

Cover Page

**“UNRAVELLING THE DYNAMICS OF PRIVATE HEALTHCARE
POST – INTRODUCTION OF RGHS AND CHIRANJEEVI SCHEME – AN IN-
DEPTH ANALYSIS ON FUNCTIONING OF HOSPITALS AND THE IMPACT ON
– PROFITABILITY, FACILITY UTILISATION AND QUALITY”**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree

of

Master of Business Administration (MBA)

In

Hospital and Health Management

by

Dr. Bhavya Gupta

Under the Supervision and Guidance

of

Dr. Deepti Sharma

2023

Title page

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled "Unravelling the dynamics of Private Healthcare Post - introduction of RGHS and Chiranjivi Scheme - An In-depth analysis on functioning of hospitals and the impact on - Profitability, Facility Utilisation and quality" is the bonafide record of my original researchwork. 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 Information derived from the published or unpublished work of others has been duly acknowledged in the text.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)

Dr. Bhavya Gupta

Date:

Completion Certification

CERTIFICATE

This is to certify that Dr. Bhavya Gupta in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur has successfully completed her internship at Medipulse Hospital during February 20- May 19, 2023.

Place:

(Head/Preceptor of the Organisation)

Medipulse Hospital

Date:

Certificate from Faculty Guide and School Dean

CERTIFICATE

This is to certify that dissertation titled "Unravelling the dynamics of Private Healthcare Post - introduction of RGHS and Chiranjivi Scheme - An In-depth analysis on functioning of hospitals and the impact on - Profitability, Facility Utilisation and quality" is a record of the research work undertaken by Dr. Bhavya Gupta in partial fulfillment 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 her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide
IIHMR
University,
Jaipur

School Dean
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Date:

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ABSTRACT

This comprehensive study set out to investigate the transformative impact of the Rajasthan Government Health Scheme (RGHS) and the Chiranjeevi Health Insurance Scheme on the functioning of private healthcare institutions. Specifically, the research focused on examining the dynamics of revenue, patient footfall, capital utilization and the consumption of pharmacy services, at a Private Hospital in Rajasthan, a 300-bed tertiary care hospital empanelled under both the aforementioned government schemes. The primary objective of the research was to analyse the fluctuations in revenue patterns following the implementation of the RGHS and the Chiranjeevi Scheme. Notably, the study observed a significant upward trend in revenue generation following the introduction of these schemes, indicating an enhanced financial performance for the healthcare provider. A key element of this research was to evaluate the changes in patient footfall, both in the inpatient department (IPD) and outpatient department (OPD), as a result of these government initiatives. Following the implementation of the schemes, the study observed an increase in the number of patients availing healthcare services at the hospital. This increase is a positive indication of the broader accessibility and affordability of healthcare services brought about by these government initiatives.

The research scrutinized the variations in pharmacy services consumption, particularly focusing on the volume of medications dispensed by the hospital's pharmacy department. Post-scheme implementation, the research noted an increase in medication consumption, reflecting the potential overutilization of services, an issue which could lead to concerns of antibiotic resistance and patient safety. Another crucial aspect of this study was to examine the changes in different departments following the incorporation of these public welfare schemes. However, despite the evident benefits, the research also identified several challenges arising from the implementation of the RGHS and the Chiranjeevi Scheme. One significant issue was the operational stress placed on the hospitals due to the sudden surge in patient footfall. Moreover, the schemes inadvertently led to increased radiation exposure due to the higher frequency of radiology tests, and increased medication consumption due to the free availability of services.

In conclusion, the research underscores that while the RGHS and the Chiranjeevi Scheme have brought about significant transformations in private healthcare institutions, they also demand strategic planning for sustainable implementation. Policymakers, healthcare administrators, and practitioners need to understand these dynamics and implications to optimize the implementation of such schemes and further improve the healthcare landscape. Future research should focus on exploring the quality of patient care, patient satisfaction, and the broader implications of these schemes on healthcare delivery. While the study was confined to one hospital, it offers insightful observations and implications that could be of value in other similar settings. The research's findings are integral to guiding future policy decisions, enhancing hospital management strategies, and ultimately, elevating the standard of healthcare provision in the region.

Keywords: Rajasthan Government Health Scheme (RGHS), Chiranjeevi Health Insurance Scheme, Private Healthcare, Revenue Generation, Patient Footfall.

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Regards,

Dr. Bhavya Gupta

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ABBREVIATIONS

RGHS	Rajasthan Government Health Scheme
CGHS	Central Government Health Scheme
MLAs	Members of Legislative Assembly
OPD	Outpatient Department
IPD	Inpatient Department
PPP	Purchasing Power Parity
GDP	Gross Domestic Product
COVID 19	Coronavirus Disease 2019
RTH	Right to Health
ABPMJAY	Ayushman Bharat Pradhan Mantri Jan Arogya Yojana
CKD	Chronic Kidney Disease
PFHI	Private Funding For Health Insurance
RSBY	Rashtriya Swasthya Bima Yojana
ECHS	Ex Servicemen Contributory Health Scheme
CMHIS	Chief Minister Health Insurance Scheme
OOP	Out of Pocket

CHAPTER – 1

INTRODUCTION

Background: India's vast population has consistently presented a considerable challenge in delivering comprehensive healthcare to all citizens. For a long time, the private healthcare sector has served a crucial role in bridging the deficit created by the under-resourced and ill-equipped public healthcare system. However, this arrangement's outcome was glaringly unequal as access to healthcare was directly correlated with an individual's financial capacity. The private healthcare sector in India is the largest globally. In 2018, private payments constituted 48% of total healthcare expenditure, while the government and health insurance funds covered the remaining 62%. This condition stands in marked divergence when compared with the larger international landscape. A report that was issued by the World Health Organisation in 2007 highlighting India's rank at 184 out of 191 countries, with reference to its public healthcare spending as a tiny part of the total GDP. There was a little increase in public investment, rising from 0.9% to 1.2% of the GDP in the span of 1990 to 2010, and then it increased to 3.2% of GDP in 2018.

Both medical and non-medical expenditures paid directly by the individual often become significant obstacles to accessing healthcare. These challenges tend to hit less affluent populations harder than their wealthier counterparts. Individuals with lower economic status usually devote a larger share of their income towards healthcare expenses compared to those from wealthier backgrounds.

The 1955-56 Round National Sample Survey revealed that 40% of individuals had to resort to selling or borrowing against their assets to cover hospitalization costs. The burden is more severe among the poorest two quintiles, with half of them falling into debt or forced to sell assets, compared to just a third in the wealthiest quintiles. Alarming, health-related expenditures cause about half of households to descend into lower socioeconomic classes. The data indicates that one's financial situation significantly influences access to healthcare. Surprisingly, the majority of Indians, encompassing 80% of urban and 86% of rural residents, have zero expenditure on health in terms of Purchasing Power Parity (PPP) per capita.

This situation differentiates India from the countries like China, France, Italy, Russia, South Africa, Spain, and the US. These nations mainly rely on government funding for healthcare, overtaking private expenditure by a considerable margin. Still, over 80% of Indians are compelled to fund their private healthcare out of pocket. Non-medical costs, such as transportation, also hinder access to healthcare due to the expenses involved. Experts believe that outreach programs are essential to access marginalized and remote populations. Medical costs, such as out-of-pocket hospitalization fees, are another formidable barrier to healthcare access. Astonishingly, 40% of hospitalized individuals are pushed into enduring debt or poverty. Additionally, over 23% of patients cannot afford necessary treatment, and 63% have irregular access to required medications. With healthcare and treatment costs soaring by 10-12% annually, and medical advancements escalating costs further, this trend seems set to continue. Furthermore, unregulated medication prices exacerbate the problem.

