Faisal Talib states that to evaluate the effectiveness of the hospitals and their relative performance, 15 public sector hospitals that offer basic healthcare services are chosen from Delhi. In these hospitals, the number of physicians, nurses, other medical personnel, and beds is regarded as an input, while the number of annual outpatients, inpatients, and major surgeries is regarded as an output. At the conclusion of this essay, there is also a conclusion, limits, and suggestions for further research.

16 Measuring the efficiency of Turkish maternal and child health hospitals: A two-stage data envelopment analysis

Gülnur İlgün & Seda Sönmez states that there are not many studies that evaluate the effectiveness of maternity and child health hospitals in Turkey. Furthermore, such research doesn't include secondary analyses. Finally, it is anticipated that these findings would offer health policymakers useful and evidence- based information for allocating resources for associated services.

17 THE EFFICIENCY OF HOSPITALS: PLATFORM FOR SUSTAINABLE HEALTH CARE SYSTEM:

Beata Gavurova & Kristina Kocisova states that a vital forum for national health policy makers and those responsible for strategic regional health plans as a foundation for ongoing development of mechanisms essential to the provision of a regionally sustainable system of Slovak healthcare. The epidemic threats on a global scale, like the COVID-19 pandemic, raise concerns about the viability of public health systems.

18 Efficiency of Human Resources in Public Hospitals: An Example from the Czech Republic:

Iveta Vrabková & Iana Vaňková states that large hospitals are the least effective hospitals in terms of hospital size, while medium-sized hospitals have produced the best-balanced outcomes. The highest average efficiency rates— a value of 0.866 for CRS and a rate of 0.926 for VRS—are found in medium- sized hospitals when models with all the chosen input and output variables are used. To avoid lowering the standard of service offered, it is important to execute the rationalization of human resources.

19 Efficiency Comparison of Public Hospitals under Different Administrative Affiliations in China: A Pilot City Case.

Gang Yin, Chaoyi Chen & Lijun Zhuo states that provincial and municipal hospitals' average efficiency values have increased over time, particularly since the start of the Pilot Public Hospital Reform, although hospitals affiliated with other organizations have shown the reverse tendency. The technical efficiency of public hospitals began to differ in terms of administrative subordination, and this discrepancy was anticipated to widen over time. Better administration and organizational structure may be to blame for the improved efficiency of hospitals linked with municipalities as opposed to those managed by the province and under other administrative connections.

- 20 The economic efficiency of clinical laboratories in public hospitals: A case study in Iran Mina Alinejhad & Siamak Aghlmand states that according to DEA calculations, clinical labs had an average economic efficiency of 0.676 in 2017. The fact that this number was lower than the scores for technical and allocative efficiency suggests that these units may increase their efficiency by lowering their costs without affecting output values. Additionally, 14% of the clinical laboratory units had good economic efficiency. Additionally, it is important to highlight that just three university hospitals' laboratories had no economic surplus or deficiency values for inputs.
- 21 Efficiency and profitability in US not for proft hospitals

Michael Rosko & Mona Al Amin states that there is a correlation between profitability and size, output concentration, occupancy rate, and participation in a multi-hospital system. There was an inverse connection identified between academic medical centers and professors, average duration of stay, location in a state that has expanded Medicaid,

admissions by Medicaid and Medicare, and unemployment rate. According to the results of a Hausman test, efficiency in the proft equations is exogenous. The findings imply that non-profit hospitals would respond to incentives to improve efficiency and will leverage market power to grow surplus to further their goals.

22 Measuring the efficiency of the Portuguese public hospitals: A value modelled network data envelopment analysis with simulation

Miguel Alves Pereira & Diogo Cunha Ferreira states that the first-ever use of static systems with a matrix- like structure revealed that two-thirds of those providers were ineffective and allowed the Portuguese National Health Service to identify priority areas for future policy adjustments

23 Efficiency evaluation of public hospitals in Saudi Arabia: an application of data envelopment analysis

Ahmed D Alatawi & Louis Wilhelmus Niessen states that 69 out of 91 public hospitals were found to be technically inefficient, or 75.8% of them. With an average efficiency score of 0.76, hospitals could have cut their inputs by 24% without reducing the quality of their healthcare services. Small hospitals performed better than medium-sized and big hospitals (efficiency score: 0.79). Hospitals in the centre region were more effective than those in other regions (efficiency score: 0.83). More than half of thehospitals (62.6%) were not running as efficiently as they might have been in terms of scale, which suggests that they need to change their production capacity in order to become more efficient. Ineffectiveness was mostly caused by the misuse of physicians and the underproduction of health services, according to performance study

24 Technical Efficiencies of Turkish Hospitals: DEA Approach

Korkut Ersoy & Sahin Kavuncubasi states that data Envelopment Analysis is used in this work to investigate the technical efficacy of 573 acute general hospitals in Turkey. Number of beds, primary care doctors, and specialists as well as how they are employed as inputs to create outputs of examined are surgical procedures, outpatient visits, and hospital discharges. According to the findings, less than 10% of acute general hospitals in Turkey are as effective as their international equivalents. Inefficient hospitals often employ 32% more specialists, 47% more primary care physicians, and have 119% more staffed beds than efficient hospitals.

- 25 Performance of Hospital Services in Ontario:DEA with Truncated Regression Approach Hedayet Chowdhury & Valentin Zelenyuk states that efficiency is significantly influenced by several organizational variables, including occupancy rate, rate of unit-producing employees, outpatient-inpatient ratio, case-mix index, geographic locations, size, and teaching status.
- 26 Performance evaluation of hospitals that provide care in the public health system, Brazil Marcelo Cristiano de Azevedo Ramos & Lucila Pedroso da Cruz states that small hospitals had a lower hospital occupancy rate than medium-sized, large-sized, and specialty hospitals. In hospitals that offer education, a higher hospital occupancy rate and bed turnover index were reported. Despite having more admissions that were extremely difficult than regular hospitals, specialized hospitals had a lower hospital death rate. For most of the metrics examined, we discovered no differences between hospitals in the direct and indirect administration.
- 27 Healthcare efficiency assessment using DEA analysis in the Slovak Republic Robert Stefko & Beata Gavurova states that the results of the estimated efficiency in each location are indirectly correlated with the values of the variables throughout time. Both locations that had low values of the variables over time and vice versa saw high levels of efficiency. It was interesting to learn that the progressive inclusion of the input side variables "number of MR, number of CT, and number of medical devices" did not significantly change the projected efficiency of healthcare facilities.
- Özgen Narcı, H., Ozcan, Y. A., Şahin, İ., Tarcan, M., & Narcı, M. (2015). Stated that the higher inefficiency of public university hospitals compared to private hospitals may be explained by the fact that publicly funded university hospitals are required to provide health care to more severe patients than general purpose private hospitals. The study also shows if global budgeting and performance-based payment methods worked for MoH hospitals. These two significant reimbursement modifications may be claimed to have

worked only for MoH teaching hospitals in 2010. Furthermore, MoH teaching hospitals

