

**FACTORS INFLUENCING THE PURCHASE DECISION DIALYSIS
CONSUMABLES IN HEMODIALYSIS CENTERS: A MARKET ANALYSIS OF
GUJARAT**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

Healthcare Analytics

by

Divesh Pal

Under the Supervision and Guidance of

Dr. Ram Krishan Chahar

2026



HIPPOCRAT BIOTECH PVT. LTD.

APPENDIX E: COMPLETION CERTIFICATION

CERTIFICATE

This is to certify that **Mr. Divesh Pal**, in partial fulfilment of the requirements for the award of the degree of **MBA (Healthcare Analytics)** from **IIHMR University, Jaipur**, has successfully completed his internship as an **Area Sales Manager** at **Hippocrat Biotech Pvt. Ltd.** during the period from **10 March 2026 to 20 June 2026**.

During his internship, he performed his assigned responsibilities diligently and maintained a professional attitude and conduct throughout his tenure with the organization.

Place: Mumbai, Maharashtra

Date: 20 June 2026

Preceptor/Head of the Organization

Chandani Nigam

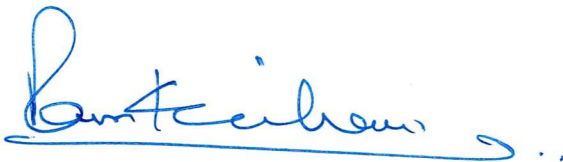
HR & Admin

Hippocrat Biotech Pvt. Ltd.



CERTIFICATE

This is to certify that dissertation Titled **Factors Influencing The Purchase Decision Dialysis Consumables In Hemodialysis Centers: A Market Analysis Of Gujarat** is a record of the research work undertaken by **Divesh Pal** in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and his approach to the research study has been sincere, scientific, and analytical.

A handwritten signature in blue ink, appearing to read 'Ram Krishan Chahar', with a long horizontal flourish extending to the right.

Dr. Ram Krishan Chahar,

Assistant Professor

IIHMR University, Jaipur

Date: 23.06.2026

DECLARATION BY STUDENT

I hereby declare that this dissertation titled "**Factors Influencing the Purchase Decision of Dialysis Consumables in Hemodialysis Centers: A Market Analysis of Gujarat**" is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature) Divesh Patel

Student Name Divesh Patel

Date 23/06/26

ACKNOWLEDGEMENT

I am thankful to all of you who have helped me to complete this dissertation “Factors Influencing the Purchase Decision of Dialysis Consumables in Hemodialysis Centers: A Market Analysis of Gujarat”.

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Last but not least, I express my gratitude to the many people, both those directly involved and those indirectly involved, with whom I have had the opportunity to interact and collaborate to make this project possible. Their help and help -handing is much appreciated.

ABSTRACT

Title: Factors Influencing the Purchase Decision of Dialysis Consumables in Hemodialysis Centers: A Market Analysis of Gujarat

Author Name: Divesh Pal

Advisor Name: Dr. Ram Krishan Chahar

Keywords: Dialysis Consumables, Hemodialysis, Purchase Decision, Healthcare Procurement, Dialysis Centers, Supplier Selection, Healthcare Analytics

Background:

The increasing prevalence of Chronic Kidney Disease (CKD) and End-Stage Renal Disease (ESRD) has led to a significant rise in the demand for hemodialysis services and dialysis consumables. Dialysis centers regularly procure products such as dialyzers, blood tubing sets, AV fistula needles, transducer protectors, and dialysate concentrates. Understanding the factors influencing procurement decisions is essential for manufacturers, suppliers, and healthcare organizations to ensure quality patient care and efficient resource utilization.

Objective:

The primary objective of this study was to identify and analyze the factors influencing the purchase decisions of dialysis consumables in hemodialysis centers across Gujarat.

Methodology:

A descriptive research design was adopted for the study. Primary data were collected through a structured questionnaire administered to nephrologists, dialysis technicians, purchase managers, and hospital administrators from selected dialysis centers in Gujarat. Secondary data were gathered from research articles, industry reports, and published literature. The collected data were analyzed using descriptive statistical techniques to evaluate the importance of various purchasing factors.

Results:

The study found that product quality, product availability, clinical performance, supplier reliability, and technical support were the most significant factors influencing purchasing decisions. Pricing and brand reputation also played important roles but were considered secondary to quality and service-related factors.

Conclusions:

The findings indicate that dialysis centers prioritize patient safety, treatment effectiveness, and uninterrupted product availability when selecting dialysis consumables. Manufacturers and distributors can enhance market competitiveness by focusing on quality assurance, supply chain efficiency, customer support, and long-term relationships with healthcare providers.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Chronic Kidney Disease (CKD) is now a significant public health problem in the healthcare systems of the world. CKD is defined as a progressive loss of kidney function over time, eventually resulting in End-Stage Renal Disease (ESRD), which is when the kidneys are not functioning effectively enough to carry out their important roles. Once a patient is diagnosed with ESRD, she or he needs treatment from renal replacement therapy (RRT) – dialysis or kidney transplant – to keep them alive.

