

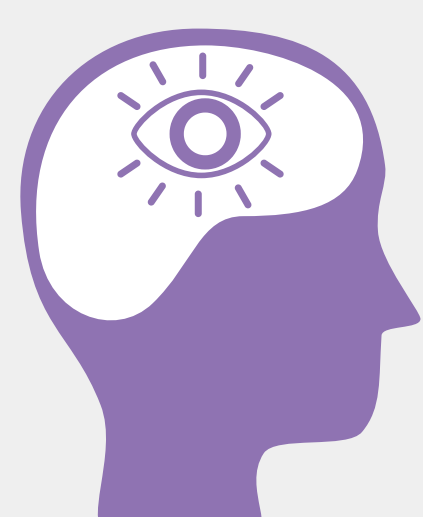
"Comparative Analysis of Ceftazidime-Avibactam Brands: Evaluating Price, Potency, and Cost-Effectiveness for Enhanced Patient Outcomes and Affordability" and "Assessing the Healthcare Cost Implications of Drug Price Control Organization's (DPCO) Decision: A Case Study on Meropenem Price Ceiling"

BRIEF HISTORY ABOUT MEDANTA HOSPITAL

- Medanta - The Medicity Hospital, located in Gurgaon, India, is a renowned multi-specialty medical institution known for its world-class healthcare services.
- It was founded in 2009 by Dr. Naresh Trehan, a prominent cardiovascular surgeon, with the vision of providing cutting-edge medical facilities and holistic patient care.
- The hospital facilities have received different national and international accreditations, such as from the Joint Commission International (JCI) and the National Accreditation Board for Hospitals and Healthcare Providers (NABH).



"To deliver world-class healthcare and create an ethical and safe environment to treat all with respect and dignity"



"To provide affordable medical services to patient with care, compassion and commitment"



Patient centric care, Excellence, Innovation and Safety.

ABOUT THE DEPARTMENT : CLINICAL PHARMACY

The department is lead by Dr. Nipun H Patil(MBBS , MD) who had been associated with medanta since more than 4 years. Medanta has the largest team of clinical pharmacy throughout India and has more than 80 clinical pharmacologist who are highly skilled and hard working .The team work together to assure the rational drug use, medicine adherence,therapeutic drug monitoring and has day to day challenging roles to meet the maximum patient safety.



STRENGTHS

- Comprehensive healthcare services
- World-class infrastructure
- Renowned medical professionals
- International patient base

WEAKNESS

- Cost of treatment
- Capacity constraints
- longer waiting times
- Overcrowding

OPPORTUNITIES

- Expansion and growth
- Technological advancements
- Medical tourism

THREATS

- Competition
- Regulatory challenges
- Public perception

THOERY VS PRACTICAL

THEORETICALLY

- Theoretical knowledge learnt at IIHMRU, has had a strong fundamental foundation for me which enabled me to perform confidently on my internship.
- Theory in terms of statistics, pharma business environment and pharmacology acted as an integral component for me to analyse the derived data.

PRACTICALLY

- Identify the case/need/problem that exists real time.
- Perform secondary research, used tools such as excel to filter and sort the data.
- Analyse, condense and arrange the collected data in representable form.
- Strategize and provide sustainable solutions based on my findings.

USEFULLNESS OF INTERNSHIP:

- Corporate exposure.
- Hands-on-experience on a live project.
- Interacting with the industry experts.

Comparative Analysis of Ceftazidime-Avibactam Brands

01. PROJECT TITTLE :-

"Comparative Analysis of Ceftazidime-Avibactam Brands: Evaluating Price, Potency, and Cost-Effectiveness for Enhanced Patient Outcomes and Affordability"

02. OBJECTIVE :-

"To compare prices and duration of therapy of different brands of Ceftazidime-Avibactam, identifying the most cost-effective option for shorter hospital stays and improved affordability"

03. METHODOLOGY:-

- Total 250 patient's data was collected for those patients who were given Ceftazidime-Avibactam in 4 months(JAN-APR) through Medanta eHIS system.



