

BRAND PERCEPTION MAPPING IN THE MOST COMMONLY PREFERRED MOLECULES BY GYNAE, CPS, CARDIO & ORTHO

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By

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Under the Supervision and Guidance of

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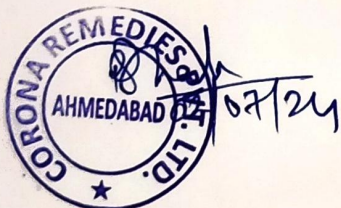
To Whom So Ever It May Concern

This is to certify that **Mr. Shubham Agarwal** the student of IIHMR, Jaipur has successfully completed his internship at CORONA Remedies Pvt. Ltd. during **April 1st – June 30th 2024**.

His internship project was a part of Market Research assignment on "**Brand perception mapping in the most prescribed molecule by Gyne/ CPs/ Cardio/ Diabeto**".

The scope of his work included primary research on different specialties with the help of a well-designed questionnaire to understand doctor perception & preference for prescribing various combinations & the factors affecting choice of molecule & its rationale in different patient conditions.

We wish him every success in his life & career.



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DECLARATION BY STUDENT

I hereby declare that this dissertation titled "Brand Perception Mapping in the Most Commonly Preferred Molecules by Gynae, CPs, Cardio & Ortho" 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 Information derived from the published or unpublished work of others has been duly acknowledged in the text.



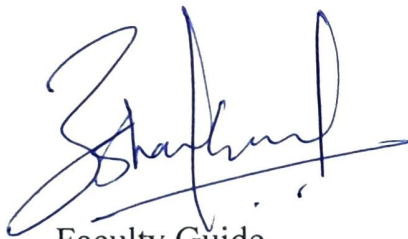
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CERTIFICATE

This is to certify that dissertation titled **Brand perception mapping in the Most Commonly preferred Molecules by Gynae, CPs, Cardio & Ortho** is a record of the research work undertaken by Mr. Shubham Agarwal in partial fulfillment of the requirements for the award of the degree of MBA Pharmaceutical Management from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.



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ABSTRACT

This dissertation explores brand perception in the pharmaceutical industry, focusing on commonly prescribed molecules by gynecologists, consulting physicians (CPs), cardiologists, and diabetologists. Through primary research and a literature review, the study identifies key factors influencing prescribing behaviours and brand preferences. Quality, affordability, and availability are pivotal determinants, with quality being the most critical. Corporate and brand equity, geographic variations, and doctor demographics significantly impact brand perception and prescribing decisions.

In gynecology, progesterone formulations are chosen based on clinical needs like luteal phase support and high-risk pregnancies. Cardiologists prioritize medications like rosuvastatin with antiplatelet agents (Aspirin or Clopidogrel) for cardiovascular disease management, influenced by efficacy and patient tolerance. CPs and diabetologists prefer combinations like Glimepiride and Metformin for diabetes management, particularly in patients with insulin resistance and obesity, balancing clinical efficacy and cost considerations.

Geographical factors and doctor demographics shape prescribing patterns, with younger doctors favouring newer brands and older practitioners favoring established medications. Strong corporate and brand equity, built through consistent quality and effective communication, is crucial.

Recommendations for pharmaceutical companies include enhancing product quality, addressing affordability through strategic pricing, ensuring availability, and building strong brand equity. Collaborating with key opinion leaders and supporting evidence-based medicine are essential, alongside post-marketing surveillance for continuous improvement and trust maintenance.

This research emphasizes a patient-centered approach in pharmaceutical marketing to support optimal healthcare delivery.

Keywords: brand perception, pharmaceutical industry, prescribing behavior, healthcare providers, medication quality.

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Date-

Shubham Agarwal

Place- Jaipur

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Chapter 1

INTRODUCTION

1.1 INTRODUCTION

The pharmaceutical industry is incredibly aggressive, with many unique capsules vying for the attention of fitness care vendors. In this context, logo notion is critical to steer prescribing behaviors. Drug choice for gynecologists, cardiologists and diabetics depends no longer best on scientific advantage but also on numerous concerns together with emblem name, affected person feedback and price. This thesis objectives to discover tablets utilized in drug combos commonly prescribed in those specialties is in mapping, with a focal point on the underlying drivers of emblem choice.

1.1.1 BACKGROUND AND MOTIVE

In gynecology, hormone remedy including prescribing progesterone is crucial for coping with a whole lot of corporations from menstrual disorders to hormone alternative therapy. Cardiologists commonly prescribe telmisartan, silnidipine, chlorthalidone, telmisartan, metoprolol, telmisartan, amlodipine mixture to save you cardiac activities. Diabetics additionally prescribe antiplatelet combination tablets such as statins, aspirin for effective control of kind 2 diabetes. Stop mixture remedy including Glimepiride, Metformin on and use complementary therapies inclusive of L-Methylfolate and Pregabalin, Duloxetine for associated complications consisting of neuropathic ache, depressive signs and symptoms.

The belief of those manufacturers among healthcare carriers is stimulated with the aid of more than one elements. Efficacy and safety are paramount, but different factors inclusive of ease of use, affected person adherence, and universal logo agree with additionally notably impact decision-making. Understanding those perceptions can provide precious insights into the prescribing styles and assist pharmaceutical businesses to tailor their marketing techniques for that reason.

1.1.2 SIGNIFICANCE OF THE STUDY

Mapping the emblem belief amongst these specialties is essential for numerous reasons. First, it allows in figuring out the strengths and weaknesses of various pharmaceutical brands from the attitude of healthcare professionals. Second, it provides insights into the elements which can be maximum vital to prescribers while deciding on a emblem, that may tell centered advertising and product development techniques. Finally, it offers an knowledge of the competitive panorama, especially in how manufacturers like Corona Remedies are perceived relative to other gamers inside the marketplace.