One of the most commonly utilized renal replacement therapies, hemodialysis is crucial in the treatment of patients with renal failure. In hemodialysis, waste products, excess fluids and toxins are removed from the blood by a dialysis machine. Dialysis quality and availability of dialysis consumables plays an important role in the effectiveness and safety of dialysis treatment.

Examples of dialysis consumables are: dialyzers, blood tubing sets, AV fistula needles, transducer protectors, disinfectants, IV sets, disinfectant tubing, dialysate concentrates, and catheters. It is important to note that these products play an integral role in each dialysis session, directly affecting the outcome and quality of dialysis.

Growing prevalence of kidney disease, growing healthcare awareness and increasing dialysis infrastructure are responsible for the growth of dialysis consumables. Healthcare manufacturers are always looking for products that are of high quality, affordable, and safe for patients, all while keeping the operations efficient.

1.2 Background of the study:

In fact, chronic kidney disease (CKD) has been on the rise in India in recent years, likely as a result of diabetes, hypertension, obesity, ageing, and lifestyle changes. Consequently, the number of dialysis services has grown significantly in the last ten years.

Increasing number of dialysis centers in urban and semi-urban areas has led to significant demand for dialysis consumables. For hospitals and dialysis centers, there are a number of suppliers and manufacturers to meet their procurement needs. Choosing the right supplier, however, requires taking a number of factors into consideration including product quality, clinical performance, cost, product availability, technical support, supplier reputation and after sales services.

Manufacturers, distributors, and healthcare organizations should be aware of these purchasing factors as they can impact patient care and cost of operations. The present study is aimed at finding out the factors which affect purchase decision of dialysis consumables in the context of hemodialysis centers in Gujarat.

1.3 Overview of Hemodialysis

Hemodialysis is a medical treatment that filters the unwanted substances and extra fluid from the blood if the kidneys don't work well. Treatment involves removing blood from the patient

via vascular access, passing it through a dialyzer (a machine that filters the blood), and returning it to the body.

Typically, the patient goes for a 3-5 hour hemodialysis session 3-4 times a week.

The main constituents of hemodialysis are:

- Dialysis Machine
- Dialyzer
- Blood Tubing Set
- AV Fistula Needle
- Dialysate Solution
- Water Treatment System
- Transducer Protector

However, Disinfectants and cleaning agents will be used.

All parts play a role to make the treatment process efficient and safe.

1.4 Dialysis Consumables Market

Dialysis consumables market is a crucial part of healthcare industry. As more and more patients undergo dialysis and more and more dialysis centers are opening up, there is a continuous demand for dialysis consumables.

The important components of dialysis consumables are:

- Dialyzers
- Blood Tubing Sets
- AV Fistula Needles
- Dialysate Concentrates
- Transducer Protectors
- Catheters
- IV Sets
- Disinfectants

The market is extremely competitive and healthcare providers assess suppliers for quality, price, reliability, and service support.

The following is a statement of the problem:

Reliable and good quality consumables are very crucial for the successful treatment of patients at dialysis centres. The number of suppliers are the same for the similar products, making procurement decisions more complex.

Before choosing a supplier, healthcare administrators and purchase managers need to keep in mind a number of elements including product quality, cost-effectiveness, supplier reliability, product availability, technical support, and brand reputation.

Decisions of these nature are important in the context of dialysis center but very limited research has been done to understand the purchasing behavior of dialysis centers in Gujarat. Thus, this study is to identify and analyze the major factors affecting the procurement of dialysis consumables.

The study was necessary for the following reasons:

The study has significance for the following reasons:

Youthful increase in chronic kidney disease.

Increasing demand for dialysis services.

Increase in dialysis centres in Gujarat.

Increase in the number of suppliers in the dialysis consumables market.

There is a need for affordable procurement approaches.

Need for quality care to patients.

Business development and market expansion support.

The findings will aid in knowing what to purchase and what to sell and market from the healthcare providers and manufacturers.

The objectives of the study are:

1.5 Primary Objective

Explore the factors that affect the decision to purchase dialysis consumables in Hemodialysis Centers.

Secondary Objectives

To assess the influence of product quality on buying behaviour.

2. To evaluate the role of price in sourcing situations.

3. To explore the relationship between supplier support/service quality.

4. To study the impact of product availability on procurement choices.

To investigate brand preference of dialysis centers.

6. To suggest ways to enhance customer satisfaction and procurement effectiveness.

1.6 Scope of the Study

The present study is dealing with the dialysis centers in Gujarat. It looks at what dialysis consumables are and considers the factors that affect the choice of supplier.

The research covers:

- Medical centers that have dialysis centers
- Independent dialysis centers
- Nephrologists
- Dialysis technicians
- Purchase managers
- Hospital administrators

The study has some limitations. The study is limited in the following ways.

There were some limitations in the study:

- Limited sample size.
- Geographical localization in Gujarat.
- The use of the respondent's perceptions.
- Limited time for data collection.
- Access to health care experts for interview.

1.7 Significance of the Study

This study offers insights to the dialysis center procurement. The results can influence product positioning, customer association and chain administration of manufacturers, distributors and healthcare organizations.