05. Results/Findings

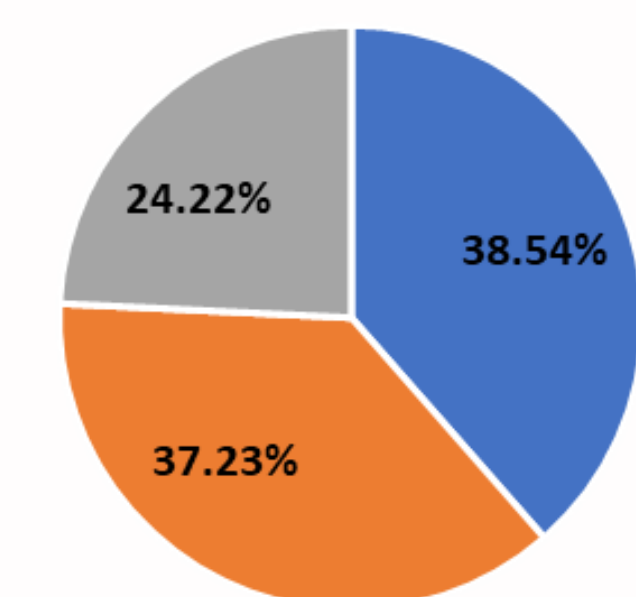
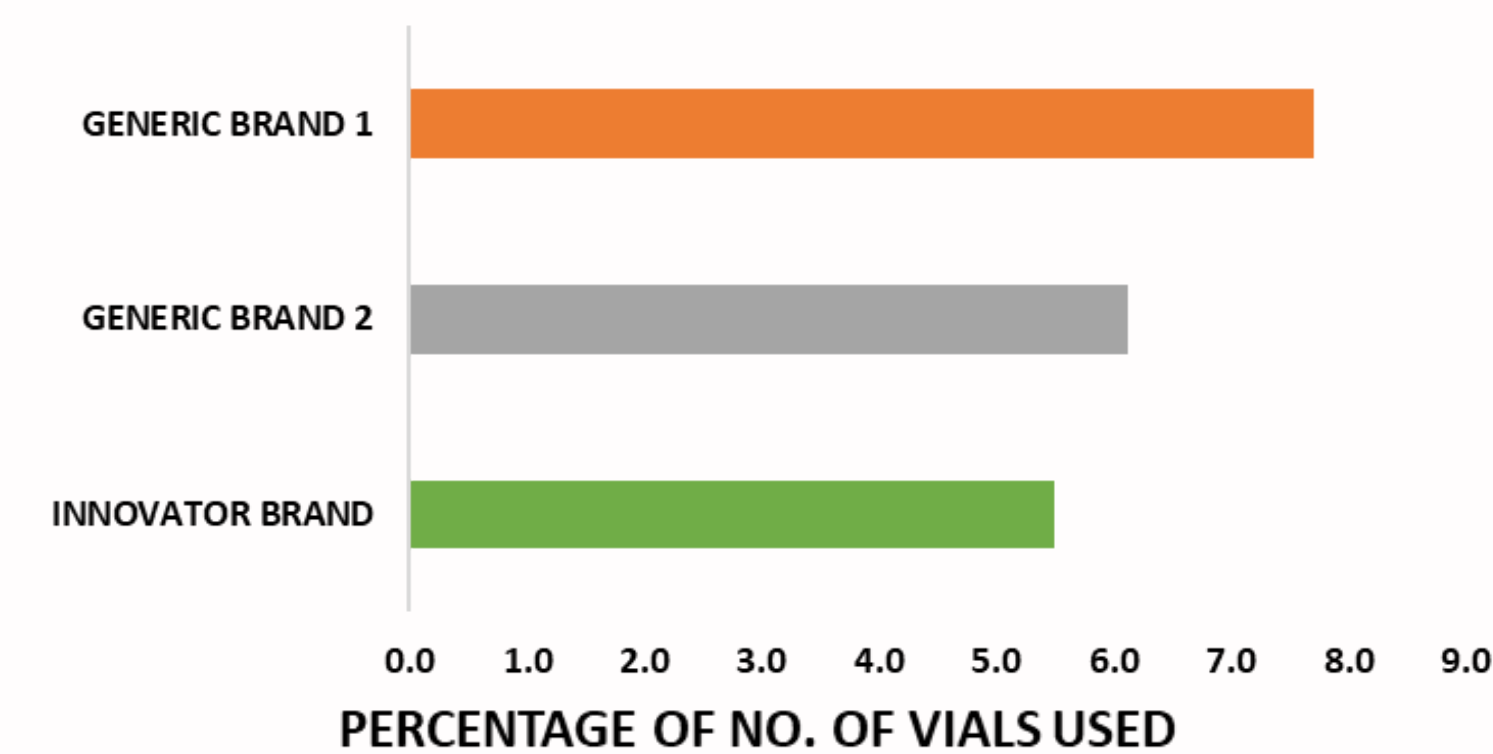
- Patient Stay Duration: Innovator brand has the shortest average patient stay duration of 5.5 days, followed by generic brand 2 with 6.1 days, and generic brand 1 with the longest duration of 7.7 days.
- Cost: Innovator brand has the lowest cost among the three brands, followed by generic brand 2, and generic brand 1 has the highest cost.
- The results also reveal that generic brand 1, which had the highest patient stay duration and cost, exhibited maximum consumption in the specialities of Paediatric Hemato Oncology & BMT, Medical & Haemato Oncology, and Critical Care.