1.1.3 METHODOLOGY OVERVIEW

To gain these goals, a number one research approach might be followed. This entails the design and distribution of a well-structured questionnaire focused at gynecologists, cardiologists, and diabetologists. Data will be accumulated thru Google Forms and analyzed to pick out traits and insights into logo perception. The findings could be integrated and analyzed to draw conclusions and make guidelines for pharmaceutical groups

1.1.4 OBJECTIVES:

- 1. To have a thorough understanding of the pharmacological use of the below molecules:**
 - Telmisartan + Cilnidipine + Chlorthalidone, Telmisartan + Cilnidipine, Telmisartan + Amlodipine - CPs/ Cardio/ Diabeto
 - Rosuvastatin + Aspirin, Rosuvastatin + Clopidogrel, Rosuvastatin + Aspirin + Clopidogrel - CPs/ Cardio/ Diabeto
 - Glimepiride + Metformin(1000mg) - CPs/ Cardio/ Diabeto
 - L-Methylfolate & Combinations and Pregabalin + Duloxetine - CPs/ Cardio/ Diabeto
 - Progesterone in Gynae
- 2. Prepare a questionnaire for the primary research survey.**
- 3. Conduct primary research on a sizeable sample of each specialty.**
 - Understand doctor's perception & preference for prescribing various combinations
 - Understand the factors affecting choice of molecule & its rationale in different patient conditions

Chapter 2

LITERATURE REVIEW

2.1 LITERATURE REVIEW

2.1.1 Introduction

Within pharmaceutical firms, brand confidence has a big impact on prescription patterns. This evaluation of the literature aims to identify the factors affecting brand belief among healthcare organizations. It concentrates on the most often prescribed drug combinations in the fields of gynecology, cardiology, and diabetes management.

2.1.2 Gynecology

Steroid Formulations

Progesterone is an essential hormone in the treatment of serious gynecological disorders including luteal phase support, gestational support, and high-risk pregnancies. Numerous formulations, such as drugs, softules, gels, and injections, offer benefits of their own and are selected mostly based on the demands of the afflicted person [1,2]

- **Tablets:** Especially for help during the luteal phase and continuing gestational resource, tablets are extensively used for his or her regular hormone supply and convenience of use [1].
- **Softules:** These are preferred for more absorbing and luxury, particularly in high-risk pregnancies[2].
- **Gels:** Powerful at delivering localized hormone shipping, progesterone gels are beneficial in cases of threatened abortions, recurrent miscarriages, and immoderate-chance pregnancies [3].
- **Injections:** These give fast and effective hormone release and are appropriate for emergency conditions like threatening abortion and manual during IUI and IVF procedures [4].

2.1.3 Cardiologists and Consulting Physicians

Rosuvastatin Combinations

Rosuvastatin is often used along with antiplatelet drugs like aspirin or clopidogrel to treat cardiovascular diseases. The choice between clopidogrel and aspirin depends on the medical conditions and patient tolerance. [5,6]

- **Aspirin:** Good for reducing thrombotic events, it is advised even if it can irritate the stomach [5].

- Clopidogrel: Choosing it in cases when aspirin has adverse effects or in those with coagulation issues provides effective antiplatelet activity with fewer gastrointestinal side effects [6].

Notes for Writing Prescription

- In people with ASCVD, rosuvastatin combined with antiplatelet drugs reduces cardiovascular events and helps prevent plaque buildup [7].
- PCI (Percutaneous Coronary Intervention): Rosuvastatin aids with lipid control and plaque stabilization; post-PCI antiplatelet treatment is crucial to preventing stent thrombosis [8].
- Coronary Artery Bypass Graft Surgery, or CABG: Maintaining graft patency and preventing thrombotic events require rosuvastatin and antiplatelet medications [9].

2.1.4 Diabetes Care

Combining Metformin with Glimepiride

Treatments for type 2 diabetes often include glimepiride plus metformin, particularly in patients with obesity and insulin resistance [10, 11].

- Glimepiride is a sulfonylurea that increases pancreatic insulin production, therefore improving glycemic control [10]
- Metformin: A cornerstone of the treatment for diabetes, it increases insulin sensitivity and reduces hepatic glucose production [11].

Indications

- Insulin Resistance: The combination can lower blood sugar levels and boost insulin sensitivity [12].
- Obesity: Metformin helps for its weight-neutral or weight-reducing effects; glimepiride enhances glycemic control [13].

2.1.5 Affecting Components of Brand Perception

Corporate Equity and Brands

Prescription practices are mostly shaped by brand equity and corporation. A good corporate reputation and a well-established brand trust may help a drug be accepted by medical professionals more readily [14, 15].

Geography and Demographics

The infrastructure for healthcare and the frequency of diseases in a certain area may influence prescription habits. Furthermore, younger doctors might be more open to trying new brands than their more experienced colleagues who cling to tried-and-true prescriptions [16].

Affordability, Availability, and Quality

Second only to quality in determining brand choice is affordability. Besides prescribing safe and efficient therapies, physicians consider the cost to ensure patient compliance. Even if it is less significant, availability contributes to ensure that patients can routinely get the medications they are given [17].

Conclusion

This review of the research emphasizes the complicated factors influencing the prescribing habits and brand perception of healthcare practitioners. Knowing these elements can help pharmaceutical companies increase brand equity and ensure that their products meet the needs of patients and doctors.

Chapter 3

METHODOLOGY

3.1 METHODOLOGY

3.1.1 Questionnaire Design

- Literature survey and preliminary research: To determine the contemporary level of knowledge on the mixtures or compounds in issue, a thorough survey of the literature become first performed. This raised pertinent problems and exciting factors.
- Questionnaire Formulation: The questionnaire became first drafted using the literature observe. There were questions within the draft intended to get special answers on the views of prescribers, the functions of prescriptions, and the perception of the emblem.
- Expert Opinion: To guarantee its thoroughness and relevance, issue count number specialists in the pharmaceutical enterprise assessed the questionnaire. Comments more suitable the questions.
- Confirmation: The questionnaire became progressed after substantial idea to accumulate the records required to attain the observe's desires.

3.1.2 Expert Interviews

Experts in each mixture or remedy, docs, should be your first source of information. Locating Authorities: The possible interviews had been arranged with desire for prescribers who have been conversant with the specific combos of medicinal drugs under research.

Interview Schedule: The specialists deliberate the interviews to healthy their availability. Arranging and ensuring their nerve-racking schedules allowed this.

Interviewing: The finished questionnaire turned into used as a manual for each interview. In case specialists can be found, they have been personally interviewed.

3.1.3 Online Data Collection Forms from Google

Using generation to its fullest, prepare and assemble prescriber answers.