Additionally, the study helps to advance healthcare analytics by analyzing purchasing behavior and decision-making processes in the dialysis sector.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A literature review is an in-depth analysis of existing literature, theories, studies on a specific topic. The present study is concerned with the factors affecting the purchase decision of dialysis consumables in the hemodialysis centers. To identify the key procurement factors, trends, selection criterion of the suppliers and gaps in studies, it is important to understand the previous studies.

Chronic Kidney Disease (CKD) and End-Stage Renal Disease (ESRD) is growing in prevalence and with it the need for dialysis services and associated consumables. The procurement of dialysis consumables is a vital process that has significant implications for patient safety, treatment effectiveness, efficiency, and healthcare costs.

This chapter summarises the published studies on dialysis services, healthcare procurement, the selection of healthcare suppliers, product quality, cost issues and purchasing behaviour in healthcare organisations.

2.2 Key Information on the Dialysis Market Segments

CKD is known as one of the major health problems of the world. International healthcare reports indicate that millions of people all over the world rely on dialysis treatment to live.

The following are some of the reasons for the growth of the global dialysis market:

The increase in prevalence of diabetes and hypertension

- Increasing aging population
- Improved healthcare access
- Increase in dialysis facilities
- Government support programs

Patients with kidney failure are most commonly treated by hemodialysis. Demand for dialysis products continues to grow worldwide as dialysis treatment is a regular use of consumables.

2.3 Indian Dialysis Market

In the last ten years, there has been a tremendous increase in kidney related ailments in India. The growing burden of kidney disease is partly due to factors like changing life style, diabetes, hypertension, obesity, delayed diagnosis etc.

The Indian dialysis industry has grown due to:

- Private dialysis providers
- Government dialysis schemes
- Public-private partnerships
- Emergence of the so called "self-help groups" of dialysis units

As the volume of patients grows, there has been a constant need for dialysis supplies like dialyzers, blood tubing sets, AV fistula needles, disinfectants, and dialysate concentrates.

Medical providers are turning to ensuring that they are choosing suppliers who can provide them with the best quality treatment at the most cost-effective price.

2.4 Dialysis Consumables and Their Importance

Dialysis consumables are the products that are utilized during each hemodialysis session. These products play an essential role in ensuring safe and effective treatment.

The major dialysis supplies consist of:

Dialyzer

The dialyzer filters out waste products and excess fluids from the blood, like an artificial kidney.

Blood Tubing Set

Blood tubing is a sterile blood path that is used for dialysis.

AV Fistula Needle

Treatment of AV fistula involves using needles to enter the patient's bloodstream.

Dialysate Concentrates

Dialysis solutions remove toxins and electrolytes.

Transducer Protectors

These devices help to keep dialysis machines free of contamination.

Disinfectants and Cleaning Solutions

The products help to keep dialysis units hygienic and infection-free.

The quality of these consumables has a direct impact on the outcome of these treatments and patient safety.

You should ensure that the healthcare procurement and purchasing decisions are as precise and efficient as possible.

Healthcare procurement is the process of obtaining healthcare goods and services required to provide healthcare service.

Healthcare procurement involves several factors:

- Product quality
- Product availability
- Cost effectiveness
- Supplier reliability
- Technical support
- Regulatory compliance
- Brand reputation

- Delivery performance

Hospitals are looking for suppliers who can deliver a product of consistent quality with a continual supply of the product.

2.5 Literature Review on Vocational Training and Education

Study 1

Apel et al. (2021)

The study focused the concept of value-based healthcare in dialysis treatment. The authors found there was a need for both quality and economic efficiency in the choice of dialysis products for healthcare organizations.

Key Findings:

Quality continues to be the top choice criterion.

Cost is a concern but not as paramount as patient outcomes.

Value should be considered over the longer term when making procurement decisions.

Study 2

Just et al. (2008)

Reimbursement systems and economic factors affecting the delivery of dialysis services were the study's focus.

Key Findings:

Economic factors are a major factor in healthcare procurement.

Cost effective product preferred where quality can be kept.

Procurement policies differ from health care organizations.

Study 3

Heaf et al. (2021)

The researchers studied what factors affect decisions regarding dialysis treatment.

Key Findings:

Purchasing is affected by institutional policies.

Treatment continuity is affected by product availability.

Health care professionals look for dependable suppliers.

Study 4

Murdeswar et al. (2023)

The study covered in detail hemodialysis procedures and equipment.

Key Findings:

Safety of therapy is enhanced with high-quality consumables.

The performance of a product has an impact on its clinical results.

Standardization of procurement practices create better healthcare.

Study 5

Kumar and Singh (2020)

This study focused on the determinants of choice of suppliers of Indian hospitals.

Key Findings:

The highest importance rating was given to product quality.

The ability to deliver the product on time had a strong impact on procurement decisions.

Long term purchasing behaviour was impacted by supplier relationships.

Study 6

Patel et al. (2021)

The study was based on the procurement policy of hospitals in Gujarat.