The Indian government's health expenditure constitutes just 27.1% of the country's Current Health Expenditure, considerably less than other countries like Brazil, the US, and China, where government spending forms 41.9%, 50.2%, and 56.7% respectively. The inadequacies of this system were starkly exposed during the Covid-19 pandemic when citizens were forced to seek care in private hospitals. Anecdotes of patients being billed exorbitantly for their treatments were common. For instance, one patient was billed for ten days of hospitalization, amounting to several thousand euros. The average cost of basic Covid-19 treatment, excluding ventilator support, often equalled a couple of hundred euros per day. For those needing ventilator support, the daily charges increased significantly. Additional expenses for room rent, equipment, and monitoring further inflated these costs, with a typical Covid-19 treatment bill amounting to several thousand euros per week or tens of thousands of euros per month. These amounts are unaffordable for the average citizen. Even in Goa, boasting the highest per capita net state domestic product (NSDP), the cost of treatment can be prohibitive. For states with lower NSDP like Maharashtra and Bihar, the cost becomes even more unattainable. In Mumbai, one of India's wealthiest cities, only a fraction of the population has an income high enough to afford Covid-19 treatment at private hospitals. The majority of the city's population falls into an income bracket that would find these costs challenging, with a small percentage earning an income that would make private hospital treatment completely untenable. Moreover, India's per capita income is far from sufficient to afford even a single day of Covid-19 treatment at a private hospital.

The availability of healthcare services isn't exclusively determined by income levels; the discrepancy between the urban and rural health infrastructure within India is another critical factor. Astonishingly, by the year 2013, a huge 72% of India's rural population only had access to a third of the nation's total health infrastructure. This stark imbalance highlights the geographical disparity in the accessibility and distribution of healthcare resources. A significant portion of rural inhabitants had to travel over 5 km to avail outpatient department (OPD) services, which represent the initial contact point between a patient and medical staff. The Economic Survey of 2018-2019 highlighted that 60% of primary health centres in India, all located in rural areas, had only one doctor, and shockingly, 5% had none. The restricted access to primary healthcare, especially in rural zones, along with the persistence of non-scientific medical practices, could elucidate why certain diseases endure in these areas, notwithstanding their eradication or considerable reduction in other parts of the world. For example, in 2018, the rate of detection of tuberculosis was at 74%, with an incidence rate of 199 per 100,000 individuals. The next year, India had 2.4 million tuberculosis cases, which led to over 79,000 fatalities. For some diseases, namely, leprosy, tetanus, and diphtheria, a similar pattern was seen with significant number of new cases being reported in the previous years in India.

Despite the historical trend of high out-of-pocket expenses in the healthcare sector, recent years have shown a promising shift. The government and health insurance programs have started covering more than half of total healthcare costs. This shows progress towards equal access, funding, and outreach in India's healthcare system. As the economy grows, the government has become better at providing health insurance to most of its citizens. Over time, various government programs have been launched to decrease the disparities and issues in India's healthcare sector.

In 2017, there was a significant change in India's health policy. The new policy invited the private healthcare sector's participation and aimed for a universal health coverage, which was strategically buying services from private hospitals. This shift made the way for the Indian government's scheme ABPMJAY, often referred to as "Modicare".

Introduction of this scheme was a major step towards making healthcare accessible to India's economically weaker sections. The plan was to become the world's largest health-insurance scheme with the government promising to cover hospital's yearly costs for eligible families.

Under ABPMJAY, qualifying patients could seek care at any empanelled public or private hospital.

However, the policy faced a great downfall when only a few of private hospitals agreed to get empanelled with it. This was primarily due to the lower rates of reimbursement offered by the government for consultations and surgeries which was a consequence of underfunding of the scheme. The initial budget allocation was a small fraction of our country's GDP. Even after a year of operation, the number of enlisted hospitals remained quite low, with public facilities making up only half. Only a tiny percentage of private multi-specialty hospitals joined ABPMJAY, indicating that top-level medical establishments, mostly driven by profit motives, preferred to stay out.

The Covid-19 pandemic has vividly highlighted the unique challenges and certain limitations within India's healthcare framework. The private healthcare sector, despite its rapid growth and development, often levies costs that are unaffordable to many, thereby failing to provide a complete supplement to the public healthcare sector. Since the onset of Covid-19 in 2020, numerous individuals have had to deplete their savings to afford necessary medical treatments for themselves or their family members. Public hospitals were invariably overburdened, prompting many to seek immediate medical attention at private facilities, resulting in a significant financial strain on India's middle-class population.

Recognizing the shortcomings of the ABPMJAY, the Rajasthan government, headed by Chief Minister Ashok Gehlot, has introduced two formidable healthcare initiatives - the RGHS and the Mukhyamantri Chiranjivi Yojana. These strategies were meticulously designed to broaden healthcare accessibility and make it more financially feasible for the residents of the state.

RGHS Initiative

Launched in September 2021, the Rajasthan Government Health Scheme (RGHS) is a comprehensive and fully automated digital initiative modelled after the Central Government Health Scheme (CGHS). The scheme primarily serves employees and retirees of the Rajasthan state government, current and former Members of the Legislative Assembly (MLAs), their families based in Rajasthan, as well as serving and retired state Judges.

This extensive healthcare program provides a multitude of services, including outpatient (OPD) services, inpatient (IPD) services, cashless options for day care procedures, and diagnostic tests at approved centres. Furthermore, it includes family welfare provisions, as well as maternal and child health services, all accessible at recognized or empanelled hospitals within Rajasthan.

Under RGHS, beneficiaries can avail cashless hospitalization at all government and properly empanelled private hospitals in the state. The scheme ensures that beneficiaries don't bear the cost of medical treatments, which is instead covered by the government. This cashless facility is only offered at participating healthcare network providers, including government and private hospitals, and diagnostic/imaging centres at the stipulated CGHS rates.

Beneficiaries can also avail cashless OPD medicines from government-owned CONFED stores and private empanelled pharma stores. The RGHS delivers comprehensive treatment coverage, including OPD/IPD/Day Care, maternity and child care facilities, following the CGHS guidelines.

The RGHS Card Tracker System enables all beneficiaries to track their OPD and IPD card limits as per their category through their registered SSO login ID. Pensioners under the scheme (as per RCS (Pension) Rules 1996) can avail the facility of online OPD enhancement, offering a seamless, user-friendly system to provide real-time information on the availability of funds for required medicines.

Particularly for serving and retired SAB employees under RGHS, an insurance sum of Rs 5 lakhs (including Rs. 20,000 OPD) per family per year is provided, with an additional coverage of Rs 5 lakhs per year per family for any catastrophic illnesses specified within the scheme.

Mukhyamantri Chiranjeevi Swasthya Bima Yojana

Parallel to the RGHS, the Mukhyamantri Chiranjeevi Yojana was initiated with the purpose of aiding the economically weaker sections of society by making health insurance more accessible to them. Rajasthan's government has been at the forefront in initiating various schemes to provide health services to the citizens of the state. It has previously successfully implemented free medicine and free check-up schemes in the state, providing free medicines and check-ups to the public in government hospitals.

The healthcare scheme offers an annual cashless medical insurance benefit up to INR 10 lakh, significantly increased from the previous limit of INR 5 lakh. It covers an extensive variety of medical procedures, covering as many treatments and associated medical costs. These initiatives have been primarily formulated at the state level, and they supplement the national AB-PMJA, which offers coverage of up to INR 5 lakh per family each year for secondary and tertiary care hospitalizations.[6] In compliance with the 'Universal Health Coverage' announced in the 2021-22 budget, the Chief Minister Chiranjeevi Health Insurance Scheme was implemented in the state from May 1, 2021. It aims to alleviate citizens from substantial medical expenses so that there is no financial obstacle in treating serious illnesses. The salient features of the scheme include:

1. From 1st May 2021, the Chief Minister Chiranjeevi Health Insurance Scheme was initiated.
2. **Beneficiary Families:** Under the scheme, families linked/registered to the Jan Aadhaar database, eligible under the free category, or who have paid the determined premium to register in the scheme are included. Families eligible under the National Food Security Act (NFSA), contract workers in all departments, boards, corporations or government companies in the state, small farmers, and families who received COVID-19 financial assistance last year are included in the free category. Other families in the state who are not government employees/pensioners can join the scheme by paying the determined premium.
3. **Insurance Cover:** As per the budget announcement of 2023-24, the health insurance cover has been increased from Rs 10 lakh per family per year to Rs 25 lakh.
4. **Package:** The scheme will only be valid for In-Patient Department (IPD) procedures and identified procedures. It includes 1798 types of packages and procedures for various diseases. All diseases prior to the start of the scheme are included. The

package includes registration fee, bed cost, admission and nursing expenses, surgery, anaesthesia specialist and general medical consultation fees, expense of anaesthesia, blood, oxygen, OT etc, cost of medicines, cost on X-rays and examinations, cost of necessary equipment to protect hospital staff and patients from infectious diseases. The cost of tests, medicines and doctor's consultation fees related to the disease for which the patient is admitted to the hospital, 5 days prior and 15 days after discharge, is included in the package amount.