06. Conclusion

Innovator brand exhibited the shortest average patient stay duration of 5.5 days, Innovator brand had the lowest cost among the three brands, followed by generic brand 2, while generic brand 1 had the highest cost. Overall, Innovator brand emerges as the preferred option due to its shorter patient stay duration and lower cost.

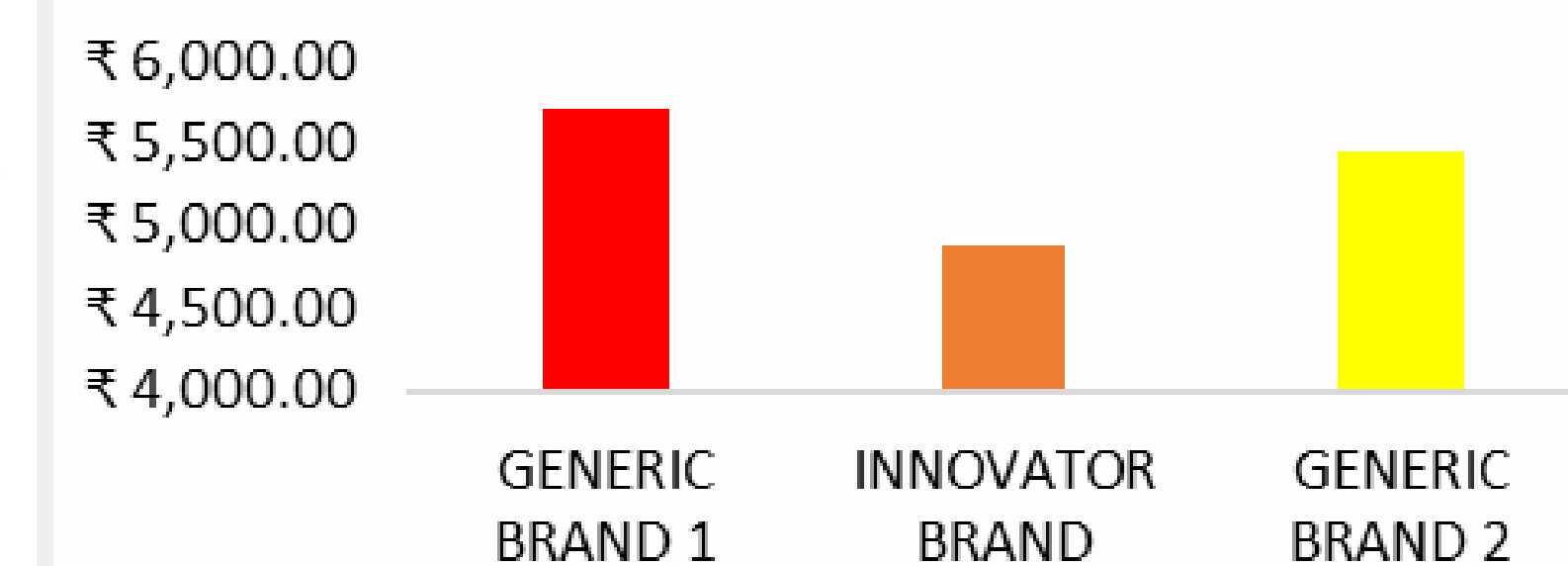
04. Analysis:-

BRAND vs AVERAGE DURATION OF DAYS



■ GENERIC BRAND 1 ■ INNOVATOR BRAND ■ GENERIC BRAND 2

COST OF EACH BRAND



A Case Study on Meropenem Price Ceiling