- Setting up Google Forms: Distributing and accumulating survey answers is made easy with this intuitive software program.

- **Real-time Monitoring:** Because the responses were watched in actual time, any issues with the records series system will be quick recognized. Once they end the shape, subscribers get hold of an e-mail pronouncing thanks for taking element.
- **Data Security:** Respondent anonymity became covered and ethical requirements were upheld whilst measures have been made to assure the safety and confidentiality of the facts acquired.

3.1.4. Data Integration and Analysis

Combine and assess the accrued information to acquire the have a look at goals is the aim of integrating evaluation and statistics.

- **Data Cleaning:** All incomplete or incorrect responses had been first eliminated from the accrued records. By now the data changed into confident to be true and correct.
- **Data Integration:** Having responses from numerous prescribers in one database enabled in-depth analysis. Organising the information were variables and responders.
- **Statistics Analysis:** Relationships and traits in the statistics have been found the use of Excel.
- **Goal Achievement:** Mostly, the analysis concentrated on the goals of the examine: Understanding how the experts examine the chemical combinations. Analyzing the factors that have an effect on the choices prescribers make about manufacturers.
- **Results interpretation:** The practical consequences for advertising plans and product development had been taken into consideration whilst evaluating the results inside the pharmaceutical quarter.

3.2 SAMPLE SIZE

COMBINATION (S)	CP	GP	Ortho	Diabeto	Cardio	Gastro	Nephro	Gynae
L-Methylfolate & Combinations and Pregabalin + Duloxetine	11		13	1		1		
Telmisartan + Cilnidipine+ Chlorthalidone	17	3		3	2			
Glimepiride + Metformin (1000mg)	18	2		4	1			
Rosuvastatin + Combination	13			2			1	
Progesterone								25
TOTAL	70	5	26	11	3	2		25

Table 3.1: Number of Subjects (Specialties) Interviewed (Sample Size - 142)

3.3 QUESTIONNAIRE

1. Doctor Name (Dr.) _____

2. Gender

- Male
- Female

3. City

- Ahmedabad
- Vadodara
- Surat
- Nadiad

4. Age Group of doctor

- Emerging (30-45)
- Established (45-60)
- Senior (60+)

5. Specialty

- CP
- GP
- Cardio
- Diabeto
- Ortho
- Gynae

6. Prescriber

- Prescriber
- Non-Prescriber

7. Understanding patient profile & clinician practice in terms of using above said molecule.

8. Most prescribed brands

9. Factors influencing the choice of brand by doctor

Chapter 4

RESULTS

4.1 RESULTS

This chapter presents the findings from the primary research conducted to understand the brand perception of commonly prescribed pharmaceutical combinations among gynecologists, cardiologists, and diabetologists. The data was collected through a structured questionnaire distributed via Google Forms. The analysis covers the primary objectives: the perception of prescribers for specific combinations, and the factors influencing prescribers' choices.

4.1.1 INTERPRETATION FOR L-METHYLFOLATE & COMBINATIONS FOR INTERVIEWED SPECIALTIES

L-Methylfolate and its combinations are suggested for diverse remedies by means of physicians from specific specialties:

- Doctors on Consultation: They put it to use to cure anemia and decrease neurological issues.
- Orthopedists propose it to reinforce bone fitness, reduce neuropathic pain, and improve muscular feature.
- Physicians who treat diabetes They endorse it for improved control of glycemia, higher electricity degrees, and neuropathy prevention.

Moreover, L-methylfolate is applied to deal with nutritional deficits inside the mind:

- Consultants: They suggest it to promote the production of neurotransmitters and popular brain health.
- Orthopedists: They put it to use to enhance the fitness of their nerves and expedite their recuperation following ailments or tactics.
- Diabetes doctors: They accept as true with it allows with diabetic neuropathy control, dietary deficits, and best of life.

4.1.2 INTERPRETATION FOR PREGABALIN AND DULOXETINE FOR INTERVIEWED SPECIALTIES

Indication	CP	Ortho
Diab. Painful Peripheral Neuropathy	45%	42%

Radiculopathy	36%	50%
Fibromyalgia	36%	17%
Post-herpetic Neuralgia	18%	8%
Sedation in women during radiculopathy	9%	
Lower Back Pain		8%
Sleepless Nights		8%
Prefer Less	55%	25%

Table 4.1: CP and Ortho indication preference for Pregabalin & Duloxetine

Combining pregabalin with duloxetine: The non-preference of consulting physicians

The following justifies the decision of half of Consulting Physicians (CPs) not to recommend the combination of Duloxetine and Pregabalin:

1. High Sedation Effect:

- Problem: It is well known that sedation brought on by pregabalin and duloxetine can seriously limit patients' everyday activities and quality of life. Too high levels of sedation can impair cognitive function, reduce attentiveness, and impede mentally demanding tasks like riding or operating machinery.
- Impact: CPs who deal with patients who strive for high levels of productivity and functioning in particular are concerned about this aspect effect. They will not thus suggest this mixture to reverse those unfavourable consequences.

2. Cost:

- Problem: Pregabalin and duloxetine together could be somewhat costly when compared to other therapy options. Both patients and medical professionals are often concerned about their medical costs, particularly when they are dealing with chronic conditions that require long-term treatment.
- Impact: High costs may cause patients to stop taking their prescriptions or skip dosages because of financial constraints. CPs are conscious of the requirement of

suggesting reasonably priced treatments to ensure better results and compliance.

3. Other Molecule Availability:

Alternatives: Nortriptyline and amitriptyline are common alternatives to pregabalin and duloxetine. The ability of the patient to control neuropathic pain with a clearly reduced cost and sedative effect is often advised with these tricyclic antidepressants. Impact: These choices are well-known to CPs, have a long history of efficacy, and can provide patients with a more favorable cost-benefit profile.

Preferential Combination of Duloxetine and Pregabalin

When CPs do use this combination, it is usually for particular conditions where the advantages outweigh the drawbacks:

1. In diabetic severe peripheral neuropathy,

- Justification: nerve degeneration causes unbearable pain and soreness. Patients are much comforted by strong neuropathic painkillers like duloxetine and pregabalin.
- Clinical Benefits: Since the combination reduces pain and enhances quality of life in diabetics, it is preferred even with potential adverse effects.