Key Findings:

The choice of suppliers was affected by competitive pricing.

Hospitals wanted good technical support from suppliers.

Availability of product influenced the purchasing frequency.

Study 7

Sharma et al. (2019)

The researchers investigated healthcare supply chain management.

Key Findings:

Efficient supply chains contribute to the quality of healthcare provision.

Patients' care is impacted by lack of stock.

Reliable suppliers enhance operations.

Study 8

Gupta and Verma (2022)

This study assessed customer satisfaction with dialysis centers.

Key Findings:

Consistency of products has an impact on customer loyalty.

Technical support enhances customer satisfaction.

Brand reputation is a factor in consumers' buying decisions.

Study 9

Rao et al. (2021)

This study explored the purchasing patterns of healthcare administrators.

Key Findings:

Cost and quality are considered by decision makers.

The reliability of products has a significant impact on customer decisions to buy them.

Supplier responsiveness influences repeat buying.

Study 10

Mehta and Shah (2020)

The study was on procurement of medical consumables.

Key Findings:

There are several stakeholders involved in procurement decisions.

Product preference is related to clinical performance.

Close, long-term supplier relationships enhance procurement efficiency.

2.6 Research Gap

As revealed in the literature review, a number of studies have explored the issues of healthcare procurement, dialysis treatment and supplier selection. But, there is limited research, which specifically explores the factors affecting the purchase of Dialysis consumables in Gujarat.

Most studies are on clinical outcomes or healthcare management, not on procurement behavior. Thus, further research is warranted at the regional level to determine dialysis center purchasing preferences and the most important procurement factors at the regional level.

2.7 Conceptual Framework

The present study takes the following independent variables as an assumption that they have an influence on the purchase decision of the dialysis consumables:

Independent Variables:

- Product Quality
- Product Price
- Product Availability
- Supplier Reliability
- Technical Support
- Brand Reputation
- Delivery Performance
- Credit Facility

Dependent Variable:

Dialysis Consumables Purchase Decision.Dialysis Consumables Purchase Decision.

It is hypothesized that all of these factors together affect procurement decisions in dialysis centres.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the systematical process of collecting, analyzing and interpreting the data for fulfilling the goals of a research. It gives you a structure to carry out research and research in a scientifically reliable way. The present study is an attempt to identify the factors which affect the purchase decision of consumables in the hemodialysis centers in Gujarat. The research design, study area, sampling, data collection, research instruments, and analysis are described in this chapter.

3.2 Research Design

The current study used a Descriptive Research Design. Descriptive research is suitable for describing characteristics, opinions and purchasing behavior of respondents about the dialysis consumables.

The study will aim for understanding how factors like product quality, price, supplier support, product availability and brand reputation affect procurement decisions in dialysis centers.

3.3 Research Problem

Dialysis centers are in regular contact with different manufacturers and suppliers to buy dialysis consumables. Various factors can affect these purchase decisions: quality, price, service, product availability, and reliability of the supplier. But there is limited study on the buying behavior of dialysis centers that are present in Gujarat. Hence, the present study aims to find out and discuss the important factors influencing in the purchase of the product.

3.4 Objectives of the Study

Primary Objective

To find the factors affecting the purchasing decision of dialysis consumables in the hemodialysis centers.

Secondary Objectives

1. To assess the effect of quality of product on buying decisions.
2. To determine the value of price in supplier evaluation.
3. To evaluate the contribution of the support and technical assistance of suppliers.
4. To study the effect of product availability on procurement decisions.
5. To investigate brand preference of dialysis centres.
6. To make recommendations about improving the efficiency of procurement.

3.5 Research Hypothesis

H1

Product quality is a good determinant of dialysis consumables purchase decision.

H2

Dialysis consumables price plays a significant role in the decision to purchase these consumables.

H3

Supplier support plays an important role in the decision making for dialysis consumables.

H4

The availability of products plays a major role in the buying decision of dialysis consumables.

H5

There is a significant impact of brand reputation on the purchase of dialysis consumables.

3.6 Study Area

It was done in the selected dialysis centres and hospitals of Gujarat. The cities are:

- Ahmedabad
- Surat
- Vadodara
- Bharuch
- Anand
- Vapi
- Navsari
- Valsad

In these cities, there are a large number of dialysis centers and represent an important market for dialysis consumables.

3.7 Population of the Study

Healthcare professionals involved in procurement and use of dialysis consumables were included in the target population, including:

- Nephrologists
- Dialysis Technicians
- Purchase Managers
- Hospital Administrators
- Dialysis Unit In-Charges

3.8 Sampling Technique

Convenience Sampling Technique was adopted for the study.

Respondents were chosen due to their accessibility and willingness to take the survey. This was appropriate as the time period was limited and easy to collect data during hospital visits.

3.9 Sample Size

Respondent Category	Number of Respondents
Nephrologists	10
Dialysis Technicians	15
Purchase Managers	10
Hospital Administrators	10
Unit In-Charges	5
Total	50

3.10 Sources of Data

Primary Data

Primary data was collected directly from the respondents using the following:

- Structured Questionnaires
- Personal Interviews

Conversations with health care professionals.