01. PROJECT TITTLE :-

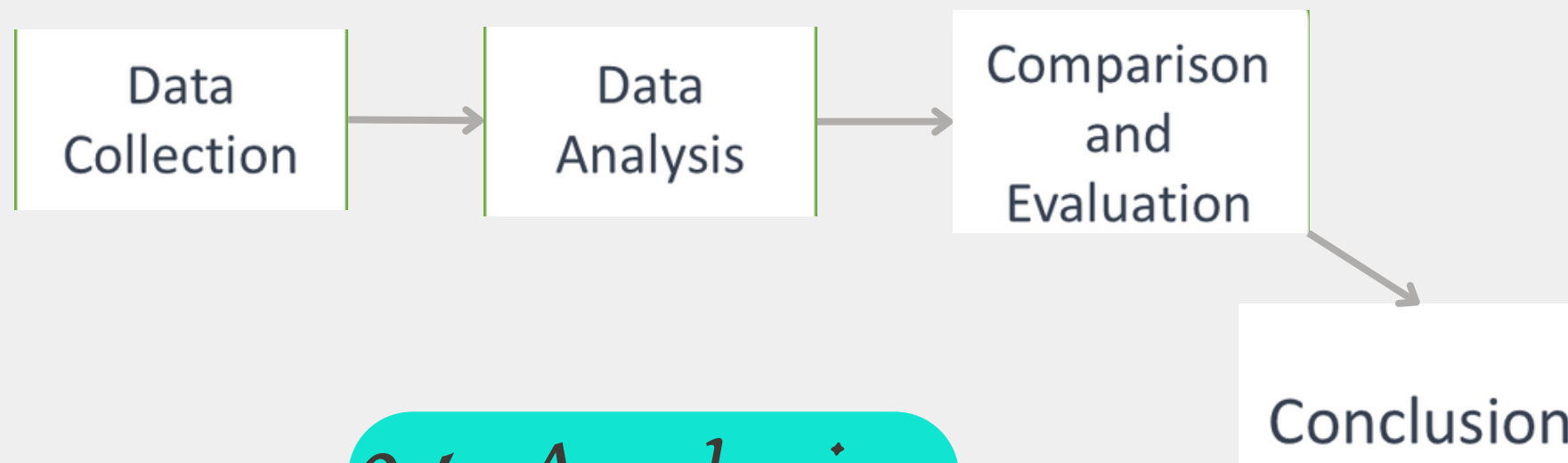
"Assessing the Healthcare Cost Implications of Drug Price Control Organization's (DPCO) Decision: A Case Study on Meropenem Price Ceiling"

02. OBJECTIVE :-

"To analyse the Healthcare Impact of DPCO's Decision: Evaluating the Cost and Duration of Meropenem Drug Therapy and Assessing Patient Financial Burden"

03. METHODOLOGY:-

Total 400 patient's data was collected for those patients who were given meropenem in a month(MAR) through Medanta eHIS system.