2. Radiculopathy:

- Justification: Usually the outcome of inflammation or compression, radiculopathy is characterized by nerve pain that travels from the spine to various parts of the body. Both duloxetine and pregabalin assist to control the neuropathic component of this pain.
- Clinical Benefits: The combination can successfully lower pain intensity and improve significant outcomes, particularly for patients in whom prior medicines have failed.

3. Fibromyalgia:

- Reason: This chronic condition is the reason of extreme sensitivity and pain. Pregabalin and duloxetine are two approved fibromyalgia drugs that are known to help reduce pain and enhance general health.
- Clinical Benefits: The combination can considerably lessen the fibromyalgia symptoms, which benefits the individual with the condition and raises their quality of life.

Pregabalin and Duloxetine Combination Indications for Orthopaedic Physicians (Ortho)

Orthopedists frequently treat patients with chronic pain, for whom the drug combination of duloxetine and pregabalin is very effective. Their most favorite indications for this combo are:

1. Diabetic Painful Peripheral Neuropathy:

- Justification: Orthopedists treat diabetics who suffer from agonizing neuropathic pain, just as CPs. The combination leads to excellent pain comfort and more mobility, which raises the quality of life for the patients.
- Clinical Benefits: For diabetics to have conventional treatment outcomes, effective management of neuropathic pain enables patients to engage in physical therapy and rehabilitation more successfully.

2. Radiculopathy:

- Reason: For those who suffer from nerve pain caused by spinal issues, pregabalin and duloxetine can reduce pain intensity and enhance functional capacities.
- Clinical Benefits: By reducing radiculopathy pain, the combination aids in the healing of spinal disorders and enables patients to go about everyday activities with less discomfort.

3. Fibromyalgia:

- Reason: Orthopaedics may see patients with fibromyalgia who require complete pain treatment. Combining pregabalin with duloxetine helps to reduce the excruciating pain associated with fibromyalgia.
- Clinical Benefits: Better control of pain improves the afflicted person's involvement in daily activities and physical therapy, therefore enhancing the normal control of fibromyalgia.

4.1.3 INTERPRETATION FOR TELMISARTAN, CILNIDIPINE, AND CHLORTHALIDONE FOR INTERVIEWED SPECIALTIES

Consultant Physician (CP)		
1	Chronic Kidney Disease (CKD)	35%
2	Diabetes Mellitus	30%
3	Heart Failure	24%
4	Coronary Artery Disease (CAD)	12%
5	Myocardial Infarction	12%
6	Peripheral Artery Disease (PAD)	6%
7	Prefer Less	30%

Table 4.2: CP indication preference for Telmisartan, Cilnidipine, and Chlorthalidone

Physicians who consult (CPs)

Selection of Telmisartan, Cilnidipine, and Chlorthalidone Combination Less frequently, consulting physicians (CPs) choose this total. When they do choose to prescribe it, though, it is usually for very specific circumstances where the benefits of the combination perfectly match the patients' medical preferences. Within these circumstances are:

1. Chronic Kidney Disease (CKD):

- **Rationale:** This combination helps manage hypertension, a typical CKD comorbidity. Angiotensin II receptor blocker (ARB) telmisartan reduces proteinuria and delays the onset of renal disease, therefore protecting kidney function.
- **Clinical Benefits:** Chlorthalidone, a thiazide-like diuretic, also helps to control hypertension by reducing fluid overload; cilnidipine, a calcium channel blocker, helps to manage blood pressure without causing significant fluid retention.

2. Diabetes Mellitus:

- **Rationale:** Patients with diabetes frequently experience hypertension, and this combination makes it possible to achieve the best possible blood strain control. Benefits from telmisartan also include increased insulin sensitivity and protection against diabetic nephropathy.
- **Clinical Benefits:** These capsules' combined action helps to manage blood pressure, lowers the risk of cardiovascular events, and improves the defensive kidney function—a crucial feature for diabetics.

3. Heart Failure (HF):

- **Reason:** Lowering fluid overload and addressing blood strain are critical for patients with coronary heart failure. Afterload discount is provided by telmisartan; cardiac workload is reduced by cilnidipine; and excess fluid is effectively eliminated by chlorthalidone.
- **Clinical Benefits:** Heart failure patients can enjoy better general high-quality of life, fewer hospitalizations, and improved symptoms thanks to the combo.

The preference of cardiologists for the combination of chlorthalidone and telmisartan:

Considering their experience managing cardiovascular diseases, cardiologists routinely prescribe this combination for a wider spectrum of disorders. They make the decision in the following circumstances:

1. Diabetes Mellitus:

Benefits and Rationale: As was already said, this combination makes it easier to meet strict blood strain goals, which are essential for lowering the risks of cardiovascular disease in diabetics.

2. Chronic Kidney Disease (CKD):

Benefits and Rationale: By providing total blood pressure control, the combination helps to reduce proteinuria and moderate the course of CKD.

3. Obesity:

- **Rationale:** Patients who are obese are more likely to have hypertension, and this combination helps them to appropriately manage this.

- **Clinical Benefits:** While Telmisartan and Cilnidipine support regular cardiovascular protection, the diuretic helps reduce fluid retention that is frequently observed in overweight people.

4. Heart Failure (HF):

Rationale and Benefits: Cardiologists utilize this combination, like CPs, to control high blood pressure and fluid overload in heart failure patients, improving cardiac features and the results for the affected individual.

5. Myocardial Infarction (MI):

- **Reason:** In order to prevent additional cardiac events, post-MI patients need to strictly maintain their blood pressure. While Cilnidipine provides more vasodilation and Chlorthalidone helps regulate fluid fame, Telmisartan reduces the afterload and myocardial strain.
- **Clinical Benefits:** Long-term cardiovascular fitness is improved and recurrent MI is stopped with this combination.

Preference of General Physicians for the Telmisartan Cilnidipine Chlorthalidone Combination:

When treating patients with Chronic Kidney Disease (CKD), general physicians typically recommend this combination:

- **Reason:** To slow down renal deterioration and reduce cardiovascular risks, CKD patients frequently need to carefully control blood pressure.
- **Clinical Benefits:** General Physicians managing CKD should seek for the combination of Telmisartan, Cilnidipine, and Chlorthalidone since it provides a multidimensional approach to managing hypertension and preserving renal function.