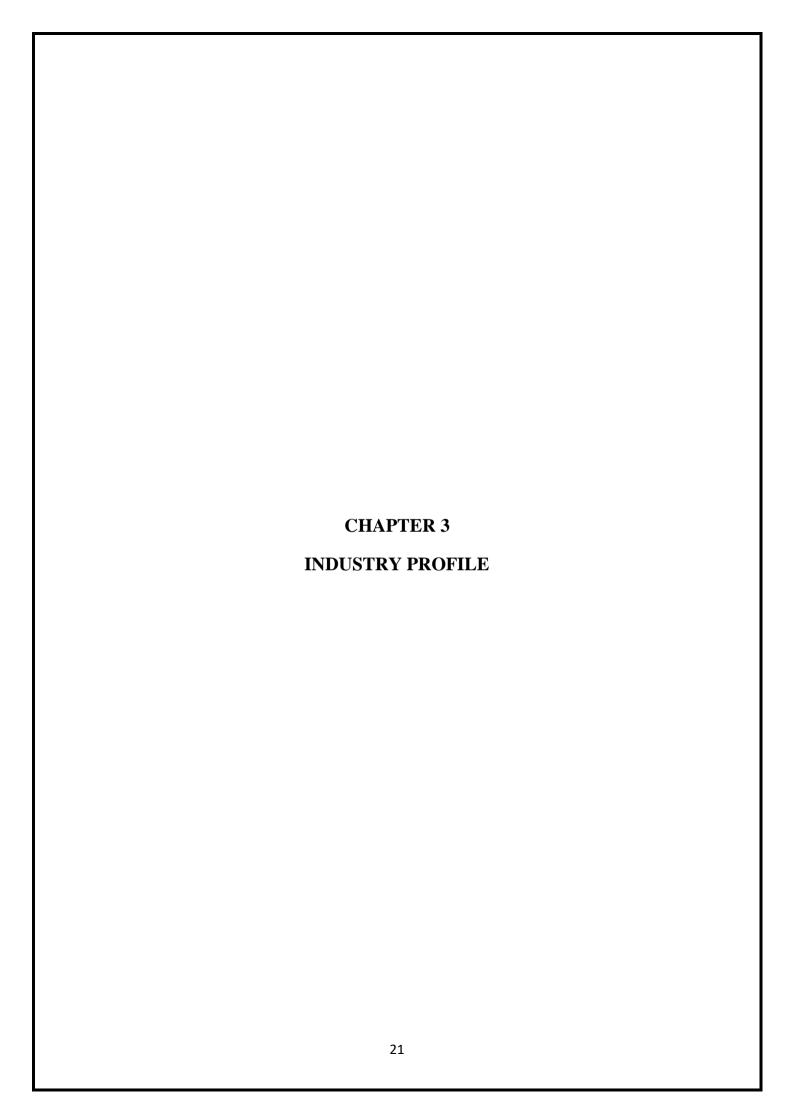
28 An examination of competition and efficiency for hospital industry in Turkey.

quality during the last decade, implying that encouraging competition among general hospitals does not contribute to enhanced hospital efficiency.

- 29 Performance analysis of hospitals in Kerala using data envelopment analysis model. Barpanda, S., & Sreekumar, N. (2020) stated that in any industry, performance analysis is critical to understanding the existing situation and, as a result, enhancing overall efficiency. We intended to use this unique approach to measure the efficiency of the selected hospitals and provide important analysis on the same. According to the findings of this study, the operational efficiencies of the sample hospitals examined had overall trends towards efficiency; nevertheless, a few of the selected have yet to attain this standard, which can be linked to inefficient utilization of available resources
- 30 Total factor productivity growth in private sector hospitals of India: an assessment through MPI approach.
 - Mogha, S. K., Yadav, S. P., & Singh, S. P. (2015) stated that there is significant change in technical efficiency and astonishing change is seen in the technology. Efficiency gains and losses among hospitals are essentially mutually offset, and technical change has little discernible impact on total TFP growth, with efficiency change being the primary contributor to productivity change. The analysis clearly shows that hospitals experienced growth over the reference period, and this improvement can only be attributed to the efficient use of resources to produce outputs. The hospitals are also grouped into other categories based on productivity change, efficiency change, and technological change to assess the performance of different hospitals throughout areas.
- 31 Technical efficiency of public district hospitals in Madhya Pradesh, India: a data envelopment analysis.
 - Ram Jat, T., & San Sebastian, M. (2013). Stated that 50% of district hospitals were performing in an inefficient manner from a technical standpoint. The proper operation of these hospitals will be of utmost importance for public health given the state's low health indicators and resource shortage. The results of this study are based on a specific input-output mix; hence, the policy implications of these results should be viewed from this perspective.

32 Using data envelopment analysis to measure the extent of technical efficiency of public health centres in Ghana.

Akazili, J., Adjuik, M., Jehu-Appiah, C., & Zere, E. (2008). Stated that only 35% of Ghana's health centres, according to the study, are effective, and while this conclusion is completely consistent with that of other developing nations, notably those in Africa, its implications for the delivery of health care are very worrying. It is necessary to make the health clinics that aren't operating on the frontier efficient because primary healthcare plays a significant role in the health care systems of most developing nations, including Ghana.



2.1 Brief history of the industry:

The hospital industry has a rich and complex history that dates back centuries. The concept of hospitals can be traced back to ancient civilizations, where temples were used to provide medical care to the sick and injured. However, the modern hospital industry as we know it today began to take shape during the Middle Ages in Europe. During this time, religious orders such as the Knights Hospital and the Knights of St. John established dedicated institutions to care for the sick and injured. These institutions provided not only medical care but also shelter and food for those in need.

The hospital industry continued to evolve throughout the Renaissance and Industrial Revolution periods. The development of medical advancements and scientific discoveries led to a greater understanding of diseases and improved treatment methods. Hospitals became more specialized, with separate departments for surgery, internal medicine, and obstetrics. This specialization allowed for more focused and effective care for patients, leading to better outcomes.

In the 19th century, the hospital industry underwent significant changes due to advancements in medical technology and the establishment of professional medical associations. The development of anesthesia and antiseptic techniques revolutionized surgery and made it a safer and more viable option for patients. The creation of medical schools and the professionalization of medicine also had a profound impact on the hospital industry. Physicians became more knowledgeable and skilled, leading to improved patient care.

The 20th century saw further advancements in medical technology and an increased focus on patient-centered care. The introduction of antibiotics, X-rays, and other diagnostic tools allowed for more accurate diagnoses and effective treatments. Hospitals began to adopt a multidisciplinary approach to patient care, with teams of healthcare professionals working together to provide comprehensive treatment plans.

In recent years, the hospital industry has faced numerous challenges, including rising healthcare costs, an aging population, and an increase in chronic diseases. These challenges have prompted hospitals to adapt their business models and incorporate new technologies to improve efficiency and patient outcomes. The use of electronic health records, telemedicine, and remote monitoring systems have become increasingly common in hospitals, allowing for better coordination of care and improved access to healthcare services.

In conclusion, the hospital industry has a long and fascinating history that has seen significant advancements in medical care and patient outcomes. From its humble beginnings as religious institutions caring for the sick, hospitals have evolved into complex organizations that provide a wide range of specialized services. As we move into the future, it is crucial for the hospital industry to continue adapting to meet the changing needs of patients while maintaining high standards of care.

2.2 nature of the industry

The nature of the hospital industry is unique and complex, as it involves the provision of healthcare services to individuals who require medical attention. Hospitals play a critical role in society by offering a wide range of services, including emergency care, surgeries, diagnostic tests, and treatment for various medical conditions. The industry is characterized by its commitment to ensuring the well-being and safety of patients, as well as its continuous efforts to improve healthcare outcomes and patient satisfaction.

One of the key aspects of the hospital industry is the need for highly skilled healthcare professionals. Hospitals are comprised of a diverse range of medical specialists, including doctors, nurses, surgeons, and technicians, who work collaboratively to provide comprehensive care to patients. These professionals undergo extensive training and education to acquire the necessary knowledge and skills required to diagnose and treat various medical conditions. The industry is highly reliant on these healthcare professionals to deliver quality care and ensure positive patient outcomes.

Another important characteristic of the hospital industry is its reliance on advanced medical technology and equipment. Hospitals invest heavily in state-of-the-art equipment and technology to enhance the accuracy of diagnoses, improve treatment outcomes, and increase patient comfort. From MRI machines to robotic surgical systems, hospitals leverage technological advancements to provide cutting-edge healthcare services. This emphasis on technology also requires hospitals to have specialized staff who can operate and maintain these complex systems.

The hospital industry is also heavily regulated due to its critical role in public health and safety. Various government agencies and regulatory bodies set standards and guidelines that hospitals must adhere to in order to ensure quality care and patient safety. Compliance with these regulations is paramount, as failure to meet these standards can result in fines, penalties, or even closure of the facility. Additionally, hospitals are often subject to audits and inspections to assess their compliance with regulations and guidelines.

Financial sustainability is another important aspect of the hospital industry. While hospitals provide essential healthcare services, they are also businesses that need to generate revenue to cover operating costs and invest in infrastructure, technology, and human resources. Hospitals rely on a mix of funding sources, including government reimbursements, private insurance payments, and out-of-pocket payments from patients. Managing finances effectively and optimizing revenue streams is crucial for hospitals to remain financially viable and continue providing high-quality care.