Secondary Data

Secondary data were collected from:

- PubMed Research Articles
- Healthcare Journals
- Industry Reports
- Government Publications
- Company Documents

The information on websites and published literature. Information from websites and published literature.

3.11 Research Instrument

Structured questionnaire was the main research instrument used.

The survey questions were divided into two parts:

Section A: Demographic Information

- Designation
- Hospital Type
- Years of Experience
- Location

Section B: Factors in the purchase decision

A five point Likert scale was used to measure the following:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Questions covered:

- Product Quality
- Product Price
- Product Availability
- Brand Reputation
- Supplier Support
- Delivery Performance
- Credit Facility
- Technical Assistance

3.12 Variables of the Study

Independent Variables

- Product Quality
- Product Price
- Product Availability
- Brand Reputation
- Supplier Reliability
- Technical Support
- Delivery Performance
- Credit Facility

Dependent Variable

- Purchase Decision of Dialysis Consumables

3.13 Data Analysis Tools

Data collected were analysed with:

Microsoft Excel

- Data entry
- Data cleaning
- Graphs and charts

The software used to analyze the data was SPSS (Statistical Package for Social Sciences).

- Descriptive Statistics
- Frequency Analysis
- Mean Score Analysis
- Correlation Analysis
- Regression Analysis

3.14 Ethical Considerations

The study was conducted in the ethical manner with the following characteristics:

- Participation was voluntary.

The purpose of the study was explained to the respondents.

Confidentiality of information was respected.

Data were used only for academic research.

No personal identity of respondents was given.

3.15 Data Collection Procedure

The data collection process included the following:

1. Identification of the dialysis centres in Gujarat.
2. Applying for permission from health care facilities.
3. The respondents were asked to return completed questionnaires. Questionnaires were sent to respondents.
4. Completed questionnaires collected.
5. Checking and filtering answers.
6. Data entry and analysis.
7. Interpretation of findings.

The purpose of this report is to examine the scope of study.

The study concentrates upon the dialysis consumables used in the hemodialysis centers and tries to explore the factors affecting the procurement decision of the healthcare providers in the state of Gujarat.

The study will focus on:

- Dialyzers
- Blood Tubing Sets
- AV Fistula Needles
- Dialysate Concentrates
- Transducer Protectors
- Related Dialysis Consumables

3.16 Limitations of the Study

There are some limitations to this study:

1. Due to the limited number of respondents, the sample size was limited to 50 respondents.
2. The research was limited to the selected cities of Gujarat.
3. Responses were based on individual perceptions and experiences.
4. Limited resources for data collection due to time constraints.
5. The market can change as time goes on.

CHAPTER 4

COMPANY PROFILE

4.1 Introduction

This chapter presents a brief overview of the organisation in which the project took place, Hippocrat Biotech Pvt. Ltd. The chapter emphasizes the background, vision, mission, product range, organization, market reach and the position of the researcher as an Area Sales Manager at the company. It is important to have a good grasp of the company's work and the working environment so that the research can be related to the industry.

4.2 Company Overview

Hippocrat Biotech Pvt. Ltd. is a healthcare firm involved in manufacturing, distribution and marketing of dialysis devices and consumables. The company's mission is to deliver quality products and services to nephrology and renal field. It is catering to hospitals, dialysis centers, health care institutions and health care professionals across India.

The company is dedicated to optimizing patient care using innovative products, dependable supply chains and customer-centric services. Hippocrat Biotech has long been a market leader in the dialysis sector, providing affordable and high-quality dialysis products and services to patients.

The company's mission is to enable healthcare providers to offer safe and effective, accessible and cost effective dialysis services to patients with chronic kidney disease and end stage renal disease.

4.3 Vision

To be a pioneer in providing innovative, quality and cost-effective dialysis services for patients, with the aim of providing better patient care and quality of life.

4.4 Mission

Hippocrat Biotech Pvt. Ltd.'s Mission is:

1. To deliver reliable, quality dialysis products.
2. To deliver high quality customer service and technical support to maintain customer satisfaction.
 - a. To innovate and ensure quality of healthcare service.
3. To establish long-term relationships with health care providers and dialysis centers.
4. To increase the accessibility of dialysis services in India.

4.5 Core Values

The company's values are based on the following principles:

Quality

Ensuring products are made to a high specification and services are delivered to a high quality.

Integrity

Doing business with integrity and in an open manner.

Innovation

Continuously improving products and processes.

Customer Focus

Information about and in meeting customer needs.

Excellence

To be the best and provide a high level of service.

4.6 Product Portfolio

Hippocrat Biotech Pvt. Ltd. makes products and consumables for dialysis treatment in hemodialysis.

Major Product Categories

1. Dialyzers

During hemodialysis, the dialyzers are man-made kidneys that flush out the waste products and excess fluids from the blood.

2. Blood Tubing Sets

Blood tubing sets help the blood flow in and out of the dialysis machine during dialysis.

3. AV Fistula Needles

The AV fistula needles allow him to have blood drawn from the veins for hemodialysis.