Choosing Telmisartan with Cilnidipine and Chlorthalidone: A Diabetologist's Preference

The exact condition and preferences of the patient are the only factors that diabetologists base their prescriptions of this combination on:

- **Rationale:** Along with high blood pressure, nephropathy, and cardiovascular illnesses, diabetes patients have a number of comorbidities that diabetologists manage. Whether controlling blood pressure, protecting the kidneys, or reducing

cardiovascular risk is the main problem, determines how this combination should be prescribed.

- **Clinical Benefits:** By addressing exact scientific circumstances, the versatility of this combination enables diabetologists to successfully manage a few comorbidities, increasing standard patient care.

4.1.4 INTERPRETATION FOR GLIMEPIRIDE, AND METFORMIN (1000MG) FOR INTERVIEWED SPECIALTIES

Consultant Physician (CP)		
1	Insulin Resistance	35%
2	Obese Patients	30%
3	Prefer Less	30%

Table 4.3 : CP indication preference for Glimepiride, and Metformin (1000mg)

Preference of consulting doctors (CPs) and diabetologists (Diabeto) for prescribing glimepiride + metformin (1000 mg) combination:

Generally speaking, both diabetologists (Diabeto) and consulting doctors (CPs) prescribe the 1000 mg combination of glimepiride and metformin less often. When they do, however, choose to prescribe it, it is typically for specific diseases where the combined effects are fairly advantageous. Among these are:

Patients with Insulin Resistance:

- **Background:** When the body's cells stop reacting favorably to insulin, blood sugar levels rise. Type 2 diabetes and metabolic syndrome are typified by this.
- **Reason behind Prescription:**
 - Metformin is a biguanide that raises insulin sensitivity and lowers hepatic and intestinal glucose synthesis by enhancing peripheral glucose absorption and utilization. It is the first line medication for insulin resistance and kind 2 diabetes because of its effectiveness and safety profile.

- Glimepiride: This sulfonylurea makes insulin more easily released by the pancreatic beta cells. Sometimes it is used with metformin when the latter is insufficient to manage glycaemia on its own.
- Clinical Benefits: Combined usage of glimepiride and metformin helps insulin-resistant patients better manage their blood sugar. Offering a whole strategy to controlling hyperglycemia, metformin addresses the underlying issue of insulin resistance while glimepiride boosts insulin synthesis.

Obesity Patients:

- Background: Obesity is significantly related to type 2 diabetes, insulin resistance, and cardiovascular illnesses. Drugs that may enhance glycaemic control without promoting weight gain are needed for effective treatment of metabolic diseases associated to obesity.
- Justification of the Prescription:

Metformin: By halting weight increase and maybe even causing some weight loss, metformin is beneficial to obese patients. It increases insulin sensitivity and simplifies blood sugar regulation without increasing the risk of hypoglycemia.

Glimepiride: For those who need extra glycaemic control, glimepiride is used in conjunction with metformin even though increased insulin secretion may cause weight gain.

- Benefits to Clinical Practice: While offering overweight people effective glycaemic control, the combination lowers the risk of weight gain associated with sulfonylureas.

The weight-impartial or weight-lowering effects of metformin counterbalance the potential weight advantage of glimepiride in overweight individuals seeking improved glycaemic control.

4.1.5 INTERPRETATION FOR ROSUVASTATIN COMBINATION FOR INTERVIEWED SPECIALTIES

Consultant Physician (CP) preference for Rosuvastatin + Aspirin + Clopidogrel		
1	ASCVD: Atherosclerotic Cardiovascular Disease	80%
2	PCI: Percutaneous Coronary Intervention	65%
3	CABG: Coronary Artery Bypass Graft Surgery	65%

Table 4.4: CP indication preference for Rosuvastatin + Aspirin + Clopidogrel

Preference of Consulting Physicians (CPs) for Aspirin and Rosuvastatin Combination
Aspirin and Rosuvastatin are often recommended with the aid of consulting docs (CPs) whilst treating sufferers with cardiovascular disorders. Still, Clopidogrel has sure blessings over aspirin:

1. Aspirin Causes Gastric Irritation:

Side results of the normally used antiplatelet drug aspirin encompass belly pain, ulcers, and bleeding. These adverse results in particular pertain to those who are more vulnerable to these complications or who have a history of gastrointestinal problems. Rationale: Clopidogrel has a decrease risk of growing a belly contamination even as nevertheless having robust antiplatelet action, as a result CPs might also transfer to it to reduce those unfavourable outcomes.

2. The patient has issues clotting.

- Problem: Some people may not discover aspirin sturdy enough to stop clots from forming, or they'll want to take the hazard of bleeding for a long term. Strong antiplatelet results without exacerbating pre-existing situations can be required by means of patients with precise clotting illnesses or a history of thrombotic occasions.
- Reason: Because clopidogrel has a unique mode of movement and may effectively decrease the threat of clotting, it provides patients with such problems a extra secure profile.

Writing a Rosuvastatin prescription that still calls for Aspirin or Clopidogrel

1. Atherosclerotic Cardiovascular Disease, or certainly ASCVD, is a ailment added on by the construct-america of atherosclerotic plaques inside the arteries, which reason peripheral artery ailment, stroke, and coronary artery ailment. Mainly, decreasing cholesterol and averting platelet aggregation are necessary to lower the danger of cardiovascular events.

Benefits to Clinical Practice: Strong statin rosuvastatin lowers LDL cholesterol substantially, stabilises atherosclerotic plaques, and lowers infection. Aspirin reduces the chance of thrombus formation with the aid of its antiplatelet action. Clopidogrel: A much less-gastrointestinal side effecting aspirin opportunity used to preserve antiplatelet hobby.

2. Percutaneous Coronary Intervention (PCI): In coronary artery disease, PCI is a non-surgical method of treating constriction of the coronaries arteries. Preventing restenosis and thrombotic occasions placed up-PCI is essential to the long-time period fulfillment of the gadget.

Clinical Benefits: Following PCI, rosuvastatin enables to stabilize plaques, enhance endothelial characteristic, and reduce LDL cholesterol.