Lastly, the hospital industry is continuously evolving in response to changing demographics, advancements in medical research, and emerging healthcare trends. Hospitals need to stay abreast of these changes and adapt their strategies accordingly to meet the evolving needs of patients. This may include expanding service offerings, investing in new technologies, or implementing innovative care models.

In conclusion, the nature of the hospital industry is multifaceted and dynamic. It involves a diverse range of healthcare professionals, advanced technology and equipment, compliance with regulations, financial sustainability, and responsiveness to emerging trends. By understanding these key aspects of the industry, hospitals can navigate the challenges they face while continuing to provide high-quality care for their patients.

2.3 industrial performance in global level, national and regional level:

The performance of the hospital industry is crucial not only at the global level but also at the national and regional levels.

At the global level: the hospital industry plays a significant role in providing healthcare services to people around the world. It contributes to the overall well-being of individuals and communities by offering medical care, conducting research, and developing innovative treatments. The global performance of the hospital industry is measured by various factors such as patient outcomes, access to care, financial stability, and quality of services. Hospitals that excel in these areas are often recognized as leaders in the industry and set benchmarks for others to follow.

At the national level: the performance of the hospital industry is closely monitored by governments and healthcare authorities. National healthcare systems rely heavily on hospitals to deliver essential medical services to their populations. The performance of hospitals is evaluated based on key indicators such as patient satisfaction, wait times, mortality rates, and cost-effectiveness. Governments often set targets and standards for hospitals to meet in order to ensure the delivery of high-quality healthcare services to their citizens. National performance benchmarks help identify areas for improvement and drive innovation within the hospital industry.

At the regional level: The performance of the hospital industry is also assessed Regions or states within a country may have different healthcare needs and priorities, leading to variations in hospital performance. Regional performance indicators may include bed occupancy rates, emergency department wait times, and availability of specialized services. By analysing regional performance data, healthcare authorities can identify gaps in service provision and allocate resources accordingly. Regional variations in hospital performance can

also highlight the need for targeted interventions or policy changes to improve healthcare outcomes for specific populations.

Monitoring and improving hospital industry performance at all levels is crucial for achieving optimal healthcare outcomes. It allows for the identification of best practices and areas of improvement that can be shared across different regions and countries. Collaboration between hospitals, healthcare authorities, and researchers is essential to foster innovation and drive continuous improvement within the industry. By focusing on key performance indicators and setting targets for improvement, the hospital industry can ensure that it meets the evolving needs of patients and delivers high-quality care on a global scale.

In conclusion, the hospital industry's performance at the global, national, and regional levels is of utmost importance for delivering high-quality healthcare services. Evaluating and monitoring key indicators allows for benchmarking, identifying areas for improvement, and driving innovation within the industry. Collaboration between hospitals, healthcare authorities, and researchers is essential to achieve optimal healthcare outcomes for patients worldwide.

2.4 prospects & challenges in the industry:

The hospital industry is a critical component of the healthcare system, providing essential medical services to individuals in need. With the constant advancements in medical technology and the growing demand for quality healthcare, the prospects for the hospital industry are promising. One major prospect is the potential for growth and expansion. As the population continues to increase and age, there will be an increased need for healthcare services, including hospital care. This presents an opportunity for hospitals to expand their capacity and offer a wider range of specialized services to meet the diverse needs of patients.

Another prospect for the hospital industry is the advancement in medical technology. With new innovations and breakthroughs in medical devices and treatments, hospitals can provide more effective and efficient care to their patients. Technology such as telemedicine allows patients to receive consultations and treatment remotely, reducing the need for physical visits to the hospital. This not only improves accessibility and convenience for patients but also helps hospitals reach a larger patient population. Additionally, advancements in surgical

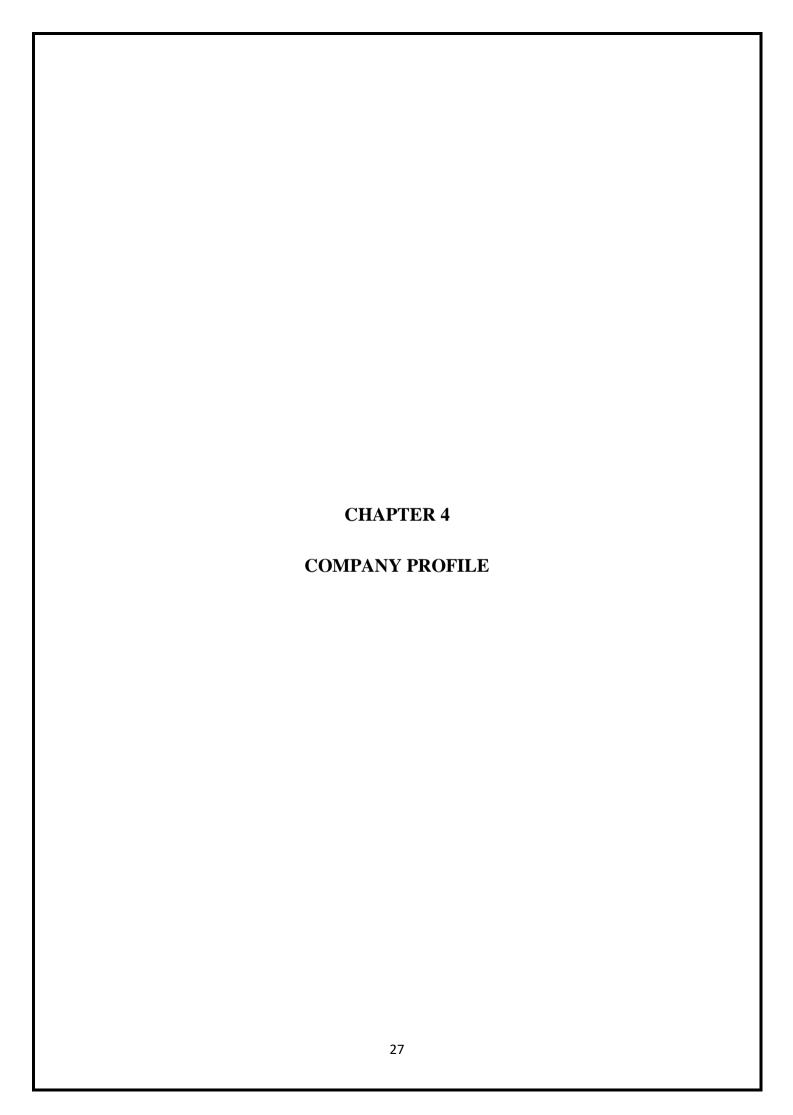
techniques and equipment have made complex surgeries safer and less invasive, leading to shorter hospital stays and quicker recovery times.

However, along with these prospects come a number of challenges that the hospital industry must address. One major challenge is the rising cost of healthcare. With increasing expenses in areas such as medical supplies, pharmaceuticals, and labor, hospitals are faced with the task of providing high-quality care while managing costs. This requires hospitals to implement efficient operational practices, negotiate favorable contracts with suppliers, and explore alternative revenue streams.

Another challenge for the hospital industry is the growing demand for healthcare professionals. As the population ages and chronic diseases become more prevalent, there is a shortage of skilled healthcare workers to meet the increasing demand. This shortage extends to various healthcare roles, including doctors, nurses, and technicians. To overcome this challenge, hospitals must invest in recruiting and retaining talented professionals by offering competitive salaries, professional development opportunities, and a positive work environment.

Furthermore, hospitals are also faced with the challenge of maintaining patient satisfaction and improving patient outcomes. With an emphasis on patient-centered care, hospitals are expected to provide personalized treatment plans and ensure a positive experience for patients throughout their stay. This requires hospitals to focus on continuous quality improvement initiatives, enhance communication between healthcare providers and patients, and implement strategies to reduce wait times and improve access to care.

In conclusion, the prospects for the hospital industry are promising due to factors such as population growth, advances in medical technology, and increased demand for healthcare services. However, challenges such as rising healthcare costs, workforce shortages, and the need for patient-centred care must be addressed in order for hospitals to thrive in this evolving landscape. By focusing on efficiency, recruitment strategies, and continuous quality improvement, hospitals can navigate these challenges and continue to provide essential medical services to their communities.