5. **Other Provisions:** There is no limit to the size and age of the family in the scheme. Infants up to one year will be eligible to take benefit in the scheme without their name in the family card.

These healthcare programs have made a profound impact not just on public healthcare access and affordability, but also on the private healthcare sector. Amidst the COVID-19 crisis, when healthcare institutions were overwhelmed with patient influx and resource limitations, these initiatives likely mitigated the financial burden on patients and enabled a more equitable patient distribution across public and private healthcare institutions. Consequently, there have likely been shifts in operational and financial dynamics within private healthcare institutions, including changes in patient inflow, healthcare utilization, and revenue streams. Despite the significant advances made by government healthcare initiatives such as the RGHS and Mukhyamantri Chiranjivi Yojana, there's a marked absence of understanding of their larger effects on private healthcare institutions. This information gap represents a deficit of knowledge that, if bridged, could shed light on how such governmental programs impact the operational and financial dimensions of private healthcare organizations - a critical aspect for the comprehensive evolution of the healthcare sector in India.

This research, therefore, seeks to probe these impacts in an exhaustive and systematic fashion by examining the operational data from a private hospital, a pivotal stakeholder, following the implementation of these schemes. The importance of this issue stems from the current healthcare reform climate, where policies are being revamped to provide universal health coverage. The symbiotic interaction between the government and private healthcare sectors is integral to the achievement of this ambitious goal, making it imperative to understand the influence of government policies on private healthcare bodies. By analysing real-world data, it aims to confirm or refute prevailing assumptions about the role and behaviour of private healthcare bodies in reaction to public healthcare initiatives.

Highlighting the financial impact of the Corona virus pandemic on private hospitals in India, these institutions faced significant financial challenges. A decrease in patient numbers and the suspension of non-emergency surgeries drastically affected their revenue streams. To cope with the financial losses, measures such as reducing doctors' salaries and other cost-cutting strategies were employed. For instance, Fortis Healthcare, a leading hospital chain, reported a stark decrease in operational income of Rs 532.4 crore or 46.8%, dropping from Rs 1,138.3 crore in April-June 2019 to Rs 606 crore in April-June 2020. Consequently, it recorded a net loss of Rs 178.9 crore in the COVID-impacted quarter, a stark contrast to a net profit of Rs 67.8 crore during the same period in 2019. This crisis underscored the vulnerability of private hospitals, which struggled to maintain financial stability amidst global health emergencies.

This research mainly hopes to create a framework that can provide a deeper insight into the influence of public policy on the private healthcare industry. Ultimately, the objective of this study extends beyond filling a critical knowledge void. It aims to deliver practical insights and empirical data that can play a significant role in forming future healthcare strategies and policies. This study will enable a more detailed understanding of the interaction between public policy and private healthcare entities, a crucial element for establishing a robust and inclusive healthcare system in India.

CHAPTER - 2

LITERATURE REVIEW

Authors (Year)	Study Location	Sample Size	Sampling Techniques	Salient Features
Ranjan A, Dixit P, Mukhopadhy ay I, Thiagarajan S. (2018)	India	Nationwide Survey	Multivariate logistic regression, Cross- tabulation analysis and Propensity score matching	The effectiveness of PFHIs and tax-funded public health services in India was examined. It was found that 45.6% of all hospitalization needs are provided by public hospitals, and the population coverage of PFHIs is 12.8%, with greater coverage observed in the upper income quintiles. The study marks the need for attention regarding the shift in the role of government from service provision to care purchasing, considering limitations of the currently available PFHIs.

Garg S, Bebarta KK, Tripathi N (2020)	Chhattisgarh, India	6375 individuals in 2004, 7651 in 2014, and 15,361 in 2019	Multivariate Analysis, Propensity Score Matching, Instrumental Variable Method, Two-stage Stratified Sampling	In this study the impact of PMJAY, a national PFHI scheme in India, on the utilization of hospital services and financial protection was investigated. Enrolment under PMJAY or other PFHI schemes did not show any increase in the utilization of hospital care, nor did it lead to a decrease in OOP expenditure or any other catastrophic expenditure. These findings question whether the government supported purchases from private institutes are appropriate in the Indian environment. Further evaluation and consideration of alternative approaches are warranted to address the challenges in achieving the desired outcomes of PFHI schemes in India.
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Karan A, Yip W, Mahal A (2017)	India	346,615 households	There is analysis of 3 sections done - (1999–2000, 2004–2005 and 2011– 2012) of the data of households representing the National Sample Survey Organisation (NSSO) and RSBY district level administrative data on enrolment, using difference-in- differences methods	It has been revealed by the study that the Rashtriya Swasthya Bima Yojana which is a government funded health scheme for the poor, was found to be ineffective in reducing the burden of OOP spending on unprivileged households. Also , the chances of incurring any OOP expenditure increased by 30% as a result of RSBY. Although there was no change in the levels of out- of-pocket spending, RSBY led to a 5% increase in household non-medical spending. These findings indicate that RSBY did not successfully alleviate the financial burden on poor households and highlight the need for further examination and improvement of the scheme's effectiveness in reducing out-of-pocket healthcare costs.
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Prinja S, et al. (2022)	India	154 hospitals (42 district hospitals and 112 subdistrict hospitals)	Multistage stratified sampling method used for the selection of states and hospitals. Also, the study used secondary data on cost and data on the number and value of claims paid during the year 2019 at the public sector district and sub-district hospitals.	In the study, the impact of ABPMJAY, a publicly financed health insurance scheme, on district hospitals was evaluated from a financial perspective. The findings revealed that in India district hospitals experienced a net yearly financial benefit of \$26.1 million as a result of the scheme. Furthermore, it was estimated that this financial benefit could potentially increase to \$41.8 million increasing the patient volume. Based on these results, the study suggests consumer driven financial approach, such as ABPMJAY, can be utilized to make the public sector strong. Additionally, they propose that increasing the utilization of district hospitals could further enhance the financial gains and contribute to the overall strengthening of the public sector.
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Behzadifar M, et al. (2022)	Lorestan, Iran.	18 public hospitals	NA	The purpose of the study was to look into how COVID-19 affected the finances of public hospitals in Iran's province of Lorestan. In order to assess the variations in monthly revenues from April 2018 to August 2021, it used an interrupted time-series analysis. According to the analysis, COVID-19 caused public hospitals to lose \$172,636 000 in revenue on a monthly average. Following the lifting of limits on patient admission and elective surgery in February 2021, the fall lasted for around 13 months before increasing somewhat steadily. The authors emphasised the financial difficulties hospitals encountered during the pandemic and the significance of allocating sufficient resources to sustain healthcare service quality and guard against future shocks.
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Reshmi B, et al. (2021)	India	NA	NA	This systematic review aims to evaluate the impact of various public-funded health insurance (PFHI) schemes in India on healthcare utilization and financial risk protection. The review includes the analysis of PFHI schemes such as RSBY, Vajpayee Arogyashree, CMHIS, and PMJAY. The outcomes examined in the review encompass healthcare utilization, willingness-to-pay (WTP), OOP expenditure and catastrophic health expenditure (CHE). The study finds inconclusive evidence regarding the impact of PFHI on financial risk protection, but highlights an increase in access and utilization of healthcare services with certain PFHI schemes. The review acknowledges the limitations stemming from data heterogeneity and the inability to provide a pooled estimate through meta-analysis.
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Garg S, Bebarta KK, Tripathi N (2022)	Chhattisgar h	492	Not specified	Examined the OOP expenditure and incidence of catastrophic health expenditure for COVID-19 hospitalizations in India. Public hospitals accounted for 69% of hospitalizations, while private hospitals accounted for the remaining. Approximately 3% of hospitalizations in government hospitals and 59% in private hospitals resulted in major expenditure. Even if the people were enrolled under any private or public insurance scheme, it did not help in reducing OOP expenditure. Utilization of hospitals was a key determinant of incurring catastrophic expenditure.
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Harish R, et al. (2020)	Thiruvananthapuram, Kerala	120	Cross-sectional sampling	This cross-sectional study aimed to assess health insurance coverage and its impact on out-of-pocket (OOP) expenditures for public sector tertiary health care hospitalization in Kerala, India. The study found that 74.2% of the study participants had health insurance coverage. Insured individuals had significantly lower OOP expenditures for treatment procedures, investigations, and medicines compared to those without insurance. Among the enrolled patients, 45% expressed dissatisfaction with the available services. Improvements in enrolment and the use of health insurance were suggested to ultimately result in improved patient satisfaction.
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CHAPTER – 3