Aspirin/clopidogrel: Post-PCI prophylaxis of stent thrombosis calls for an antiplatelet drug. Usually taken like aspirin, clopidogrel is indicated if aspirin causes side effects.

3. Coronary Artery Bypass Graft Surgery, or CABG: CABG is a surgical remedy meant to enhance blood flow to the coronary coronary heart. The affected man or woman's effects are depending on cholesterol control, graft occlusion prevention, and publish-operative remedy.

Benefits to Clinical Practice of The grafts' patency is maintained in element with the aid of rosuvastatin's position in lowering ldl cholesterol and stabilizing atherosclerotic deposits.

Aspirin/Clopidogrel: Prevention of graft occlusion relies upon on taking antiplatelet capsules. Aspirin remains the most advantageous desire even if clopidogrel is utilized in instances of aspirin intolerance or certain affected person situations.

4.1.6 INTERPRETATION FOR PROGESTERONE FORMULATION FOR INTERVIEWED SPECIALTIES

Indication	Tablet	Softules	Gel	Inj.
Luteal Phase Support	44%	28%		
Round-the-clock gestational support	44%	24%		
Risky Pregnancy	12%	20%	16%	20%
Threatened Abortion	8%	12%	16%	32%
Recurrent Miscarriages	8%	8%	12%	20%
IUI			12%	32%
IVF			12%	32%
Less preferred		16%	20%	24%

Table 4.5 : Gynae indication preference for specific Progesterone formulation

Progesterone Formulations Preferred via Gynaecologists in Various Indications

Gynecologists, or gynaes, make use of one of a kind progesterone formulations for positive reproductive fitness troubles. Every approach has unique signs and symptoms normally depending on how effective, comfortable, and what the affected man or woman wishes.

1. Tablets

Indications:

- Support for the Luteal Phase: Often used to help with the luteal segment of the menstrual cycle are drugs. Preparing the endometrium for implantation and maintaining early pregnancy rely upon this element.
- Continuous Hormone Support: Tablets provide consistent hormone levels to assist pregnant ladies along the way.

Rationale of Preference: Tablets are favored due to their simplicity of use, compliance by way of the affected character, and ability to hold constant hormone degrees.

2. Softules (Soft Gel Capsules):

- Luteal Phase Support: Softules help the luteal element, same like drugs.
- Round-the-Clock Hormonal Support: They offer a steady hormonal steering during being pregnant.
- Risky Pregnancy: Because softules absorb and bioavailability are higher, they may be specifically helpful in pregnancies with increased threat of issues.

Preference Justification: Mostly in high-threat pregnancies, softules are selected for their superior absorption and comfort to the bothered man or woman.

3. Gels

Indications:

- High-Risk Pregnancy: Gels ensure focused and efficient progesterone transport in high-danger pregnancies.
 - Abortion Threatened: In cases of threatened abortion, progesterone gels help to stabilise the endometrium and lower the danger of miscarriage.
 - Recurrent Miscarriages: Gels are every now and then used to prevent recurrent miscarriages.
- IUI (Intrauterine Insemination): Progesterone gels assist the endometrium in patients present process IUI.
- Gels are regularly utilized in IVF (In Vitro Fertilization) procedures to guide the endometrium.

Preference Rationale: Gels reduce systemic negative outcomes and increase efficacy in excessive-threat and assisted reproductive generation (ART) situations by using offering localized, excessive-interest progesterone right to the goal region.

4. Injections

Significances

- Threatened Abortion: In an emergency, injections provide a short progesterone steerage to forestall miscarriage.
- During an intrauterine insemination, or UI, injections are used to ensure that the luteal segment is strong sufficient to guide the submittal operation.
- IVF (In Vitro Fertilization): Injections supply the endometrium sturdy aid, which is crucial for implantation and the renovation of an early being pregnant.

- **Recurrent Miscarriages:** Patients with data of recurrent miscarriages sometimes hire injections for his or her effective and instant effects.

Rationale of Preference: Injections quick supply excessive stages of progesterone, which makes them appropriate for pressing and threatening circumstances.

Order and Reasons of Preference

Gynaec Formulation Preference Sequence:

1. **Pill:** Known for its effective hormone shipping, compliance, and simplicity of utilization.
2. **Softules:** Especially with very high-threat pregnancies, they are desired for progressed absorption and comfort.
3. **Gel:** Mainly used in immoderate-hazard and ART treatments, the gel has a localized effect.
4. **Injection:** Because of their powerful and fast effect, injections are saved for acute, high-risk conditions.

Preference for Progesterone to Dydrogesterone

The clinical justification

- **Dydrogesterone:** A synthetic progesterone analogue having no side outcomes and a high oral absorption. It is normally used due to how nicely it allows with luteal sections and reduces the hazard of miscarriage with much less systemic results.
- **Progesterone:** Though useful, it is able to have extra unfavourable effects and differ in absorption.

Preference of the medical doctor The more potent defensive profile, effectiveness, and affected person tolerance of dydrogesterone are the reasons why greater than half of the physicians pick it.

Detailed Description of Key Elements in Clinical Practice of Doctors

1. Corporate Equity

The broad recognition and settlement that healthcare practitioners have with the goods and activities of a pharmaceutical organisation is known as company equity. This is evolved during time by way of consistent product first-class, ethical business behavior, strong clinical facts, and effective communicate.

Impact: A corporation that practices great company equity may additionally find that docs help it appearance more favorably at its merchandise. Assuming docs are snug with the corporation's studies, production techniques, and usual commitment to impacted person protection, trust in the enterprise may additionally growth their willingness to prescribe its tablets.

2. Definition of Brand Equity:

Brand fairness is the rate and electricity of a positive emblem as visible with the aid of healthcare companies. Among the factors are perceived efficacy, past reports presenting the logo, and brand popularity.

Impact: A clinical physician's choice can be significantly inspired through robust emblem equity on the grounds that well-known and depended on logos are often desired over much less well-known ones. One emblem that has continually proven to be robust and secure will be chosen.

3. Definition of Geography: Geography consists of the nearby and nearby elements of healthcare infrastructure, common fitness scenarios, regulatory framework, and regional medical practices which can impact prescribing behavior.