4.1 brief history of the organization:

About MCS Hospital:

MCS Hospital was started functioning in the year 2017 June 1st. Despite the presence of central and state government infrastructure and employees, health facilities in Muvattupuzha were surprisingly underdeveloped.

The hospital is equipped with state-of-the-art medical equipment and facilities, including advanced operation theaters, intensive care units, diagnostic laboratories, and a pharmacy. We have a team of highly skilled and experienced doctors, nurses, and support staff who are dedicated to providing the best possible healthcare services to our patients.

In addition to general medical services, the hospital also specializes in various departments such as cardiology, orthopedics, gynecology, pediatrics, and neurology. We have a team of specialists in each department who are well-versed in the latest medical advancements and techniques.

The hospital also focuses on preventive healthcare and regularly conducts health camps and awareness programs in the local community. We believe in the importance of educating people about healthy lifestyle choices and early detection of diseases.

To ensure the highest standards of patient care and safety, the hospital strictly adheres to all the guidelines and protocols set by the regulatory authorities. We have implemented a robust quality management system and regularly undergo internal and external audits to maintain our accreditation.

Apart from providing medical services, the hospital also has tie-ups with various insurance companies to facilitate cashless treatment for our patients. We understand the financial burden that healthcare expenses can impose on individuals and families, and strive to make our services affordable and accessible to all.

As a socially responsible institution, the hospital actively participates in various community development initiatives. We organize health camps in remote areas, provide medical aid to orphanages and old age homes, and support local schools and educational institutions.

In conclusion, this hospital is a beacon of hope for the people of Muvattupuzha and the surrounding areas. We are committed to providing high-quality, affordable, and compassionate healthcare services to all our patients. With the support of our dedicated staff and the trust of our patients, we aim to continue growing and serving the community for years to come.

Departments of MCS hospital:

DEPARTMENT OF GENERAL MEDICINE

DEPARTMENT OF OBSTETRICS & GYNAECOLOGY

DEPARTMENT OF PAEDIATRICS & NEONATOLOGY

DEPARTMENT OF LAPAROSCOPIC & GENERAL SURGERY

DEPARTMENT OF ORTHOPAEDICS

DEPARTMENT OF ANESTHESIOLOGY

EMERGENCY CARE UNIT

Management team:

PM Ismail (Chairman)

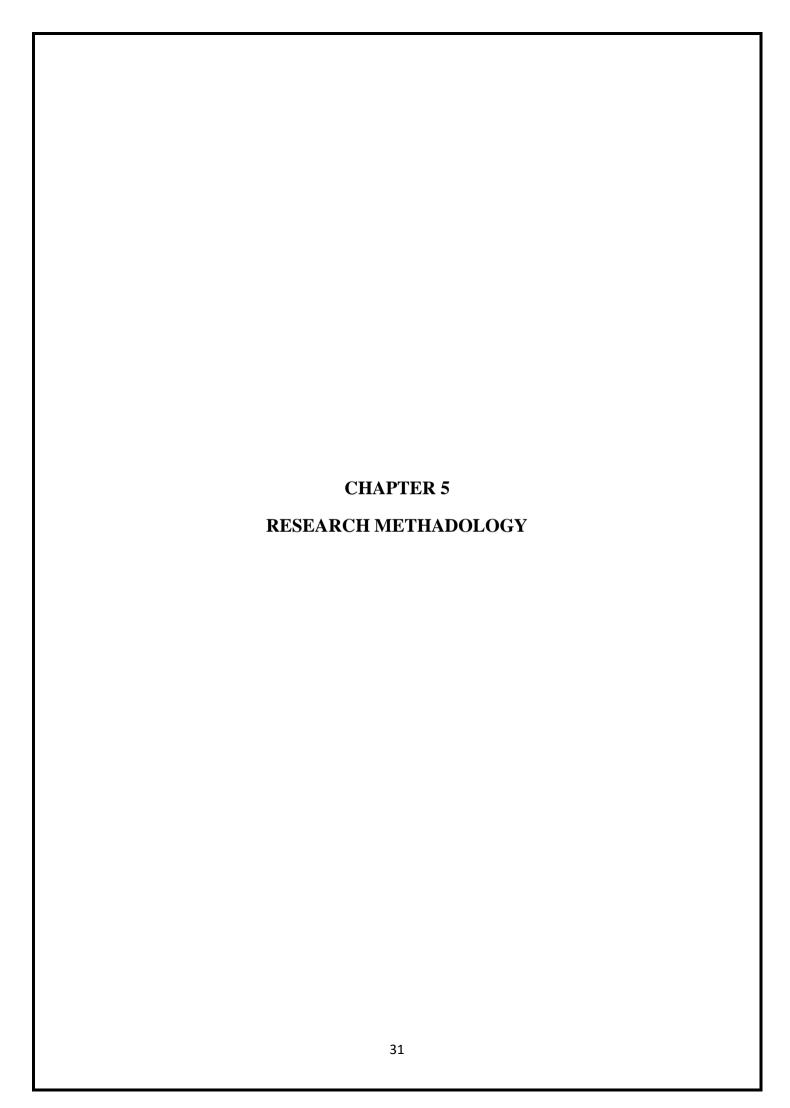
Surjith Esthose (Vice Chairman)

M A Saheer (Secretary)

Current board of directors:

There are seventeen directors in the executive committee and they are the key persons taking final decisions in crucial situation. Each and every decision are subject to the approval of the board. All of them are highly experienced professionals in India and abroad.

4.2 mission, vision statement and quality policy followed:		
4.2 mission, vision statement and q	quanty poncy tonowed:	
	30	



1 STATEMENT OF THE PROBLEM

The statement problem of the study is "Analysis of consumer behavior towards health care products with special reference to MCS Hospital"

2 RESEARCH DESIGN

The research design refers to the overall strategy that you choose to integrate the different components of the study in coherent and logical way, thereby, ensuring you will effectively address the research problem. It constitutes the blueprint for the collection, measurement and analysis.

3 SAMPLE DESIGN

Simple Random Sampling method is used to select the sample. It is a sample selected from a population in such a way that every member of the population has an equal chance of being selected and selection of any individual does not influence the selection of any other.

4 POPULATION

A population refers to the entire group of individuals, objects, events, or other elements that have a characteristics or attribute of interest. The population is the target of study, and the goal of research is to make inferences about the population based on a sample.

5 SAMPLING TECHNIQUE

Sampling techniques refer to the methods used to select a sample from a population. The choice of a sampling technique depends on the research question, the type of data being collected, the size of population, and the resources available for conducting the research.

The sampling method used for the study is random sampling.

6 SAMPLE SIZE

The sample size refers to the number of elements that are selected from a population for the purpose of conducting research. The sample size is an important consideration in the research process, as it affects the precision and accuracy of the results obtained.

• The sample size is 50.

7 DATA COLLECTION DESIGN

Data collection design refers to the process of planning and implementing methods for gathering data for a particular research study or project. The design process involves defining the research question or problem, determining the type of data needed to answer the question, selecting the most appropriate data collection methods, and planning how the data will be collected, stored, and analyzed.