METHODOLOGY

Key Research Questions :

1. How do the RGHS and Chiranjeevi Scheme affect the profitability of private hospitals, and what factors contribute to this impact?
2. What is the association between public schemes and the patient footfall in private hospitals, and how does this relationship affects different specialties or departments?
3. How has the resource utilisation changed in the private hospitals after the introduction of these government schemes?

Research Objectives :

1. To evaluate changes in patient turnout for both inpatient (IPD) and outpatient (OPD) services following the implementation of the government schemes.
2. To examine the utilization of pharmacy services and the frequency of pathology and radiology tests subsequent to the adoption of the RGHS and Chiranjivi Scheme.
3. To analyse changing trends in various operational activities of hospital due to external factors.

RESEARCH HYPOTHESIS : The implementation of the RGHS and Chiranjivi Scheme will potentially stimulate an upward trend in revenue generation and healthcare service usage, reflecting in various operational sectors of a private hospital.

Research Methods : The research methods employed in this study encompassed a comprehensive and systematic approach to investigate the impact of the RGHS and Chiranjivi Scheme on private hospitals.

- **Study Design** - The chosen study design for this research was an observational retrospective study. The analysis relied on existing hospital records spanning the period from 2018 to 2023, with a specific focus on the impact of the empanelment of the RGHS and Chiranjeevi Scheme on a private hospital during this time frame, including the years 2020 and 2021 that were significantly influenced by the pandemic. This included assessing the impact of lockdown measures, changes in patient behaviour, fluctuations in healthcare service demand, and the utilization of specific medical resources.
- **Study Setting** – This study was conducted at Medipulse Hospital, a prominent private healthcare facility located in Basni, Jodhpur, Rajasthan, India. It is a renowned tertiary care institution with 300 beds and empanelled under both the RGHS and Chiranjeevi Scheme since 2021, Medipulse Hospital serves a diverse population and provides comprehensive healthcare services to individuals from different socio-economic backgrounds. The inclusion of Medipulse Hospital as the study setting allows for a detailed examination of the impact of these government schemes on the hospital's revenue, profitability, patient footfall, and capital utilization. The hospital's accreditation, range of medical services, and its central location in Jodhpur make it an ideal research setting to explore the effects of the RGHS and Chiranjivi Scheme on private healthcare in Rajasthan.
- **Study population** – The research comprised of all patients who accessed healthcare services at Medipulse Hospital during the specified study period. The inclusion criteria for the study population required the hospital databases to have complete and available records. The patient records included in the credit payments or insurance reimbursement data were not limited to those empanelled with RGHS and Chiranjivi but also included individuals covered by any government scheme such as CGHS, ECHS, etc or health insurance who availed hospital services. These records served as

the primary source of data for the analysis. However, certain data were excluded from the study population if the records were incomplete or missing the information required for the analysis.

This ensured that the study focused on comprehensive data available for analysis, thereby ensuring the reliability and validity of the findings.

- **Study Duration** – The study duration encompassed three months for collection of data and its analysis. However, the scope of the study extended beyond this period to cover approximately five years of data. This included the pre-empanelment period, the period during the Covid-19 pandemic, and the post-empanelment period. By considering these different time periods, the study aimed to examine the impact of the RGHS and Chiranjivi Scheme on the private hospital's functioning and performance in various contexts, including the effects before, during, and after the Covid-19 pandemic. This approach allowed for a comprehensive analysis of the data, taking into account potential variations and trends that may have emerged during different phases of the healthcare landscape.
- **Sample Size** - There was no selection of specific cases. The study included all relevant data available from the hospital records over the five-year period for analysis.
- **Sampling Technique** – A total population sampling technique was applied as this study was a non-interventional study. By examining the data, this study aimed to gain a full understanding of the factors and outcomes it was analysing.

Research Procedure :

- **Data Collection** – From the hospital's online database, monthly data was collected for the five year time period of January 2018 till April 2023 using Google sheets and MS Excel for a quantitative assessment of the impact of the government health schemes on the hospital. This five year period included pre Covid, Covid, post Covid and also pre and post empanelment time and allowed the observation of the potential effects on the hospital's activities. Information on hospital's facility and resource utilisation was taken such as number of OPD and IPD visits, number of tests

conducted in laboratories, number of surgeries done, pharmacy purchases for OPD and IPD, percentage of revenue generated from cash patients and credit patients covered by insurance and government schemes organised as percentage of cash and credit patients and operational expenses such as electricity consumption and electricity bill amount.

- **Data Analysis** - For the data analysis and its presentation, some of the monthly data was converted into quarterly and presented in quarterly intervals in the graph. This method allowed for a more concise and representable presentation of the data on graphs and still captured the overall trends and patterns. By using MS Excel and Google Sheets, the data was converted into graphs and charts and statistical analysis was performed. To identify any significant patterns or trends over this five year time period, trend analysis was done which involved examining the data from 2018 to 2023 and observe the changes in IPD and OPD patient numbers and resource utilisation changes during and after the pandemic and also after the introduction of the government schemes. Any upward or downward trends were analysed by longitudinal representation. Comparative analysis was done to evaluate the differences in the hospital's operations before, during and after the pandemic and also before and after the introduction of RGHS and Chiranjeevi. This was done to understand the impact of the pandemic and these schemes on how the hospital's services. All the data was visually represented in graphs for making the patterns and trends easier to analyse.

Operational definitions

1. **Empanelment:** Refers to the process where a private hospital is officially included and recognised by a government funded scheme, allowing them to provide services under the scheme and receive funds from it. In this study, it means the hospital is eligible to provide services under the RGHS and Chiranjivi Scheme, and receive compensation from the government for those services.
2. **Patient Footfall:** This is the total number of patients who visited the hospital to avail medical services during the study period in OPD, IPD or emergency, including both new patients as well as returning patients.

3. **Pharmacy Consumption:** Indicates the quantity of medications dispensed by the hospital's pharmacy department. It reflects the utilization of pharmaceutical products by patients, including both outpatient (OPD) and inpatient (IPD) settings.
4. **Credit Patients:** Represents patients who receive healthcare services at the hospital and their payments are covered by insurance plans, government schemes, or other third-party payers. These patients do not make direct out-of-pocket payments for their medical expenses.
5. **Cash Patients:** Refers to patients who pay for their healthcare services directly using cash or other forms of payment. These patients do not have insurance coverage or are self-paying for their medical expenses.

Ethical Considerations - Throughout the study, ethical considerations were upheld, ensuring the privacy and confidentiality of the hospital's information. A study approval was taken from the Managing Director of the hospital after assurance to maintain confidentiality of all the data provided. The necessary data security measures were implemented to protect the integrity of the collected data.