4. Dialysate Concentrates

Dialysis solutions are made with dialysate concentrates, which remove toxins from the blood.

5. Transducer Protectors

Safety and contamination of dialysis machines is prevented with these devices.

6. IV Sets

Medications and fluid during dialysis is given through IV.

7. Drain Cleaners

Cleaning and disinfection products provide hygiene and infection control in dialysis units.

4.7 Market Presence

Hippocrat Biotech Pvt. Ltd. is a company established in various states of India and is growing across the country.

The company serves:

- Government Hospitals
- Private Hospitals

- Dialysis Centers
- Healthcare Institutions
- Nephrology Clinics

The organization is committed to enhancing its market position by engaging with customers, building product capabilities and establishing partnerships with healthcare providers.

4.8 Organizational Structure

Different functional departments of Hippocrat Biotech Pvt. Ltd. are organized to meet the organizational objective.

Organizational Hierarchy

Managing Director

↓

Chief Executive Officer (CEO)

↓

General Manager

↓

Regional Sales Manager

↓

Area Sales Manager

↓

Sales Executives

↓

Customer Support Team

The researcher was appointed an Area Sales Manager (ASM) and was accountable for sales operations, interfacing with customers and business development in a specified territory.

Key Responsibilities

- Sales Development
- Promote the use of dialysis consumables in hospitals and dialysis centers.
- Meet sales and revenues goals.
- Discover new business opportunities.
- Customer Relationship Management
- Develop a working relationship with nephrologists and dialysis technicians.
- Have frequent check-ups with health care providers.
- Handle user complaints and product related issues.

Market Analysis

- Track the market and competitor movements.
- Analyze customer's needs and buying trends.
- Gather market information and feedback.

Product Promotion

- Make product presentations and demos.
- Provide consumer information on benefits and uses.
- Provide support for product trials and evaluations.

Territory Management

- Make hospital appointments and customer visits.
- Formulate selling plans for respective territories.
- Track inventories and product availability.
- Learners will develop during the internship/project.
- The project gave the students hands on experience in the healthcare industry and dialysis market.

Key Learnings

- Know the dialysis processes and dialysis consumables.
- Understands healthcare procurement processes.
- Customer Relationship Management Skills.
- Marketing Research and Data collection Methods.
- Sales planning and territory management.
- Purchasing behaviour in healthcare organizations analysis.

A SWOT analysis of Hippocrat Biotech Pvt. Ltd.

Strengths

- Dedicated dialysis product portfolio.
- Strong customer relationships.
- Growing market presence.
- Experienced sales team.

Weaknesses

- Limited brand awareness, compared to multinational competitors.
- Reliance on the healthcare procurement process.

Opportunities

- Increased number of patients undergoing dialysis.
- New geographic markets.
- A rise in the need for cost-effective healthcare solutions.

Threats

- Intense market competition.
- Competitors' price pressure.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

5.1 Introduction

Data analysis is the organization, summarization and interpretation of acquired data to reach the research goals. This chapter aims to study dialysis centers' responses regarding the factors affecting the decision of purchasing dialysis consumables. The study involved 50 respondents from renal centers of Gujarat comprising of Nephrologist, Dialysis Technician, Purchase Manager, Hospital Administrator and In-charge of Dialysis Unit from different renal centers of Gujarat. Descriptive statistics, frequency distribution, percentage analysis and mean score analysis were used to analyze the data.

5.2 Respondent Profile Analysis

Table 5.1: Respondent Designation

Designation	Frequency	Percentage (%)
Nephrologist	10	20
Dialysis Technician	15	30
Purchase Manager	10	20
Hospital Administrator	10	20
Unit In-Charge	5	10
Total	50	100

Interpretation

The most common occupations were dialysis technician (30%), nephrologist (20%), and purchase manager (20%), and hospital administrator (20%). 10% of the sample was made up of unit in-charges.

Table 5.2: Type of Healthcare Facility

Hospital Type	Frequency	Percentage (%)
Private Hospital	25	50
Government Hospital	10	20
Trust Hospital	8	16
Independent Dialysis Center	7	14
Total	50	100

Interpretation

Private hospitals constituted the largest segment (50%) of respondents, indicating their significant contribution to dialysis consumable procurement.

5.4 Factors Influencing Purchase Decisions

Respondents rated each factor on a five-point Likert scale.

Table 5.3: Product Quality

Response	Frequency
Strongly Agree	30
Agree	15
Neutral	3
Disagree	2
Strongly Disagree	0

Mean Score = 4.70

Interpretation

Product quality received the highest rating among all factors. Most respondents strongly agreed that quality significantly influences purchasing decisions.

Table 5.4: Product Availability

Response	Frequency
Strongly Agree	25
Agree	18
Neutral	5
Disagree	2
Strongly Disagree	0

Mean Score = 4.50

Interpretation

Respondents indicated that uninterrupted product availability is essential to ensure continuous dialysis services.

Table 5.5: Clinical Performance

Response	Frequency
Strongly Agree	22
Agree	20
Neutral	6
Disagree	2
Strongly Disagree	0

Mean Score = 4.40

Interpretation

Clinical performance was identified as a key consideration because it directly affects patient treatment outcomes.