8 DATA SOURCES

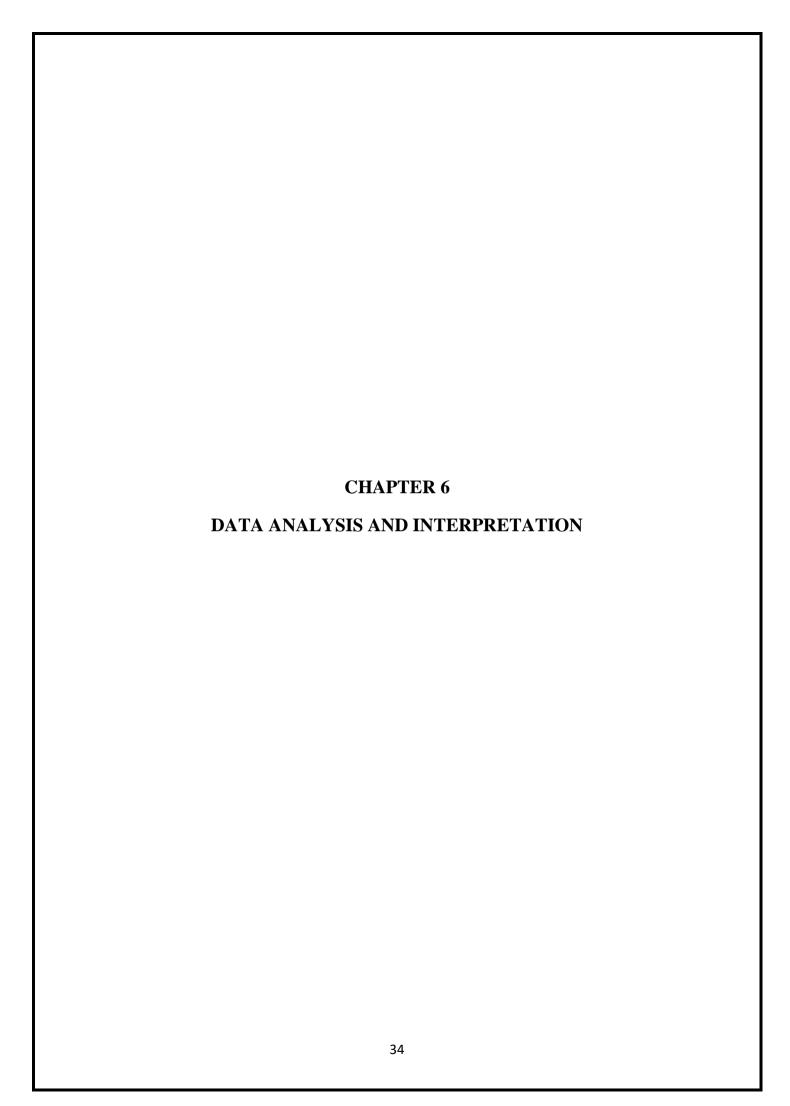
To achieve the goals of the study, both primary and secondary data were gathered. Primary sources of information are those that are gathered from scratch and for the first time, making them wholly unique in nature. A questionnaire has been used to obtain primary data. Data from secondary sources is information that has already been gathered and processed statistically by another party. The internet, organizational records, and other papers kept by the organization were used to gather secondary data.

9 DATA COLLECTION TOOLS

- Surveys: Surveys can be conducted online, via email, or in person, and are used to gather Information from many people.
- Data collection tool used for research is questionnaire.
- Surveys: Surveys are a common data collection tool used to gather information on employee satisfaction. They can be administered online, by mail, or in person and can be designed to collect both quantitative and qualitative data.
- Interviews: Interviews can be conducted in person or over the phone, and can be used to collect detailed information on employee satisfaction.

10 DATA ANALYSIS TOOL

Tables are created from the collected data. The percentages were calculated, and the analysis was done using the straightforward percentage approach. There is analysis, as well as varied conclusions and recommendations. With the aid of several tools, including percentages, tabulation, and charts, the data is evaluated.



1) Gender?

Options	Number of respondents	Percentage
Male	33	66%
Female	17	34%
TOTAL	50	100%

TABLE 6.1

The chart showing the gender of bystanders who attended this survey

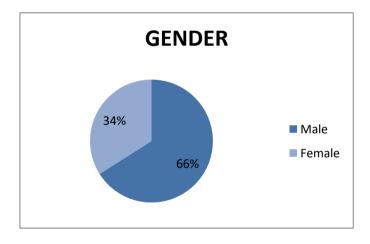


CHART 6.2

INTERPRETATION

According to the above data 66 % of respondents are male and 34 % of respondents are female in this survey

2) Age?

Options	Number of respondents	Percentage
Below 25	16	32%
25-50 years	29	58%
Above 50	5	10%
TOTAL	50	100%

TABLE 6.2

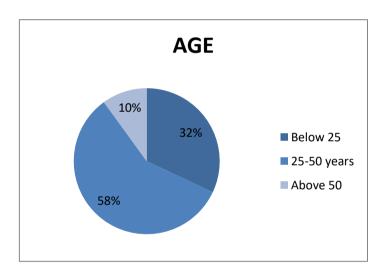


CHART 6.2

Chart showing the age of the patients

INTERPRETATION

According to the above data 58% of patients are in the age group below 25, 58% are between the age group 25-50 and 10% patients are in the age group 50 and above in this survey

3) Marital Status

Options	Number of respondents	Percentage
Single	14	28%
Married	36	72%
TOTAL	50	100%

TABLE 6.3

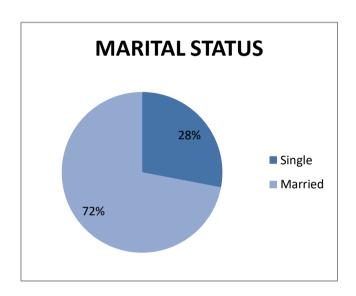


CHART 6.3

Chart showing the marital status of the patients

INTERPRETATION

According to the above data 28% of the patients are single and 72% of the patients are married.

4) Education Status

Options	Number of	Percentage
	respondents	
School	0	0%
UG	37	74%
PG and above	13	26%
TOTAL	50	100%

TABLE 6.4

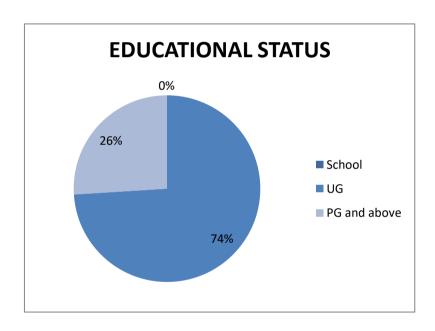


CHART 6.4

Chart showing the educational status of the patients

INTERPRETATION

According to the above data 0% of the patients have school education, 74% of the patients are under graduated and 26% of patients are post graduated and above qualified

5) Occupation

Options	Number of respondents	Percentage
Government Employee	19	38%
Self Employed	3	6%
Private employee	28	56%
TOTAL	50	100%

TABLE 6.5

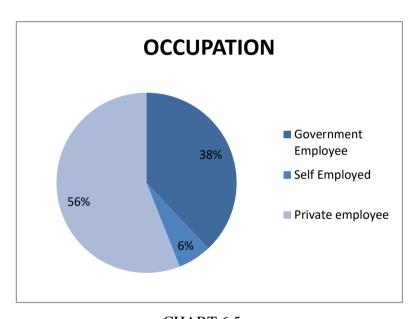


CHART 6.5

Chart showing the occupational status of the patients

INTERPRETATION

According to the above data 38% of patients are government employees, 6% of patients are self-employed, 56% of patients are private employee in this survey

6) Residence Status

Options	Number of	Percentage
	respondents	
Kerala	50	100%
Other State	0	0%
TOTAL	50	100%

TABLE 6.6

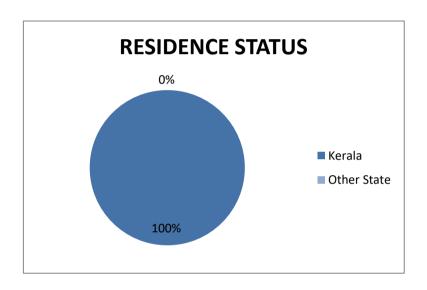


CHART 6.6
Chart showing the residence status of the patients

INTERPRETATION

According to the above data 100% of the patients are from Kerala and 0% of patients are from other state

7) Are u happy with the service provided by different departments

Options	Number of respondents	Percentage
YES	50	100%
NO	0	0
TOTAL	50	100%

TABLE 6.7

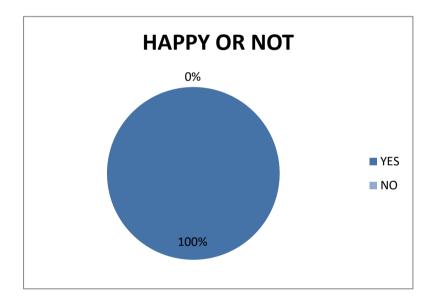


CHART 6.7

Chart showing the rate of happiness of patients towards the service

INTERPRETATION

According to the above data 100% of the patients are happy with the quality of service provided by the hospital.