CHAPTER – 4

RESULTS

The three-month research study, analysed long-term hospital operational trends spanning from January 2018 to April 2023. Key aspects involved were patient footfall, resource utilisation, and revenue generation. We also assessed the influence of external factors, such as policy shifts and global health crises, on these parameters. This study presents a comprehensive understanding of the evolving landscape of hospital operations amidst changing external conditions. The data was transformed into graphical representations and examined on both a monthly and quarterly basis for analysis.

Throughout the years, a clear downward trend in the cash percentage was observed, indicating a decrease in the number of patients opting to pay for services using cash. (Figure 1) However, during the year 2020, when the COVID-19 pandemic was at its peak, there was a temporary increase in the percentage of cash patients. This can be attributed to the unique circumstances of the pandemic, such as limitations on insurance coverage or the preference for immediate cash transactions during uncertain times. On the other hand, the credit percentage showed a consistent upward trend after October 2021, post introduction of RGHS and Chiranjeevi schemes.

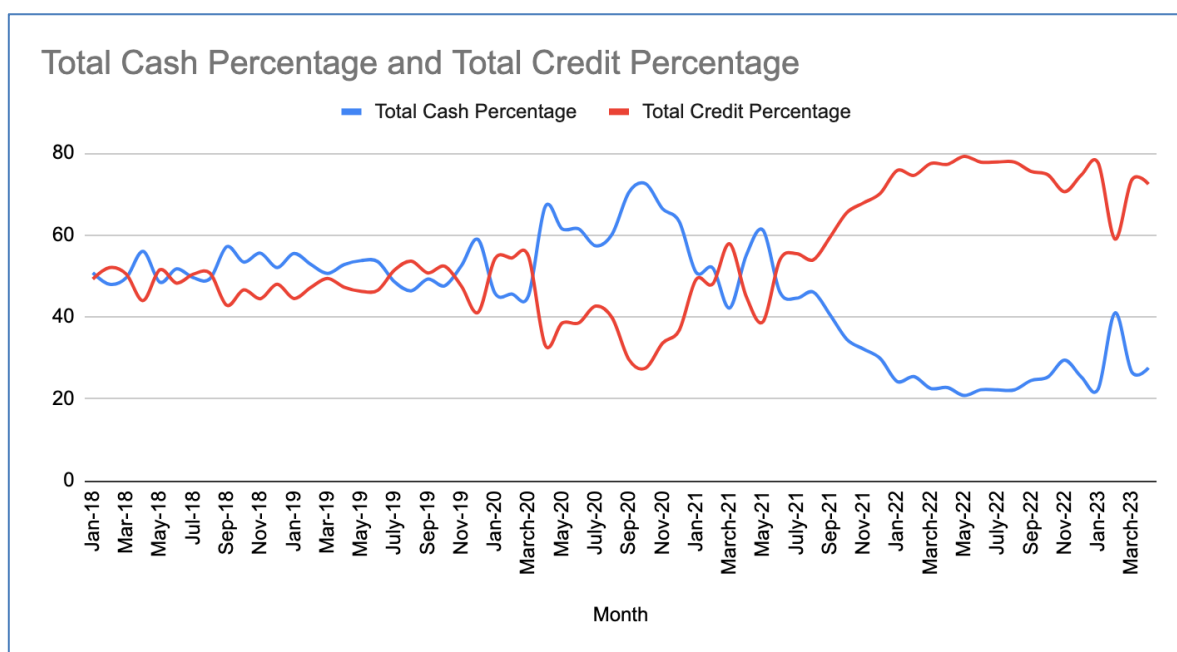


Figure 1 (The cash percentage and credit percentage as the y-axis variables and the months as the x-axis variable. The data is taken from April 2017 till April 2023 and shown in alternate months.)

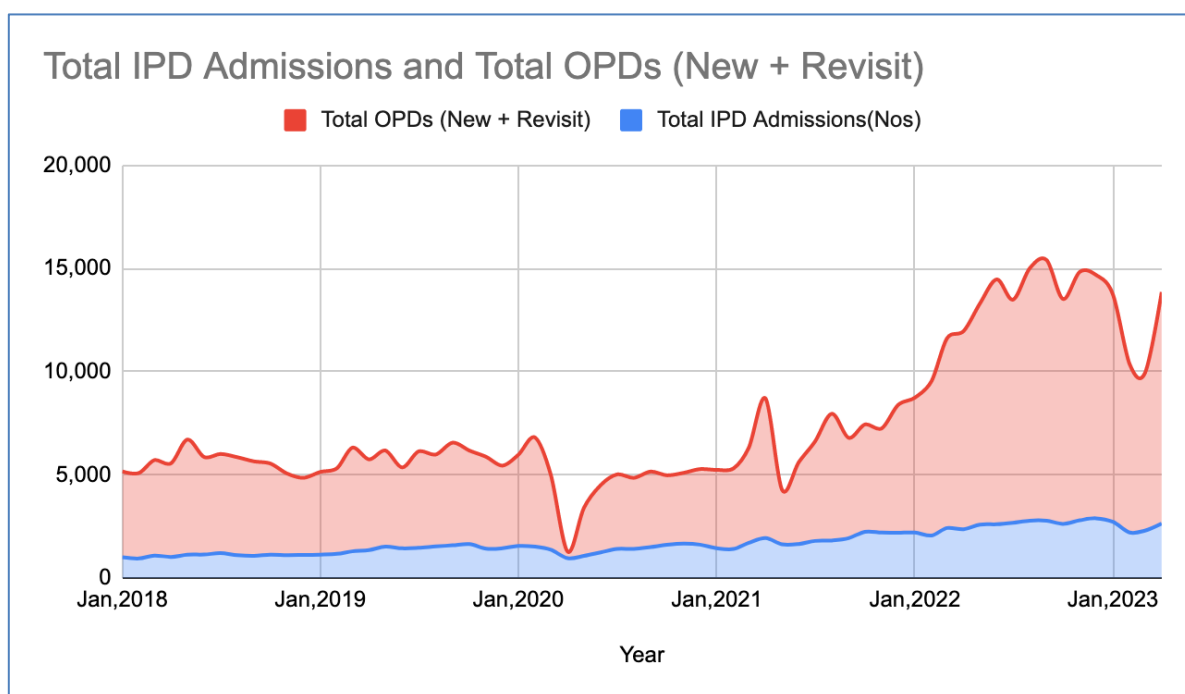


Figure 2 (The stacked data graph showing the total number of admissions to the IPD and OPD from January 2018 through April 2023)

Throughout the years, there was a notable rise in both OPD and IPD admissions. However, a decrease in OPD admissions was marked in March 2020 during the lockdown, imposed due to the COVID-19 pandemic. The same downward trend was observed in the second wave of pandemic in April 2021.(Figure 2) During the pandemic, the operation of the IPD services had been greatly disrupted. The attention of healthcare providers was largely redirected towards managing and controlling the spread of COVID-19, leading to the reorganization of resources. While IPDs were functional during this time, their focus was chiefly on the treatment of COVID-19 patients and addressing emergencies. Following the implementation of Rajasthan's public health schemes, a significant increase in both OPD and IPD admissions was observed. The year 2022 marked a considerable rise in admissions, largely due to post-COVID effects and the empanelment of patients under these schemes, which ensured coverage of their medical costs. As a result of the increased patient footfall, there were more registration counters for RGHS, while only one counter was designated for cash payments, and another counter for other schemes such as CGHS, ECHS, etc. This measure aimed to effectively handle the growing number of patients and streamline the registration process. A reversal of this increasing trend in OPD admissions was noted in March 2023. This was when doctors in Rajasthan initiated a strike against the passing of the Right to Health Bill. This led to a temporary halt in admissions to private hospitals, significantly impacting OPD admission numbers.