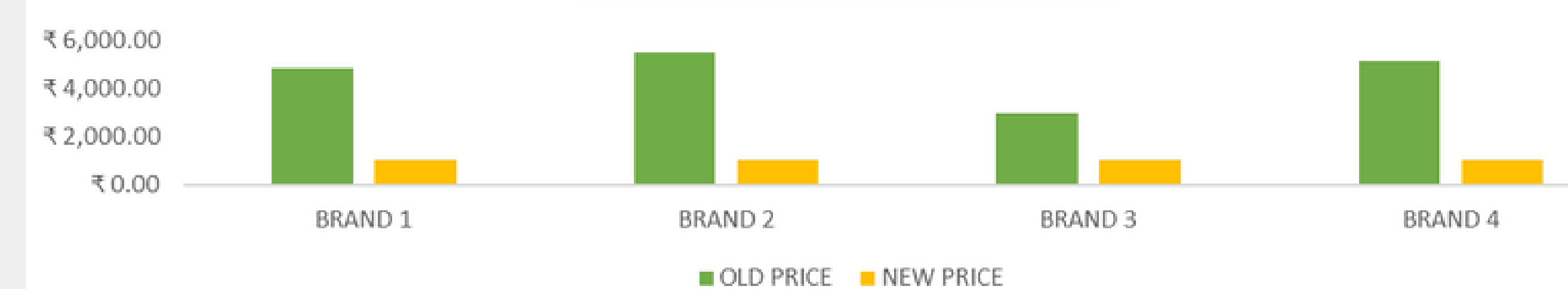


04. Analysis:-

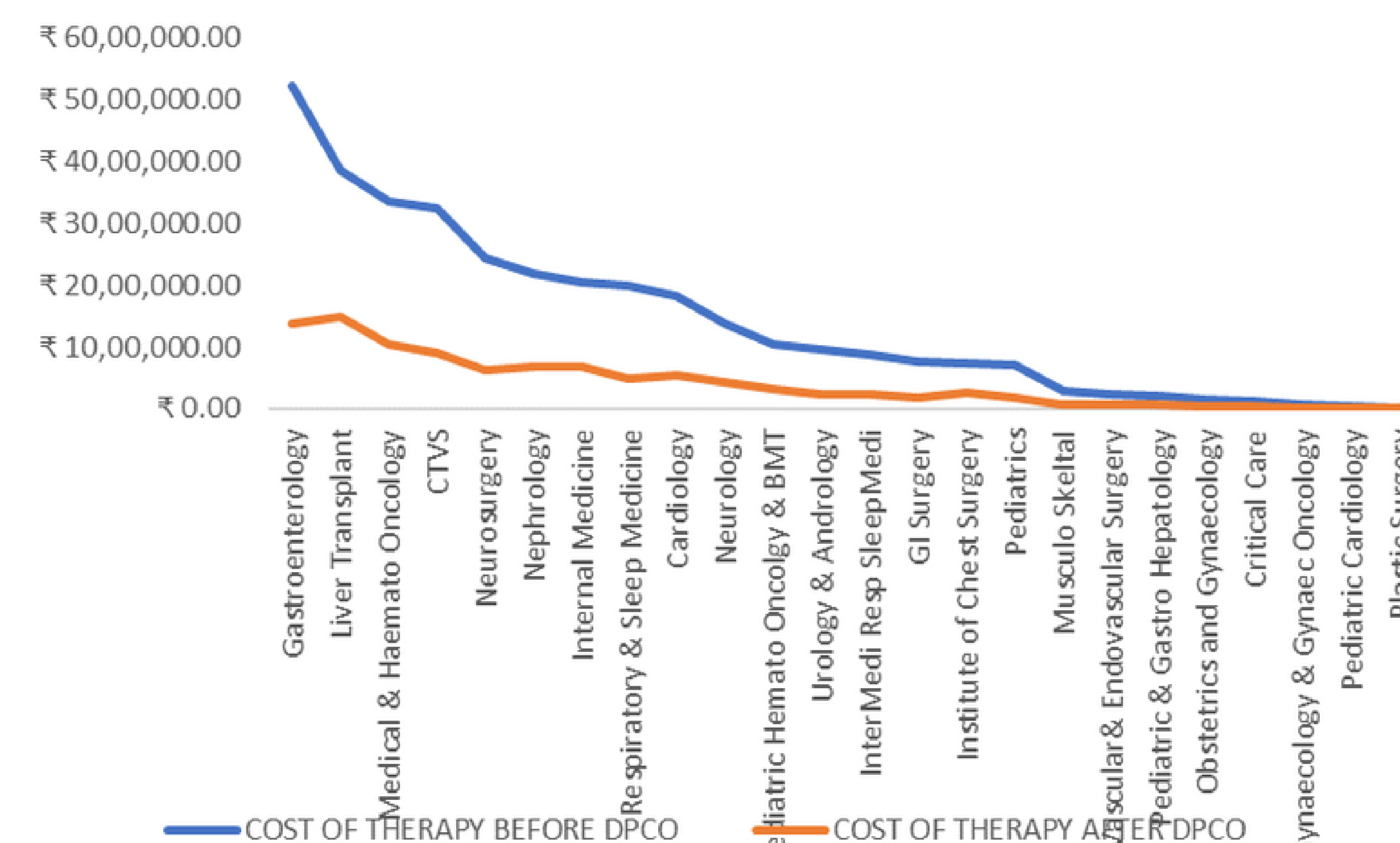
COMPARSION OF PRICES BEFORE AND AFTER DPCO FOR 500 mg VIAL