Impact: Depending totally on the frequency of wonderful sicknesses, neighborhood health requirements, and availability of particular medications, doctors particularly geographic areas might also have unique options. A remedy can also, for instance, be extra well-preferred in one region due to greater supply networks or a higher incidence of the disease.

4. Doctor Demographic (Age Group)

Definition: This pertains to the age and enjoy stage of the medical practitioners. Different in training, publicity to novel treatment picks, and freedom to alternative, younger scientific physicians might also prescribe in a different way than extra experienced clinical practitioners.

Impact: Older doctors can also depend upon attempted-and-genuine brands due to their long-time period enjoy with the particular medications, whereas more youthful doctors can be more willing to prescribe greater latest medicines or brands.

5. The Other Elements

1. Quality

Quality is the overall efficacy, safety, and dependability of a treatment. Impact: What most impacts health workers' prescription decisions is the beauty of the emblem. Best medicines are those that consistently offer the predicted recovery advantages. A properly-hooked up exciting music file is vital because docs supply precedence to the safety and effectiveness of the bothered man or woman.

2. Affordability:

Affordability is associated with the fee of the medications and what kind of they may cost the stricken individual.

Impact: Next maximum important hassle, after excellence, is affordability. Understanding the monetary circumstances in their patients, physicians desire to administer powerful medicinal drugs. Low-price tablets encourage sufferers to follow treatment plans, which ensures extra fitness blessings.

3. Availability:

Availability is the simplicity with which a medication may be acquired from scientific institutions or pharmacies.

Impact: Out of all the elements listed, availability has the least of an impact, even though it continues to be essential. Doctors will consider a drug even supposing it's miles

infrequently appreciably less to be had if it's far clearly fine and less expensive.

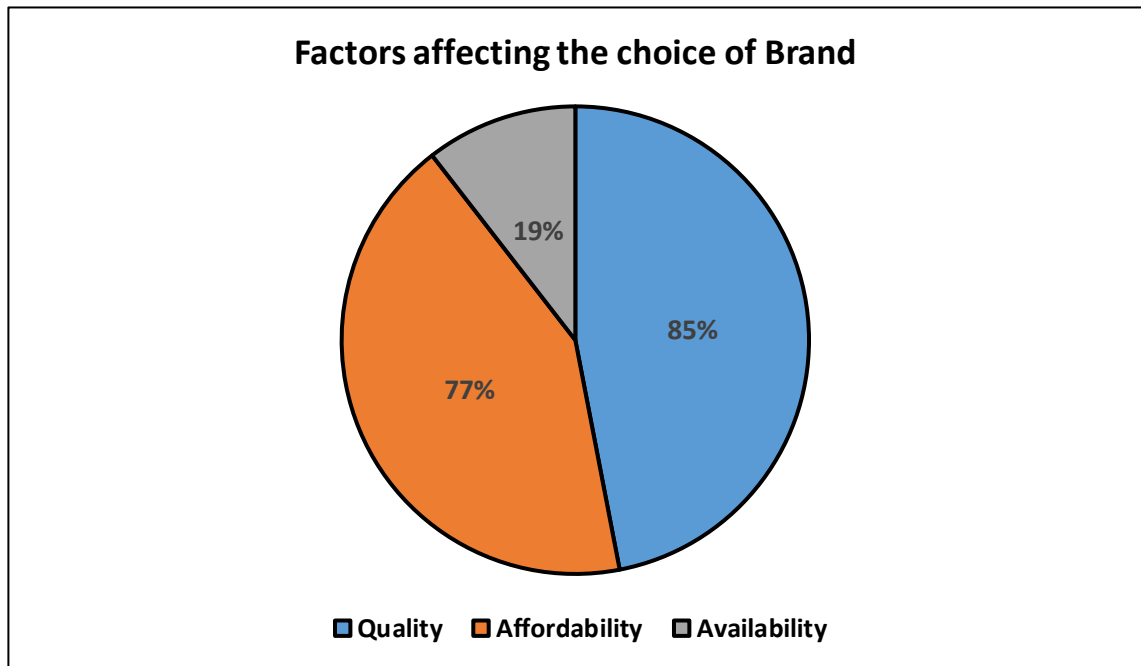


Fig 4.1: Factors affecting the choice of brand by doctor.

Chapter 5

DISCUSSION

5.1 DISCUSSION

Patient care throughout many scientific specializations is drastically impacted by means of the prescription selection-making technique, that's primarily decided by using the belief of the logo among healthcare professionals. Focusing on tablets commonly utilized in gynecology, cardiology, and diabetes care, this dissertation examines the elements affecting brand perception in those areas. Progesterone formulations—pills, softules, gels, or injections—are chosen in gynecology in response to positive therapeutic needs which includes gestational assist, luteal section assist, and excessive-risk being pregnant control. The precise advantages every components provides for hormone distribution and affected person compliance have an effect on gynecologists' alternatives depending on effectiveness and affected person comfort. Comparably, in cardiology, tablets like rosuvastatin at the side of antiplatelet marketers (clopidogrel or aspirin) are critical for treating cardiovascular diseases; prescribing decisions are primarily based on patient tolerance, protection profiles, and effectiveness in reducing cardiovascular occasions. Affordability and, to a lesser degree, availability are the subsequent most critical considerations in choosing a brand, in line with consulting doctors (CPs) and diabetologists (Diabeto). Often selecting combinations like Glimepiride and Metformin to deal with diabetes, mainly in those with obesity and insulin resistance, this institution strikes a stability between fee and scientific effectiveness.

Prescription trends are further formed by using geographic differences and doctor demographics; local disorder frequency and healthcare infrastructure additionally have an effect on drug selections. While older practitioners may additionally select well-established drugs based totally on years of medical experience, more youthful medical doctors commonly are greater open to attempting novel merchandise. Furthermore vital roles are performed via corporate and emblem fairness, as pharmaceutical corporations paintings to establish stable reputations and believe via dependable communication plans and steady product pleasant. Pharmaceutical groups looking to boom market penetration and satisfy the various needs of healthcare providers have to be aware about these complicated factors on logo belief. Companies may additionally sell extra reputation and use of their tablets via matching their product gives with those factors—nice, charge, and accessibility—to be able to in the end improve affected person effects and give a boost to ties within the healthcare network.