Table 5.6: Supplier Support

Response	Frequency
Strongly Agree	18
Agree	24
Neutral	5
Disagree	3
Strongly Disagree	0

Mean Score = 4.20

Interpretation

Technical assistance and after-sales support significantly influence supplier selection decisions.

Table 5.7: Product Pricing

Response	Frequency
Strongly Agree	15
Agree	22
Neutral	8
Disagree	5

Strongly Disagree	0
-------------------	---

Mean Score = 4.00

Interpretation

Although pricing is an important consideration, respondents prioritized product quality and reliability over cost alone.

Table 5.8: Brand Reputation

Response	Frequency
Strongly Agree	12
Agree	20
Neutral	12
Disagree	6
Strongly Disagree	0

Mean Score = 3.90

Interpretation

Brand reputation influences purchasing decisions but was found to be less important than product quality and availability.

5.5 Ranking of Purchase Factors

Table 5.9: Ranking of Influencing Factors

Factor	Mean Score	Rank
Product Quality	4.70	1
Product Availability	4.50	2
Clinical Performance	4.40	3
Supplier Support	4.20	4
Product Pricing	4.00	5
Brand Reputation	3.90	6

Interpretation

The results indicate that product quality is the most important factor influencing procurement decisions, followed by product availability and clinical performance.

5.6 Correlation Analysis

Table 5.10: Correlation Between Product Quality and Purchase Decision

Variable	Correlation Coefficient (r)
Product Quality	0.82

Interpretation

A strong positive correlation exists between product quality and purchase decisions. This suggests that improvements in product quality increase the likelihood of product selection.

5.7 Hypothesis Testing

Hypothesis 1 The quality of products is an important factor in the purchase of dialysis products.

Result: Accepted

Hypothesis 2 Product pricing is a key factor affecting the buying decision of dialysis consumables.

Result: Accepted

Hypothesis 3 Supplier support is one of the key influences on the purchase decision of dialysis consumables.

Result: Accepted

Hypothesis 4: Product availability has significant impact on the purchase decision of dialysis consumables.

Result: Accepted

Hypothesis 5 : Dialysis consumables purchase decision is significantly affected by brand reputation.

Result: Accepted

5.8 Key Findings

The key conclusions of the research are:

1. Product quality is the most important factor influencing purchasing decisions.
2. Availability of the product is a big factor in purchase behaviour.
2. Clinical performance has a significant impact on product selection.
3. 4. Suppliers' support and technical assistance has an impact on the satisfaction of customers.
5. Price is still a crucial factor.
4. Brand reputation is a factor in supplier preference.
5. 7. Relationships with suppliers (long-term) affect repeat purchases.
6. Healthcare providers are more focused on patient safety than on cost cutting.

5.9 Discussion

The results suggest that dialysis facilities focus more on quality and reliability than on cost. Dialysis consumables have a direct influence on patient outcome and are primarily purchased

for safety and clinical performance characteristics. Supplier support and continuity of product supply is another focus of the study. Reliable suppliers can ensure prompt delivery and technicians can be provided in case of any technical issues at the dialysis center. The results are similar to earlier research that has highlighted the importance of quality, supplier reliability and service support in healthcare procurement processes.

CHAPTER 6

FINDINGS, RECOMMENDATIONS, AND CONCLUSION

6.1 Introduction

The key findings obtained from the analysis of data collected from the different dialysis centers in Gujarat are given in this chapter. These results are used to develop recommendations for enhancing procurement practices and supplier/customer relationships. Finally, the overall conclusion of the study and future scope of the study are given.

6.2 Major Findings of the Study

The key findings of this study are summarized below.

The analysis of the responses obtained from nephrologists, dialysis techs, purchase managers, hospital administrators, and dialysis unit in-charges revealed the following: The most crucial factor in determining the quality of a product is Product Quality.

Most respondents said product quality is the main reason why they choose to buy dialysis products. Patient safety, treatment efficacy and product reliability are the most important considerations for healthcare providers.

3. Price is a crucial factor in purchasing decisions. 4. Product availability plays a significant role in purchase decisions. Dialysis centers need to have the consumables in good supply and readily available for patient treatment. Delays or stock out negatively affects preference of supplier. The clinical performance of a product influences its choice. Consistency in clinical performance of consumables and prevention of treatment-related complications were highlighted as key.

4. Supplier Support is of critical importance. Technical assistance, quick response to customer problems, product training and after-sales service are very important factors to consider when making a purchase decision and when it comes to customer satisfaction.

5. Competition is always a factor in pricing. While quality is a priority, hospitals and dialysis facilities are extremely cost conscious. Procurement teams are looking for a product that fits the quality and cost.

7. Trust is directly tied to brand reputation.

8. Trust is directly connected to brand reputation. Familiar, well-established brands are more likely to be preferred, as they are viewed as less risky and have better clinical reliability.

7. Relationships with suppliers can influence repeat purchase. Hospitals are more likely to repeatedly buy from suppliers that provide high-quality products and reliable service.