8) How would you rate the overall quality of the healthcare products you use?

Options	Number of respondents	Percentage
Highly Satisfied	27	56%
Satisfied	18	36%
Neutral	5	10%
Dissatisfied	0	0%
TOTAL	50	100%

TABLE 6.8

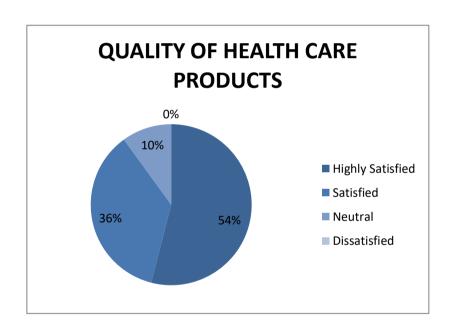


CHART 6.8

Chart showing the rate of quality of health care products which is used by the patients

INTERPRETATION

According to the above data 56% of the patients are highly satisfied toward the quality of the health care products 36% are satisfied,10% are neutral towards the quality of the product which they use

9) What factors influence your perception of quality in healthcare products?

Options	Number of respondents	Percentage
Effectiveness	43	86%
Safety	7	14%
Packaging	0	0%
Price	0	0%
TOTAL	50	100%

TABLE 6.9

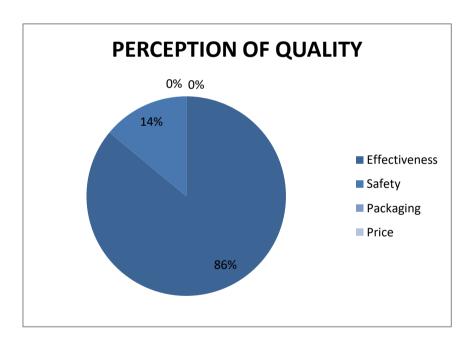


CHART 6.9

Chart showing the perception of quality in healthcare products by the patients

INTERPRETATION

According to the above data out of 50 86% of the patients prefer the effectiveness as the factor which influence the perception of quality

10) Are you satisfied with the quality of health care product provided by the hospital?

Options	Number of	Percentage
	respondents	
YES	50	100%
NO	0	0%
TOTAL	50	100%

TABLE 6.10

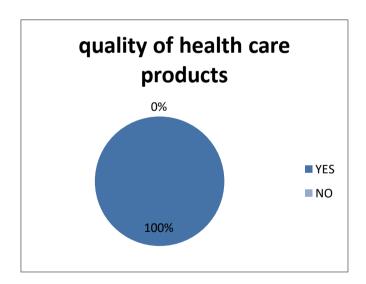


CHART 6.10

Chart showing the quality of health care products provided by the hospital

INTERPRETATION

According to the above data 100% of the patients are satisfied with the quality of health care products provided by the hospital

11) How effective do you find the healthcare products you use in addressing your health concerns?

Options	Number of	Percentage
	respondents	
Very Effective	18	36%
Somewhat Effective	26	52%
Neutral	4	8%
Not Very Effective	2	4%
TOTAL	50	100%

TABLE 6.11

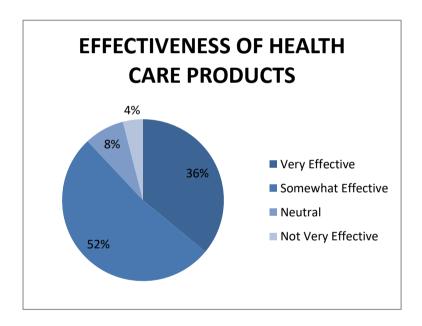


CHART 6.11

Chart showing the effectiveness of health care product which is used by the patients

INTERPRETATION

According to the above data out of 100% percentage 52% of the patients are saying that the healthcare products which they using for their health concerns is somewhat effective.

12) How likely are you to continue using the same healthcare products in the future?

Options	Number of respondents	Percentage
Very Likely	34	68%
Likely	13	26%
Neutral	2	4%
Unlikely	1	2%
TOTAL	50	100%

TABLE 6.12

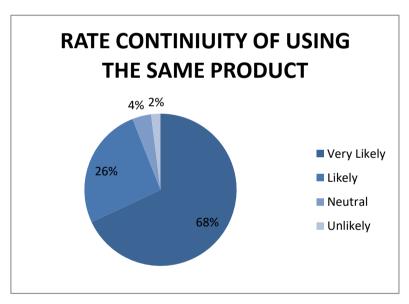


CHART 6.12

Chart showing the continuity using the same healthcare products in the future by the patients

INTERPRETATION

According to the above data out of 100% percentage 68% of the patients are saying that they continue the using of same health care products in the future

13) How often do you use these products?

Options	Number of respondents	Percentage
daily	43	86%
weekly	7	14%
monthly	0	0%
Yearly	0	0%
TOTAL	50	100%

TABLE 6.13

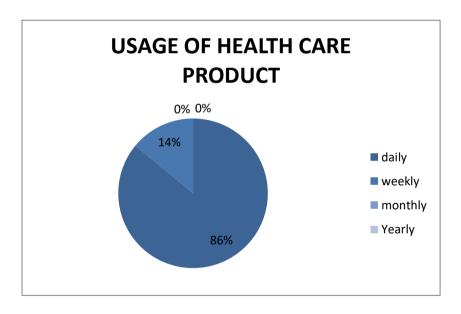


CHART 6.13

Chart showing the usage of health care products by the patients

INTERPRETATION

According to the above data out of 100% percentage 86% of the patients are saying that they use the health care products daily for their need

14) Do you believe that higher-priced healthcare products are generally of higher quality?

Options	Number of respondents	Percentage
Strongly Agree	6	12%
Agree	0	0%
Neutral	0	0%
Disagree	44	88%
TOTAL	50	100%

TABLE 6.14

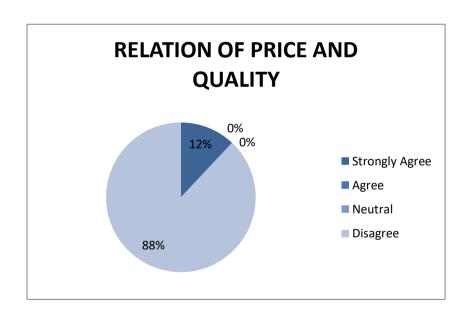


CHART 6.14

Chart showing the realtion of pricing and quality of health care products

INTERPRETATION

According to the above data out of 100% percentage 88% of the patients strongly diagrees that higher-priced healthcare products are generally of higher quality

15) How much do you trust the safety and effectiveness claims made by healthcare product manufacturers?

Options	Number of	Percentage
	respondents	
Completely Trust	2	4%
Somewhat Trust	13	27%
Neutral	34	69%
Somewhat Distrust	0	0%
TOTAL	50	100%

TABLE 6.15

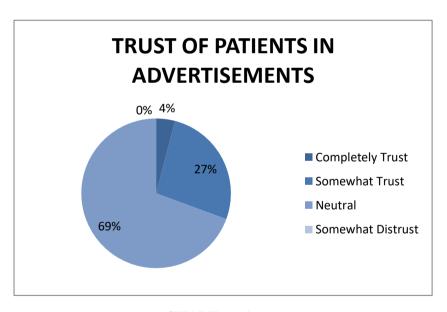


CHART 6.14

Chart showing the trust of patients in advertisements

INTERPRETATION

According to the above data out of 100% percentage 69% patients are neutrally supports the advertisement of health care products

16) How would you rate your overall Experience in the hospital?