In 2018, the OPD pharmacy purchases were at a certain level, but dropped drastically during the first wave of the COVID-19 pandemic in March 2020, when the lockdown was enforced. However, after the introduction of the RGHS - which facilitated cashless purchases of medicines - later in the year 2021, a significant revival in OPD pharmacy purchases was observed. By April 2023, the monthly OPD purchases had risen considerably, showing an impressive percentage increase of around 275% from the levels recorded in 2018.(Figure 3)

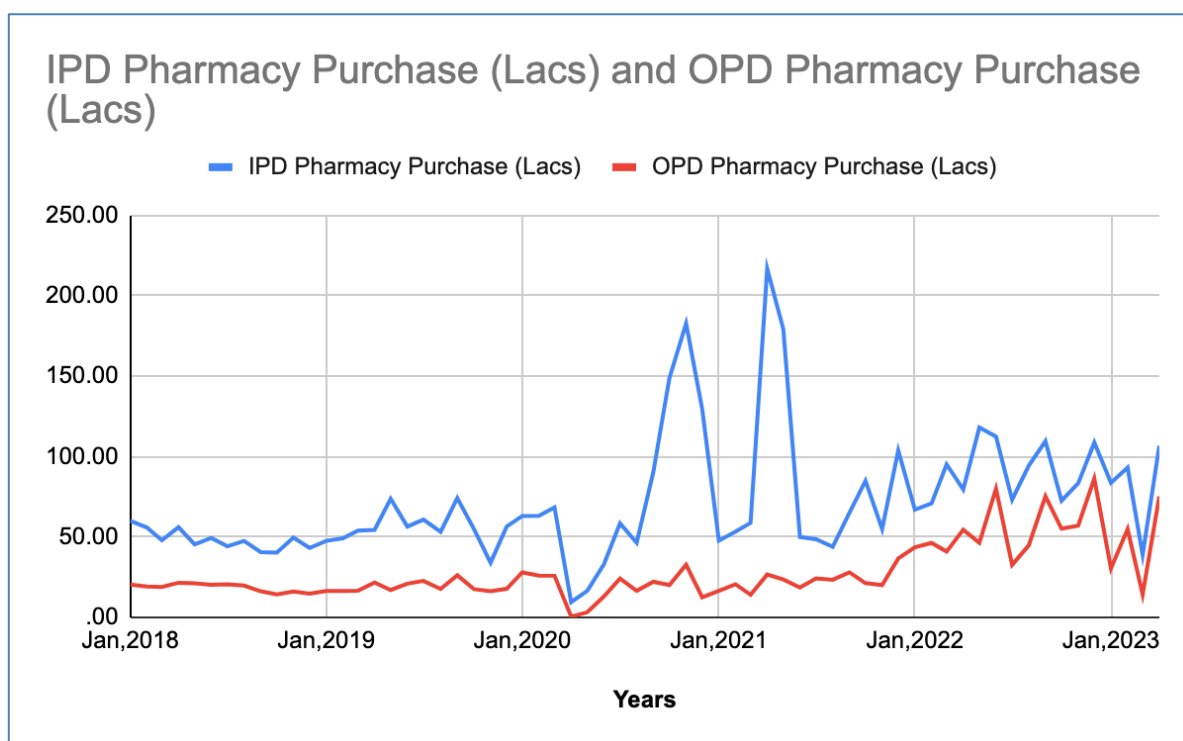


Figure 3 (The percentage increase in the OPD and IPD pharmacy purchases of the hospital from the year 2018 until April 2023)

In a similar fashion, the IPD pharmacy purchases showed a substantial growth trajectory over these years.(Figure 3) Starting from a certain base level in 2018, the purchases witnessed a robust increase by 2023. This growth was especially pronounced following the introduction of the schemes. The surge was the most noticeable during the COVID-19 pandemic, peaking in November 2020 and even more in April 2021 as the first and second waves led to increased patient admissions and exacerbated patient conditions. The percentage increase for IPD purchases from 2018 to 2023 was approximately 77%. However, during a doctors' strike against RTH bill in March 2023 when the hospital had to be temporarily closed, a dip in both IPD and OPD pharmacy purchases was recorded. This illustrated how external factors could temporarily interrupt the otherwise steady upward trend in pharmacy purchases.

A significant increase seen in the number of dialysis procedures conducted per month, starting from around 500 in January 2018 and reaching approximately 1700 in April 2023.(Figure 4) This upward trend indicated a substantial rise in the utilization of dialysis services over the five-year period. The cost of dialysis per day ranged from ₹2500 to ₹6000, which posed financial challenges for middle-class individuals. Globally, the number of

patients with treated kidney failure was expected to increase from 2.6 million in 2010 to 5.4 million in 2030. Chronic kidney disease (CKD) had a high global prevalence of approximately 13%, with the incidence of CKD and end-stage kidney disease increasing with age. Currently, dialysis and kidney transplantation are the main treatment options for end-stage renal disease (ESRD). However, there was shortage of available kidney organs for transplantation and with the growing waiting lists, dialysis is often the preferred option.

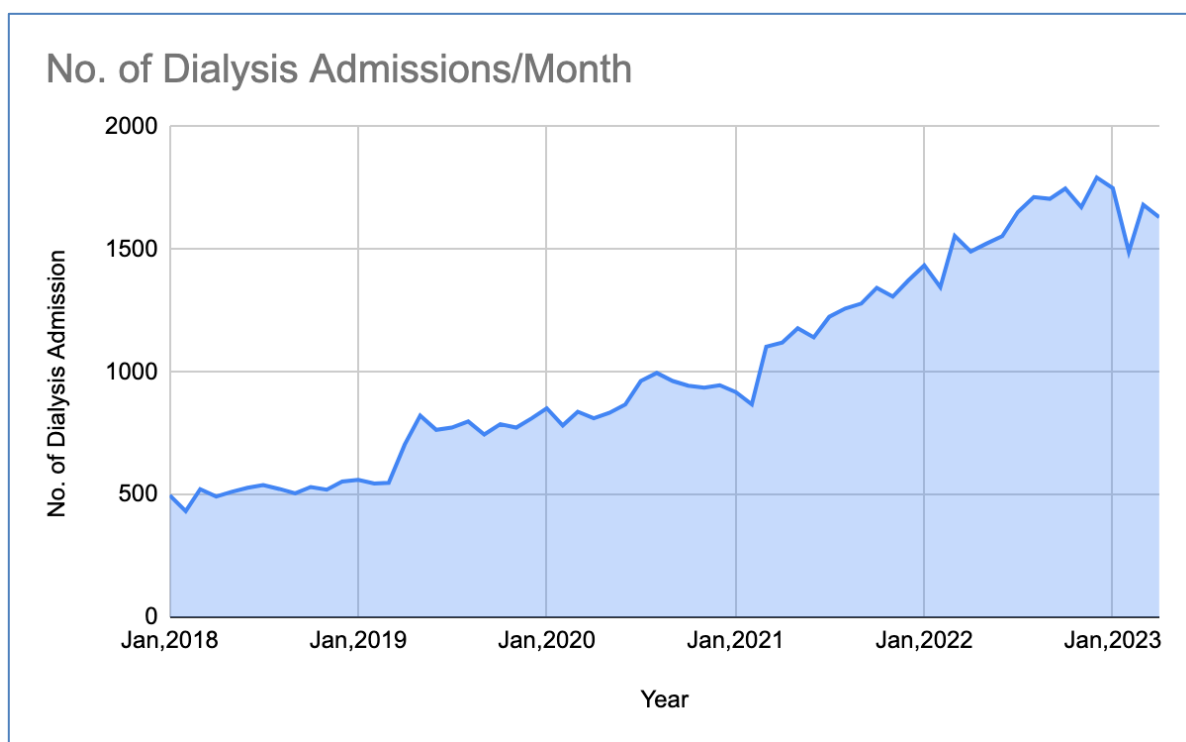


Figure 4 (Number of dialysis admissions per month. The data is taken from January 2018 till March 2023, for convenience only first month for every year is labelled on x axis)

Consequently, there has been an observed increase in the number of dialysis centres to accommodate the growing number of patients seeking dialysis. After the implementation of the RGHS and Chiranjivi schemes, there was a significant 228.8% increase in the number of dialysis patients at the hospital. The impact of the COVID-19 waves in 2020 and 2021 did not have a noticeable effect on the dialysis services. Additionally, dialysis procedures continued during the doctors' strike when emergency, OPD and IPD services of the hospital were closed.