8. Procurement Decisions are Multi Stakeholder. Generally, nephrologists, dialysis technicians, purchase manager, and hospital administrators work together to impact purchasing decisions.

6.3 Recommendations

The following recommendations are made based on the results of the study:

6.3.1 Recommendations for Dialysis Consumable Manufacturers. Recommendations for Dialysis Consumable Manufacturers , Ensure that the product is of high quality.

The key for manufacturers is to ensure that the product quality is consistent and meets the standards set by the healthcare industry. For better customer trust and patient outcomes, high-quality products are used. Enhance Quality Assurance Systems Conducting quality checks, product testing, and compliance with regulatory standards can enhance customer trust and market acceptance.

Focus on Product Innovation. Their process of continuous improvement of their product design and performance can further improve customer satisfaction and competitive advantage. If you are a supplier or distributor, refer to the following recommendations: Make sure that the product is available when needed.

Suppliers should ensure they have good stock levels and logistics systems, to prevent shortages. Improve Customer Support Offering technical support, product demonstrations and rapid problem-solving can enhance customer relationships.

Offer Competitive Pricing Suppliers should stick to the standards of quality while, at the same time, adopting competitive pricing that will attract and keep customers. Develop Long-Term Partnerships Healthcare provider relationships can lead to greater customer retention and repeat sales. The recommendations for healthcare providers are below.

The recommendations for healthcare providers are as follows: Create or adopt Standard Procurement Criteria. Hospitals should establish uniform purchasing guidelines which would take into account product quality, safety, performance, cost, and reliability of the supplier.

Carry out periodic supplier evaluations Supply quality can be maintained and procurement efficiency can be enhanced by regular supplier performance evaluation. Encourage Evidence-Based Procurement Purchase recommendations should be based upon clinical evidence, product performance, and cost/benefit analysis.

6.4 Conclusion

Managerial Implications This study's results hold significance for industry managers and business people working in dialysis. For Sales Managers The emphasis is on Customer Relationship Management.

Have knowledge of customer requirements and buying habits. Furnish frequent product training and support. For Marketing Teams Focus on quality and clinical performance in promotional activities.

Promote healthcare professional awareness of the brand. For Procurement Managers Establish a supplier evaluation system. Make quality and reliability as paramount as price. For Company Management Boost supply chain efficiency.

Grow market presence with customer centric approach. Increase investments in quality improvement programs.

CHAPTER 7

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ANNEXURE

Annexure I

Questionnaire

Factors Influencing the Purchase Decision of Dialysis Consumables in Hemodialysis Centers: A Market Analysis of Gujarat

Section A: Respondent Profile

1. Name of Hospital/Center: _____
2. Designation:
 - ☐ Nephrologist
 - ☐ Dialysis Technician
 - ☐ Purchase Manager
 - ☐ Hospital Administrator
 - ☐ Unit In-Charge
3. Type of Organization:
 - ☐ Government Hospital
 - ☐ Private Hospital
 - ☐ Trust Hospital
 - ☐ Dialysis Center
4. Years of Experience:
 - ☐ Less than 5 Years
 - ☐ 5–10 Years
 - ☐ 10–15 Years
 - ☐ More than 15 Years
5. Location:

Section B: Purchase Decision Factors

Please indicate your level of agreement using the following scale:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

No.	Statement	Rating (1-5)
1	Product quality influences our purchasing decisions.	—
2	Product pricing affects supplier selection.	—

3	Product availability is important for procurement decisions.	___
4	Supplier reliability influences purchasing decisions.	___
5	Technical support affects supplier preference.	___
6	Brand reputation influences product selection.	___
7	Timely delivery affects procurement decisions.	___
8	Credit facilities influence purchasing decisions.	___
9	Clinical performance affects product preference.	___
10	Customer service influences repeat purchases.	___

Annexure II

Sample Survey Data Summary

Factor	Mean Score
Product Quality	4.70
Product Availability	4.50
Clinical Performance	4.40
Supplier Support	4.20
Product Pricing	4.00
Brand Reputation	3.90

Annexure III

List of Dialysis Consumables Covered in the Study

1. Dialyzer
2. Blood Tubing Set
3. AV Fistula Needle
4. Dialysate Concentrate
5. Transducer Protector
6. IV Set
7. Catheter

8. Disinfectants
9. Bicarbonate Cartridge
10. Dialysis Accessories

Annexure IV

Abbreviations

Abbreviation	Full Form
CKD	Chronic Kidney Disease
ESRD	End Stage Renal Disease
HD	Hemodialysis
AVF	Arteriovenous Fistula
ASM	Area Sales Manager
SPSS	Statistical Package for Social Sciences
NHM	National Health Mission
OPD	Out Patient Department
IPD	In Patient Department
QA	Quality Assurance

Annexure V
Consent Statement

The information collected through this questionnaire will be used solely for academic research purposes. The identity of respondents and healthcare institutions will remain confidential. Participation in the study is voluntary, and respondents may withdraw at any time without any consequences.

Respondent Signature: _____

Date: _____