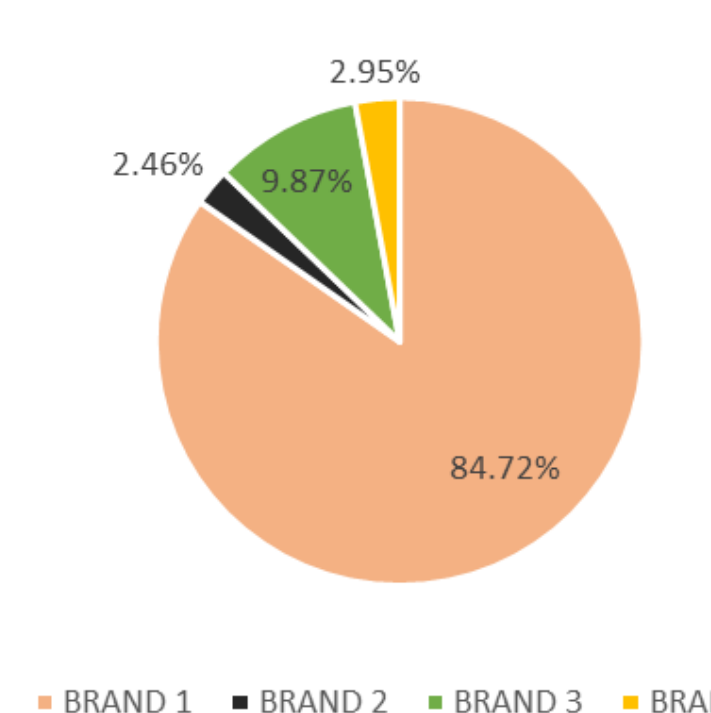
COMPARSION OF PRICES BEFORE AND AFTER DPCO FOR 1 gm VIAL



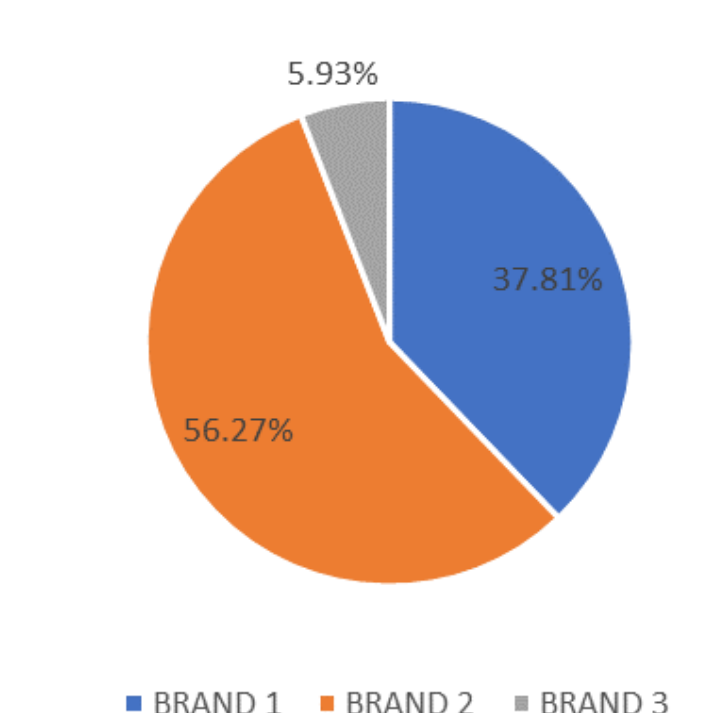
COMPARING COST OF THERAPY SPECIALITY WISE BEFORE AND AFTER DPCO DECISION



PERCENTAGE OF NO OF VIAL



PERCENTAGE OF NO OF VIAL



05. Results/Findings

- 75% average cost reduction was recorded for 1 gm vials of meropenem and 60% average price reduction was recorded for 500 mg vials of meropenem.
- Among all the brands of meropenem, Brand 1(1 gm) and Brand 2 (500 mg) was mostly prescribed to patients with dosing 1 gm and 500 mg respectively.
- Brand 2(500 mg) has the highest cost in dosing criteria of 500 mg brands and Brand 2(1 gm) has the highest cost in dosing criteria of 1 gm brands given to the patients.
- It was seen after the price ceiling , the average cost of therapy got decreased by 70.33% per patient.

06. Conclusion

The study conclude that the decision to implement a price ceiling on meropenem through the DPCO reflect the recognition of its highest usage and need to make this more accessible and affordable to the patients. It will alleviate the financial burden on the patients and improved the patient's outcome.

LIMITATIONS

The study may not consider all possible variables that could influence the duration of patient stay. Factors such as patient characteristics (age, gender, comorbidities), severity of infection, concurrent medications and healthcare provider experience may play a role in patient outcomes but are not included in the analysis.