A similar trend was observed in the number of surgeries performed, with a decline during the COVID-19 waves. During this period, fewer than 50 surgeries were performed. Another decrease in the number of surgeries was observed in May 2021, during the second wave of the pandemic. However, following the introduction of the cashless schemes, there was a notable increase in the number of surgeries, particularly in May 2022 when the maximum number of surgeries was recorded. Overall, there is an upward trend in the number of surgeries after the empanelment, with a significant increase of approximately 47% in past years.(Figure 5)

The data also reveals that the implementation of cashless schemes led to a significant increase in the number of tests performed across all departments.(Figure 6) Despite a noticeable decrease during the second quarter of 2020, attributed to the first wave of COVID-19, the number of tests rose sharply during the second wave of the pandemic. This surge is likely associated with an increase in positive COVID-19 cases. The most pronounced increment in the total number of tests was observed in December 2022, with a percentage increase of approximately 317% compared to the figures from 2018. Overall, the data indicates a 200% increase in the total number of tests since 2018.

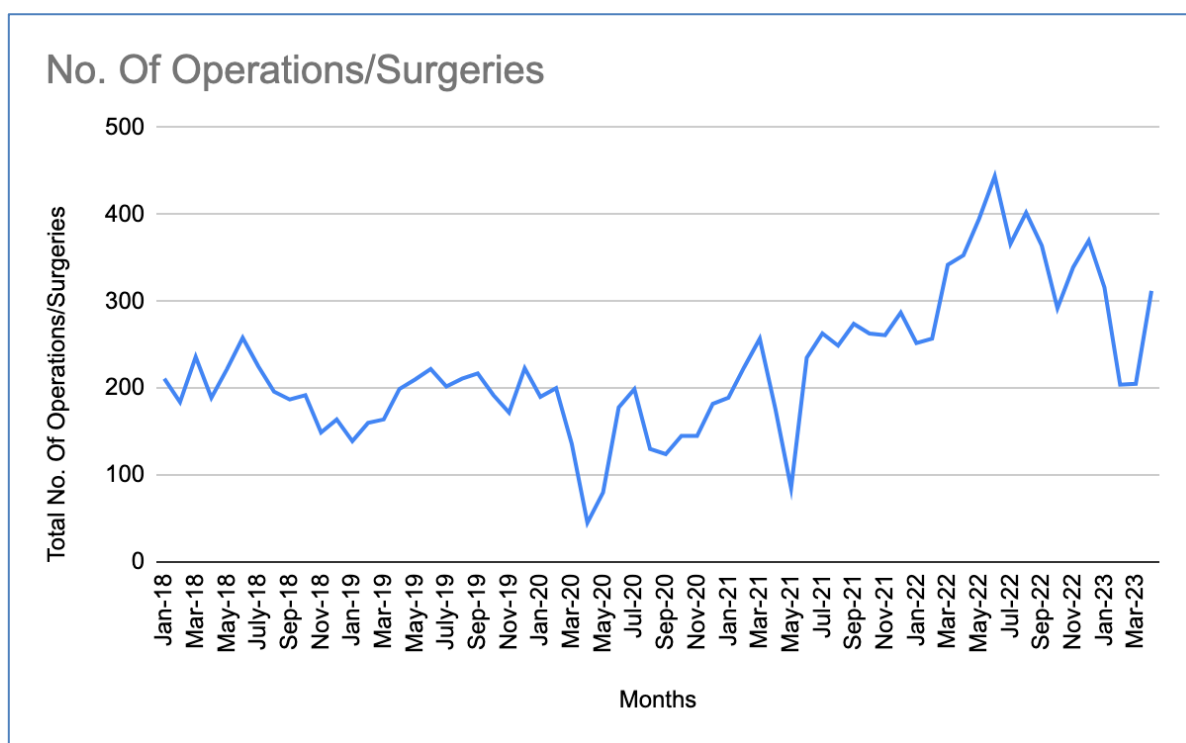


Figure 5 (Shows total number of surgeries performed per month. The data is taken from January 2018 till March 2023 and shown in alternate months)

During the second wave of COVID-19, the Biochemistry and Pathology departments in hospitals noticed a great increase in the number of tests conducted. Biochemistry, accounting for over half of the total tests, encompasses a broad variety of assessments such as liver and renal function tests, blood glucose levels, lipid profile, electrolyte balance, and other tests associated with metabolic or nutritional status, hormonal balance, and drug effectiveness. The broad range of health aspects covered by biochemistry tests contributes to their high demand and the large number of tests conducted in this department.

The Pathology department also witnessed a significant rise in test volumes. Pathology tests, which include Clinical Pathology, Haematology, Histopathology, Cytology, and Serology, are useful in diagnosing various diseases. The second quarter of 2021, marked by the second wave of COVID-19, saw a pronounced increase in Pathology tests, driven by the need for COVID-19 testing and serology tests. These tests helped identify infected individuals, as well as those who developed antibodies post-infection or vaccination, playing a pivotal role in managing the disease at the population level, understanding its spread, and informing containment strategies. (Figure 6)

This analysis shows the vital role that laboratory testing plays in public health surveillance.

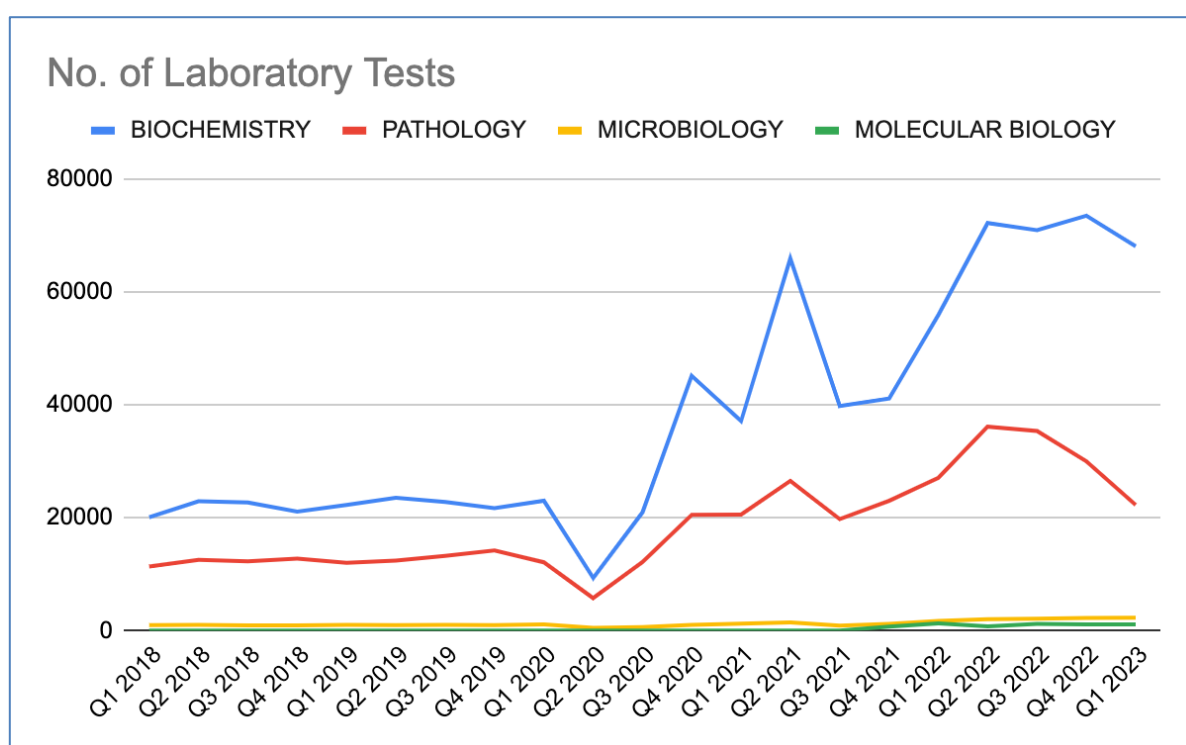


Figure 6 (The graph presents an examination of laboratory tests conducted in different departments. The data in the graph has been grouped into quarterly summaries to provide a clearer understanding of the trends.)