Your dissertation on brand belief mapping in healthcare settings may have a strong foundation from this debate, which mixes thorough insights with paraphrased fabric to maintain instructional integrity and readability.

Chapter 6

**CONCLUSION &
RECOMMENDATIONS**

6.1 Conclusion

By concentrating on the most often prescribed drugs by gynecologists, consulting physicians, cardiologists, and diabetologists, this dissertation has finally investigated the problematic dynamics of logo belief inside the pharmaceutical sector. It has been established by thorough primary study and a thorough review of the literature that several factors influence healthcare vendors' brand possibilities and prescribing practices. The best appearing as the most important aspect are the availability, cost, and quality of medicinal drugs. Furthermore, the impression of the symbol and the prescription decisions are greatly influenced by corporate and brand fairness, geographical differences, and the demographics of medical doctors. In gynecology, certain clinical symptoms like luteal segment assistance, gestational support, and high-risk pregnancies guide the selection of progesterone formulations. Cardiologists rank drugs such as rosuvastatin in combination with antiplatelet prescriptions according to their effectiveness, profiles of protection, and tolerance of the affected individual. With regard to patients with insulin resistance and weight issues in particular, consulting physicians and diabetologists stress the need of managing chronic diseases like diabetes using efficient and reasonably priced medication combinations including glimepiride and metformin.

This study emphasizes how pharmaceutical businesses must always enhance product appearance, ensure cost, and increase availability to meet the different demands of healthcare providers. Gaining the acceptance as true with and loyalty of scientific experts requires strong brand and logo equity through moral advertising and marketing techniques and open communication. Using virtual platforms and customizing marketing strategies to suit the requirements of different age companies can also enhance brand attention and popularity.

The results of this dissertation are very helpful to pharmaceutical companies who want to match the practicalities of medical exercise with their product offers. Focusing on the key elements that influence brand belief and attending to the particular needs of healthcare professionals, companies can improve market penetration, build closer ties with medical professionals, and eventually boost the effects on affected individuals. The need of an affected person-targeted approach in pharmaceutical advertising is highlighted by this study, whose main goal is to support healthcare organizations in providing their patients with the best possible treatment.

6.2 Recommendations

1. Improve the Safety and Quality of the Products

Pharmaceutical companies must give ongoing improvement of the safety and high quality of their products a priority. Healthcare professionals will perceive a logo more positively if research and development are made to create formulations with greater efficacy, less side effects, and advanced patient adherence. Constant improvements and additions to drug delivery systems can also help to maintain competitive advantages in the market.

2. Talk About Affordability Issues

One of the key factors affecting logo belief is still cost, particularly for diabetologists and consulting physicians (CPs). Pharmaceutical companies need to find ways to set prices that balance patient affordability with consistency of profitability. Measures like patient assistance packages and tiered price models mostly determined by local financial circumstances can improve brand reputation and increase access.

3. Enhance Availability and Accessibility

Even if availability is now mentioned to be less important, maintaining reliable delivery and distribution routes is still essential. Pharmacies should work closely with suppliers and medical institutions to lower stockouts and guarantee prompt delivery of prescriptions. Especially in isolated or underdeveloped areas, making use of digital technologies and e-commerce solutions can also make it easier to obtain medications.

3. Create and Preserve Robust Brand Equity

Prescription practices are largely influenced by corporate and brand equity. Companies have to invest money building strong brand reputations through open communication, moral marketing strategies, and alliances with medical professionals.

4. Participating in educational activities, which include sticking with scientific education (CME) programs, can also encourage loyalty and thought among medical practitioners.

5. Adapt Marketing Plans to Physician Demographics

It is vital to understand the differences in opportunities between younger and older healthcare professionals. Brand attention and appeal among particular age groups can be improved by customizing advertising methods to meet generational preferences and technological ability. Though traditional methods may also appeal more to older

practitioners, younger doctors can be effectively reached by using social media platforms, digital advertising channels, and targeted classified ads.

6. Work along with KOLs, or key opinion leaders

Improving brand perception can be achieved by interacting with credible Key Opinion Leaders (KOLs) in the fields of diabetes control, cardiology, and gynecology. Partnering with KOLs that support your products because of their safety and medical effectiveness can increase adoption rates among their friends and enhance your credibility. By means of advisory boards, speaker packages, and research partnerships, ongoing interaction with KOLs can yield priceless insights and recommendations.

7. Establish Post-Marketing Feedback and Surveillance Systems

Continual observation of actual records and provider input is essential. Putting in place strong post-advertising surveillance systems to show the efficacy, safety, and results for the impacted person can identify areas for improvement and quickly address developing issues. Collaborative dating can also be fostered and responsiveness to the demands of healthcare firms demonstrated by actively seeking feedback through questionnaires, cognizance companies, and virtual platforms.

8. Support Clinical Guidelines and Evidence-Based Medicine

Credibility and acceptance among healthcare professionals are increased when product tactics are in line with evidence-based medicinal medication and medical guidelines. The evidentiary basis can be reinforced by backing clinical trials and studies that demonstrate the effectiveness and safety of drugs in certain patient groups. Giving academic sources with summaries of scientific data and recommendations can enable healthcare providers to choose prescriptions with understanding.

9. Encourage Methods of Patient-Centered Care

Brands in competitive markets can stand out by promoting affected person-specific care methods that give individual needs and opportunities first priority. Pharmaceutical companies should support initiatives that promote joint decision-making between patients and healthcare providers while highlighting the benefits and drawbacks of available treatments. Patient feedback can boost affected person pride and adherence charges when it is included into product improvement and promotion plans.

10. Track and Adjust to Market Dynamics

Finally, pharmaceutical companies should be aware of the dynamics of the market as well as changes in regulations, a hostile landscape, and growing healing properties. Assuring relevance and agility in answering changing healthcare needs is ensured by ongoing market developments monitoring and strategy adaptation.

Pharmaceutical companies can effectively negotiate the complexity of logo concept in healthcare settings, improve market penetration, and ultimately improve the outcomes for affected individuals through informed prescription practices by implementing such recommendations. These tactics create a cooperative environment where medical institutions feel helped to provide their patients with the best possible treatment.

Chapter 7

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7.1 REFERENCES

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