Options	Number of respondents	Percentage
Highly Satisfied	3	6%
Satisfied	45	90%
Neutral	2	4%
Dissatisfied	0	0%
TOTAL	50	100%

TABLE 6.16

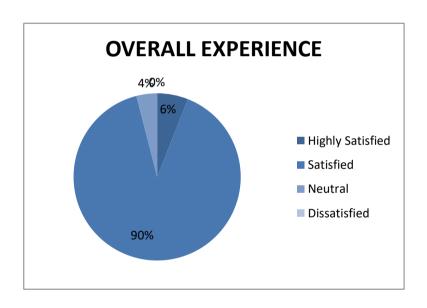
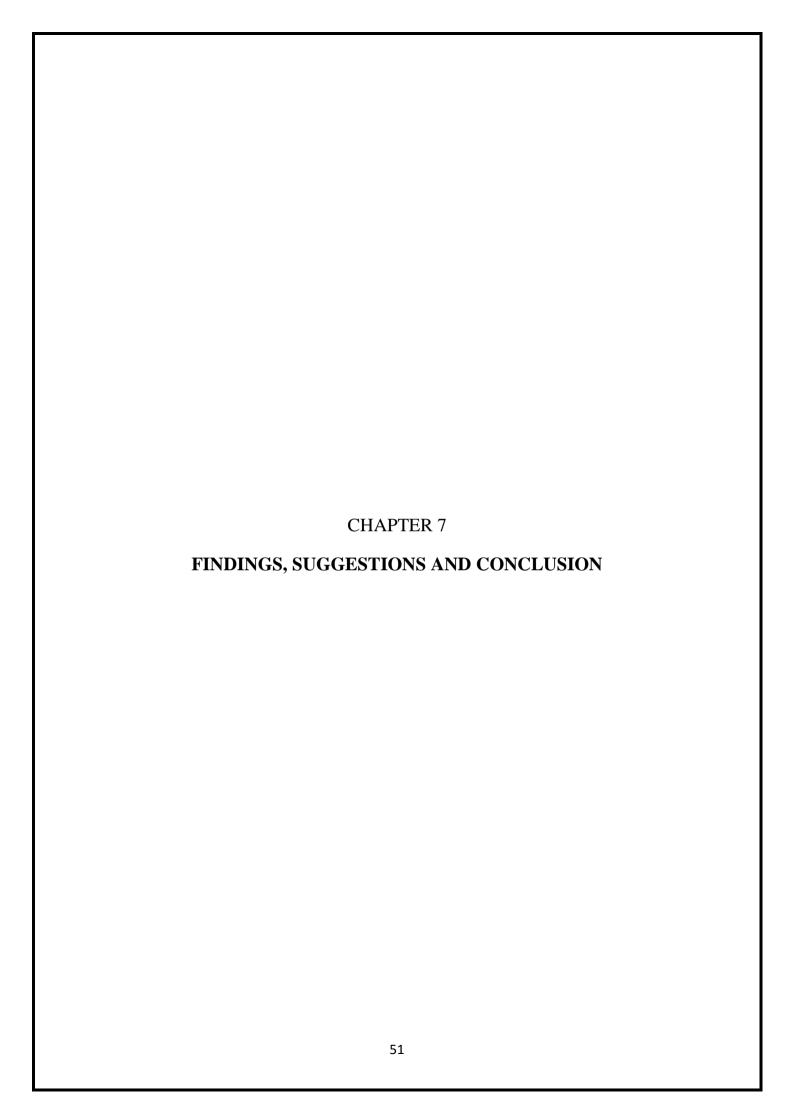


CHART 6.16

Chart showing the overall experience of the patients in the hospital

INTERPRETATION

According to the above data out of 100% percentage 90% of the patients satisfied with the overall experience in the hospital



7.1 FINDINGS

- According to the data 66 % of respondents are male and 34 % of respondents are female in this survey
- According to the data 58% of patients are in the age group below 25, 58% are between the age group 25-50 and 10% patients are in the age group 50 and above in this survey
- According to the data 28% of the patients are single and 72% of the patients are married.
- According to the data 0% of the patients have school education, 74% of the patients are under graduated and 26% of patients are post graduated and above qualified
- According to the data 38% of patients are government employees, 6% of patients are self-employed, 56% of patients are private employee in this survey
- According to the data 100% of the patients are from Kerala and 0% of patients are from other state
- According to the data 100% of the patients are happy with the quality of service provided by the hospital.
- According to the data 56% of the patients are highly satisfied toward the quality of the health care products 36% are satisfied,10% are neutral towards the quality of the product which they use
- According to the data out of 50 86% of the patients prefer the effectiveness as the factor which influence the perception of quality
- According to the data 100% of the patients are satisfied with the quality of health care products provided by the hospital
- According to the data out of 100% percentage 52% of the patients are saying that the healthcare products which they using for their health concerns is somewhat effective
- According to the data out of 100% percentage 68% of the patients are saying that they continue the using of same health care products in the future
- According to the data out of 100% percentage 86% of the patients are saying that they use the health care products daily for their need
- According to the data out of 100% percentage 90% of the patients satisfied with the overall experience in the hospital

•	According to the above data out of 100% percentage 88% of the patients strongly diagrees that higher-priced healthcare products are generally of higher quality. According to the above data out of 100% percentage 90% of the patients satisfied with the overall experience in the hospital

7.2 SUGGESTIONS

- Launch educational campaigns to raise awareness about the importance of healthcare products for maintaining health and preventing illnesses.
- Emphasize the unique benefits and features of healthcare products, such as effectiveness, safety, convenience, and value for money.
- Invest in attractive and informative packaging that communicates the product's key benefits and usage instructions clearly.
- Implement satisfaction guarantees or money-back guarantees to reduce perceived risk and encourage trial among hesitant consumers.
- Use customer feedback to continuously improve product quality, packaging, and messaging to better meet consumer expectations.
- Provide clear and accurate information about the benefits, uses, and proper usage of healthcare products through various channels such as websites, social media, and educational materials.

7.3 CONCLUSION

Through this project we can see the demographic and psychographic profiles of their target consumers, as well as their specific health concerns and goals. For example, younger consumers may prioritize convenience and accessibility, while older consumers may prioritize safety and efficacy. Additionally, cultural and societal factors can also influence consumer behavior towards healthcare products. For instance, in some cultures, traditional remedies and holistic approaches may be preferred over pharmaceutical options.

In order to effectively market healthcare products, manufacturers and retailers must tailor their messaging and positioning to resonate with their target audience. This may involve highlighting the unique features and benefits of the product, as well as addressing any concerns or misconceptions that consumers may have. For example, if a healthcare product is made from natural ingredients, the marketing campaign could emphasize its organic and sustainable qualities.

Moreover, building trust and credibility is crucial in the healthcare industry. Consumers are more likely to purchase products from brands they perceive as reliable and reputable. This can be achieved through transparent communication, providing scientific evidence to support product claims, and obtaining certifications or endorsements from trusted authorities.

In addition to traditional marketing strategies, digital marketing has become increasingly important in reaching and engaging with consumers. This includes utilizing social media platforms, online advertisements, and influencer partnerships to raise awareness and generate interest in healthcare products. Digital marketing also allows for personalized targeting and messaging, which can enhance the effectiveness of marketing campaigns.

Packaging and retail partnerships also play a significant role in influencing consumer behavior. Eye-catching and informative packaging can attract consumers and communicate the value of the product. Collaborating with reputable retailers can also enhance the perceived quality and credibility of the healthcare product.

Furthermore, actively collecting and acting on customer feedback is essential for continuous improvement and maintaining customer satisfaction. This can be done through surveys, reviews, and customer service interactions. By addressing customer concerns and

incorporating their suggestions, healthcare product manufacturers and retailers can build stronger relationships with their consumers and foster loyalty.

In conclusion, understanding consumer behavior towards healthcare products is crucial for manufacturers and retailers to effectively market and sell their products. By prioritizing elements such as effectiveness, safety, price, brand reputation, and recommendations, and implementing educational campaigns, effective branding, and engagement with healthcare professionals, they can increase consumer awareness, trust, and adoption of healthcare products. Leveraging digital marketing, optimizing packaging and retail partnerships, and actively collecting and acting on customer feedback can further enhance consumer engagement and stimulate demand. Ultimately, by comprehending and catering to the diverse needs and preferences of consumers, healthcare product manufacturers and retailers can navigate the competitive landscape and cultivate long-term relationships with their target audience.

