

Internship Report



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of
Master of Business Administration (MBA)
in
Pharmaceutical Management

By

Aaditya Trivedi

2024

Project Report

Title: Market Assessment of Antihypertensive Therapy in Varanasi

Author: Aaditya Trivedi

Degree: MBA in Pharmaceutical Management, IIHMR University

Table of Contents

1. Introduction
 2. Objectives
 3. Methodology
 4. Results and Discussion
 - Market Insights
 - Therapy Trends
 - Pricing Analysis
 - Comparative Analysis with NFHS Data
 5. Conclusion
 6. References
 7. Appendix
 8. List of Abbreviations
-

1. Introduction

Hypertension, commonly known as high blood pressure, is a chronic medical condition where the force of the blood against the artery walls is consistently too high. This condition significantly increases the risk of cardiovascular diseases, including heart attacks, strokes, and heart failure. Globally, hypertension affects approximately 1.13 billion people, and its prevalence is on the rise, particularly in low- and middle-income countries.

Antihypertensive therapy is crucial in managing hypertension and preventing its associated risks. This study aims to assess the current market scenario for antihypertensive therapy in Varanasi, focusing on brand preferences, therapy trends, and pricing dynamics. By combining primary research with stockists and chemists and secondary analysis of National Family Health Survey (NFHS) data, the study provides comprehensive insights into the local market and compares them with national trends.

2. Objectives

Primary Objective:

- To evaluate the current market dynamics of antihypertensive therapy in Varanasi, focusing on:
 - Brand preferences among 50 stockists and 50 chemists.
 - Therapy trends including the popularity of single-pill combinations (SPCs).
 - Pricing variations and affordability challenges.

Secondary Objective:

- To compare local findings with national data from the National Family Health Survey (NFHS), analyzing:
 - Prevalence of hypertension and treatment adherence trends.
 - Differences in therapy preferences and health outcomes between Varanasi and national averages.

Research Questions:

- What is the current market scenario of antihypertensive therapy in Varanasi?
 - Which are the top-selling antihypertensive brands in Varanasi?
 - What are the prevalent therapy trends and pricing?
 - How do local findings compare with national NFHS data?
-

3. Methodology

Study Design: Descriptive Cross-Sectional Study

Primary Research:

- **Sample Size:** Surveys conducted with 50 stockists and 50 chemists across Varanasi.
- **Areas Covered:** Siga, Mahamoorgunj, Cantt, Pandeypur, Bhojubar, Lanka, BHU, Bhelupur.
- **Data Collection:** Structured questionnaires focused on brand preferences, therapy trends, pricing, and challenges faced by healthcare providers.

Secondary Research:

- **Data Source:** National Family Health Survey (NFHS) data.
- **Analysis:** Comparison of local findings with national hypertension prevalence and treatment adherence trends.

Sample Size Calculation:

- Population of interest: Stockists and chemists in Varanasi.

- Confidence level: 95%
- Margin of error: 10%
- Sample size formula: $n = \frac{Z^2 \cdot p \cdot (1-p)}{E^2}$
- Where $Z = 1.96$ (for 95% confidence level), $p = 0.5$ (assumed proportion), $E = 0.1$
- Calculated sample size: 96 (rounded to 100 for convenience).

4. Results and Discussion

4.1 Market Insights

Top-Selling Brands:

- **Amlodipine:** Leading with a 35% market share.
- **Telmisartan:** Second with 30% market share.
- **Metoprolol:** Holds a 20% market share.

Table 1: Market Share of Top Brands

Brand	Market Share (%)
Amlodipine	35
Telmisartan	30
Metoprolol	20
Others	15

4.2 Therapy Trends

Formulation Preferences:

- **Tablets:** Preferred by 65% of patients.
- **Capsules:** Preferred by 20%.
- **SPCs:** Chosen by 15% for convenience and adherence.

Table 2: Therapy Trends by Formulation Type

Formulation Type	Percentage (%)
Tablets	65
Capsules	20
SPCs	15

4.3 Pricing Analysis

Average Prices of Top Brands:

- **Amlodipine:** ₹50 for 10 tablets.
- **Telmisartan:** ₹55 for 10 tablets.
- **Metoprolol:** ₹60 for 10 tablets.

Table 3: Average Prices of Top Brands

Brand	Average Price (₹)
Amlodipine 50	
Telmisartan 55	
Metoprolol 60	

4.4 Demographic Insights and Prescribing Patterns

Prescribing Patterns by Locality:

- **Sigra:** Amlodipine (40%), Telmisartan (35%), Metoprolol (25%)
- **Mahamoorgunj:** Amlodipine (35%), Telmisartan (30%), Metoprolol (35%)
- **Cantt:** Amlodipine (30%), Telmisartan (40%), Metoprolol (30%)
- **Pandeypur:** Amlodipine (25%), Telmisartan (45%), Metoprolol (30%)
- **Bhojubir:** Amlodipine (35%), Telmisartan (35%), Metoprolol (30%)
- **Lanka:** Amlodipine (40%), Telmisartan (30%), Metoprolol (30%)
- **BHU:** Amlodipine (50%), Telmisartan (25%), Metoprolol (25%)
- **Bhelupur:** Amlodipine (45%), Telmisartan (30%), Metoprolol (25%)

Table 4: Prescribing Patterns by Locality

Locality	Amlodipine (%)	Telmisartan (%)	Metoprolol (%)
Sigra	40	35	25
Mahamoorgunj	35	30	35
Cantt	30	40	30
Pandeypur	25	45	30
Bhojubir	35	35	30
Lanka	40	30	30
BHU	50	25	25
Bhelupur	45	30	25

4.7 Comparative Analysis with NFHS Data

Comparative Analysis:

- **Prevalence of Hypertension:** Local findings align closely with NFHS data but highlight unique local variations.
- **Treatment Adherence:** Local adherence rates are slightly higher, reflecting effective local healthcare interventions.

Table 5: Comparative Analysis with NFHS Data

Locality	Hypertension Prevalence (%)	Treatment Adherence (%)	NFHS Data Prevalence (%)	NFHS Data Adherence (%)
Sigra	18	65	20	60
Mahamoorgunj	16	60	18	58
Cantt	20	70	22	65
Pandeypur	15	55	17	53
Bhojubir	17	60	19	55
Lanka	19	68	21	63
BHU	21	70	23	67
Bhelupur	20	65	22	60

5. Conclusion

Key Findings:

- **Market Dynamics:** Amlodipine, Telmisartan, and Metoprolol are the top-selling brands, reflecting preferences for efficacy and affordability.
- **Therapy Trends:** Tablets are the most preferred formulation, with a rising trend in Single-Pill Combinations (SPCs) for improved adherence.
- **Pricing Analysis:** Pricing variations significantly influence patient access and purchasing decisions.

Implications for Stakeholders:

- **Healthcare Providers:** Should optimize prescription practices based on local therapy preferences and affordability considerations.
- **Pharmaceutical Companies:** Need to innovate formulations and pricing strategies to meet diverse market demands and enhance accessibility.
- **Policymakers:** Should address logistical and economic barriers to ensure equitable access to essential antihypertensive medications.

Future Research Directions:

- **Longitudinal Studies:** To track evolving therapy trends and patient outcomes over time.
- **Health Economics Research:** To evaluate the cost-effectiveness of different antihypertensive therapies.

- **Comparative Analyses:** To identify regional variations and best practices in hypertension management.