ANNEXURE 1

QUESTIONNAIRE

- 1) Gender?
- Male
- Female
- 2) Age?
- Below 25
- 25-50 years
- Above 50
- 3) Marital Status
- Single
- Married
- 4) Education Status
- School
- UG
- PG and above
- 5) Occupation
- Government Employee
- Self Employed
- Private employee.
- 6) Residence Status
- Kerala
- Other State

7)	Are u happy with the service provided by different departments
•	YES
•	NO
8)	How would you rate the overall quality of the healthcare products you use?
•	Highly Satisfied
•	Satisfied Satisfied
	Neutral
•	
•	Dissatisfied
9)	What factors influence your perception of quality in healthcare products?
•	Effectiveness
•	Safety
•	Packaging
•	Price
10`	Are you satisfied with the quality of health care product provided by the hospital?
10,	YES
•	NO NO
•	NO
11)	How effective do you find the healthcare products you use in addressing your health concerns?
•	Very Effective
•	Somewhat Effective
•	Neutral
•	Not Very Effective
12)	How likely are you to continue using the same healthcare products in the future?

Very Likely

Likely

• Unlikely

Neutral

- 13) How often do you use these products?
- daily
- weekly
- monthly
- Yearly
- 14) Do you believe that higher-priced healthcare products are generally of higher quality
- Strongly Agree
- Agree
- Neutral
- Disagree
- 15) How much do you trust the safety and effectiveness claims made by healthcare product manufacturers?
- Completely Trust
- Somewhat Trust
- Neutral
- Somewhat Distrust
- 16) How would you rate your overall Experience in the hospital?
- Highly Satisfied
- Satisfied
- Neutral
- Dissatisfied

ANNEXURE

ANNEXURE 1: BIBLIOGRAPHY

- 1. Caballer-Tarazona, M., Moya-Clemente, I., Vivas-Consuelo, D., & Barrachina-Martínez, I. (2010).
- Capacity, competiton and efficiency in hospitals: A nonparametric approach.
 Journal of Productivity Analysis, 1, 123-138. Staat, M. (2006). Efficiency of hospitals in Germany: a DEA-bootstrap approach. Applied Economics, 38(19), 2255-2263.
- 3. Sickbert-Bennett, E. E., Samet, J. M., Clapp, P. W., Chen, H., Berntsen, J., Zeman, K. L., Bennett, W.D. (2020). Filtration efficiency of hospital face mask alternatives available for use during the COVID-19 pandemic. JAMA Internal Medicine, 180(12), 1607-1612.
- 4. Rumbold, B. E., Smith, J. A., Hurst, J., Charlesworth, A., & Clarke, A. (2015). Improving productive efficiency in hospitals: findings from a review of the international evidence. Health Economics, Policy and Law, 10(1), 21-43.
- 5. Araújo, C., Barros, C. P., & Wanke, P. (2014). Efficiency determinants and capacity issues in Brazilian for-profit hospitals. Health care management science, 17, 126-138.
- 6. Choi, J. H., Fortsch, S. M., Park, I., & Jung, I. (2017). Efficiency of US hospitals between 2001 and 2011. Managerial and Decision Economics, 38(8), 1071-1081.
- 7. Czypionka, T., Kraus, M., Mayer, S., & Röhrling, G. (2014). Efficiency, ownership, and financing of hospitals: The case of Austria. Health care management science, 17, 331-347.
- 8. Papadopoulos, A. M. (2015). Energy efficiency in hospitals: Historical development, trends and perspectives. Energy performance of buildings: energy efficiency and built environment in temperate climates, 217-233.
- 9. Farsi, M., & Filippini, M. (2005). An analysis of efficiency and productivity in Swiss hospitals. Università della Svizzera italiana.
- 10. Gannon, B. (2005). Testing for variation in technical efficiency of hospitals in Ireland. Vol. XX, No. XX, Issue, Year.
- 11. Ng, Y. C. (2011). The productive efficiency of Chinese hospitals. China Economic Review, 22(3), 428-439.

- 12. Votápková, J., & Šťastná, L. (2013). Efficiency of hospitals in the Czech Republic. Prague Economic Papers, 22(4), 524-541.
- 13. Mastromarco, C., Stastna, L., & Votapkova, J. (2019). Efficiency of hospitals in the Czech Republic: conditional efficiency approach. Journal of Productivity Analysis, 51, 73-89.
- 14. Mohanta, K. K., Sharanappa, D. S., & Aggarwal, A. (2021). Efficiency analysis in the management of COVID- 19 pandemic in India based on data envelopment analysis. Current Research in Behavioral Sciences, 2, 100063.
- 15. Kushwaha, D., & Talib, F. (2022). Comparative Efficiency Measurement of Indian Hospitals Using Data Envelopment Analysis: A Proposed Model. In Recent Advances in Operations Management Applications: Select Proceedings of CIMS 2020 (pp. 157-181). Singapore: Springer Nature Singapore.
- 16. İlgün, G., Sönmez, S., Konca, M., & Yetim, B. (2022). Measuring the efficiency of Turkish maternal and child health hospitals: A two-stage data envelopment analysis. Evaluation and Program Planning, 91, 102023.
- 17. Gavurova, B., & Kočišová, K. (2020). The efficiency of hospitals: Platform for sustainable healthcaresystem. Entrepreneurship and Sustainability Issues.
- 18. Vrabková, I., & Vaňková, I. (2021). Efficiency of human resources in public hospitals: An example from the Czech Republic. International journal of environmental research and public health, 18(9), 4711.
- 19. Yin, G., Chen, C., Zhuo, L., He, Q., & Tao, H. (2021, April). Efficiency comparison of public hospitals under different administrative affiliations in China: A pilot city case. In Healthcare (Vol. 9, No. 4, p. 437). MDPI.
- 20. Alinejhad, M., Aghlmand, S., Feizollahzadeh, S., & Yusefzadeh, H. (2020). The economic efficiency of clinical laboratories in public hospitals: A case study in Iran. Journal of clinical laboratory analysis, 34(2), e23067.
- 21. Rosko, M., Al-Amin, M., & Tavakoli, M. (2020). Efficiency and profitability in US not-for-profit hospitals. International Journal of Health Economics and Management, 20, 359-379.
- 22. Pereira, M. A., Ferreira, D. C., Figueira, J. R., & Marques, R. C. (2021). Measuring the efficiency of the Portuguese public hospitals: A value modelled network data envelopment analysis with simulation. Expert Systems with Applications, 181, 115169.

- 23. Alatawi, A. D., Niessen, L. W., & Khan, J. A. (2020). Efficiency evaluation of public hospitals in Saudi Arabia: an application of data envelopment analysis. BMJ open, 10(1), e031924.
- 24. Chowdhury, H., & Zelenyuk, V. (2016). Performance of hospital services in Ontario: DEA with truncated regression approach. Omega, 63, 111-122.
- 25. Ramos, M. C. D. A., Cruz, L. P. D., Kishima, V. C., Pollara, W. M., Lira, A. C. O. D., & Couttolenc, B. F. (2015). Performance evaluation of hospitals that provide care in the public health system, Brazil. Revista de saude publica, 49, 1-9.
- 26. Stefko, R., Gavurova, B., & Kocisova, K. (2018). Healthcare efficiency assessment using DEA analysis in the Slovak Republic. Health economics review, 8(1), 1-12.
- 27. Özgen Narcı, H., Ozcan, Y. A., Şahin, İ., Tarcan, M., & Narcı, M. (2015). An examination of competition and efficiency for hospital industry in Turkey. Health care management science, 18, 407-418.
- 28. Barpanda, S., & Sreekumar, N. (2020). Performance analysis of hospitals in Kerala using data envelopment analysis model. Journal of Health Management, 22(1), 25-40.
- 29. Mogha, S. K., Yadav, S. P., & Singh, S. P. (2015). Total factor productivity growth in private sector hospitals of India: an assessment through MPI approach. Global Business and Economics Review, 17(2), 164-187
- 30. Ram Jat, T., & San Sebastian, M. (2013). Technical efficiency of public district hospitals in Madhya Pradesh, India: a data envelopment analysis. Global health action, 6(1), 21742.
- 31. Akazili, J., Adjuik, M., Jehu-Appiah, C., & Zere, E. (2008). Using data envelopment analysis to measure the extent of technical efficiency of public health centres in Ghana. BMC international health and human rights, 8, 1-12.