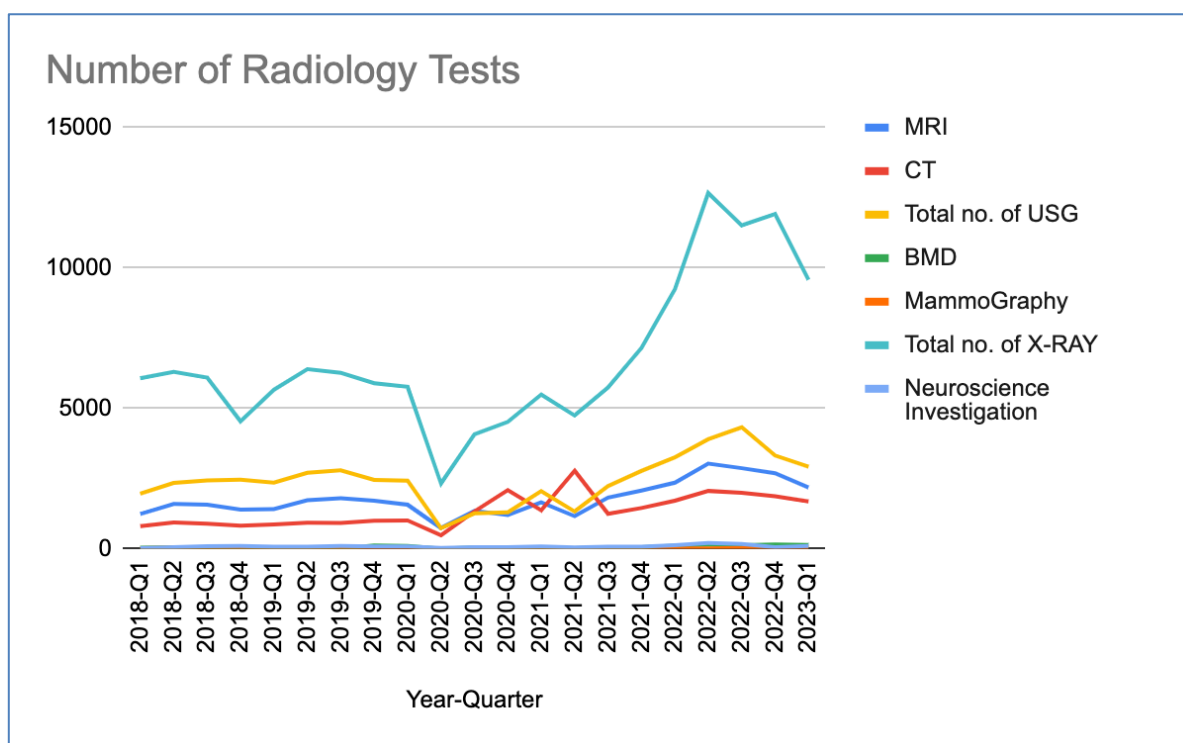


Figure 7 (The graph portrays the number of various types of radiology tests. The data has been consolidated from a monthly to a quarterly format for easier comprehension.)

Analysing the Radiology data, the highest frequency of procedures performed at the hospital is attributed to X-ray tests, which have experienced a notable surge since the implementation of the scheme. During the first quarter of 2022, a pronounced peak was observed in the number of CT scans, MRIs, and X-rays, with the number of CT scans showing a remarkable increase during the COVID-19 pandemic. From 2018 to the first quarter of 2020, the pre-COVID era, the number of tests conducted remained largely stable.(Figure 7) However, there was a significant decrease during the lockdown period. Despite the inclusion in the RGHS scheme, the frequency of Mammography tests and neuroscience investigations remained relatively constant. This steadiness, particularly with neuroscience investigations, may be due to their specialized nature addressing specific and potentially severe medical conditions, which may not significantly fluctuate with policy changes or external circumstances. On the other hand, the frequency of other tests saw a considerable uptick after the transition to cashless payment methods.

As the number of X-rays performed increased, there was a corresponding rise in the usage of X-ray films.(Figure 8) During the first wave of COVID-19, coinciding with national lockdown measures, there was a notable decline in film usage. However, after this period, a

significant rise in the number of films utilized was observed. In the first quarter of 2018, 681 films were used, a number that soared to 3162 films by the first quarter of 2023. This underscored the impact that the introduction of public health schemes can have on enhancing access to vital diagnostic services like X-ray imaging, consequently leading to increased resource utilization.

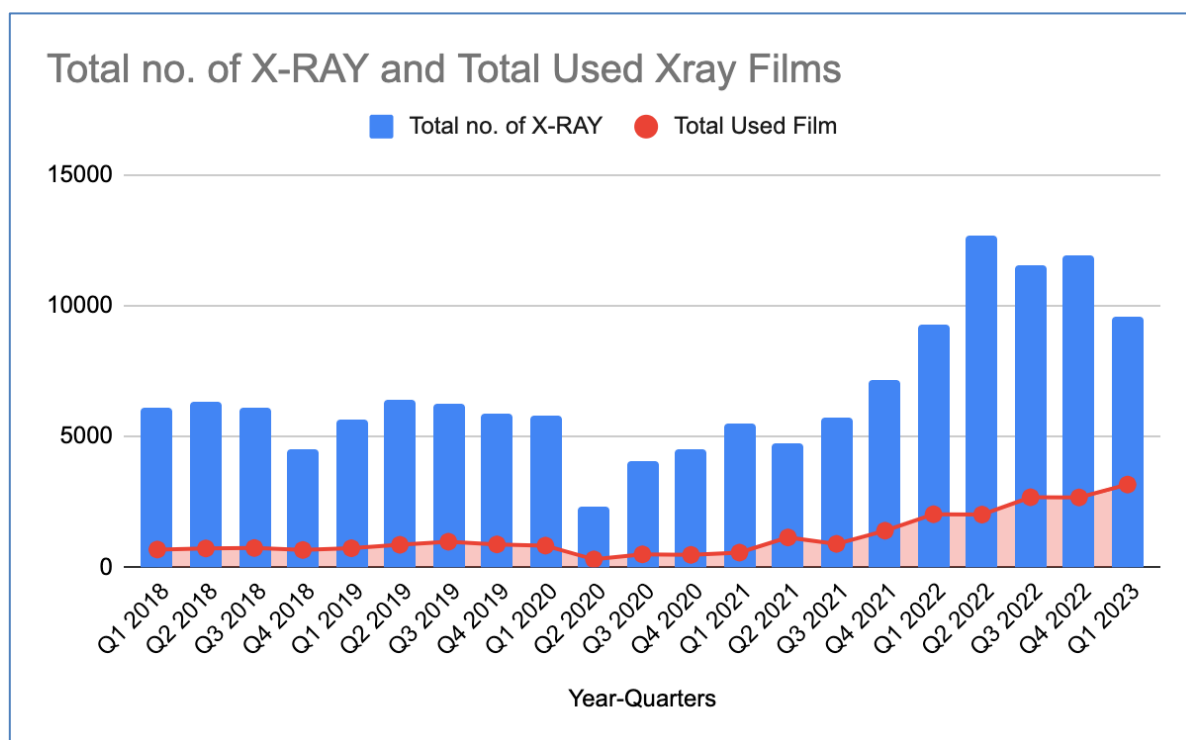


Figure 8 (The figure depicts the correlation between the quantity of X-rays conducted and the consumption of 8*10 X-ray films)

With regard to infrastructure and resources, the research noted a significant increase in electricity consumption and associated costs, peaking in the second and third quarters of 2022.(Figure 9 and Figure 10) Over the duration from 2018 to 2023, there was a significant 103% increase in electricity consumption, indicating a growing demand for electricity within the hospital as the patient footfall increased.

The number of employees increased after the fourth quarter in 2020, following the first wave of COVID-19, and also after the empanelment of the RGHS scheme.(Figure 11) As the patient footfall increased, so did the healthcare resource utilization and manpower. The number of doctors working at the hospital remained almost constant over the years, unaffected by these changes.

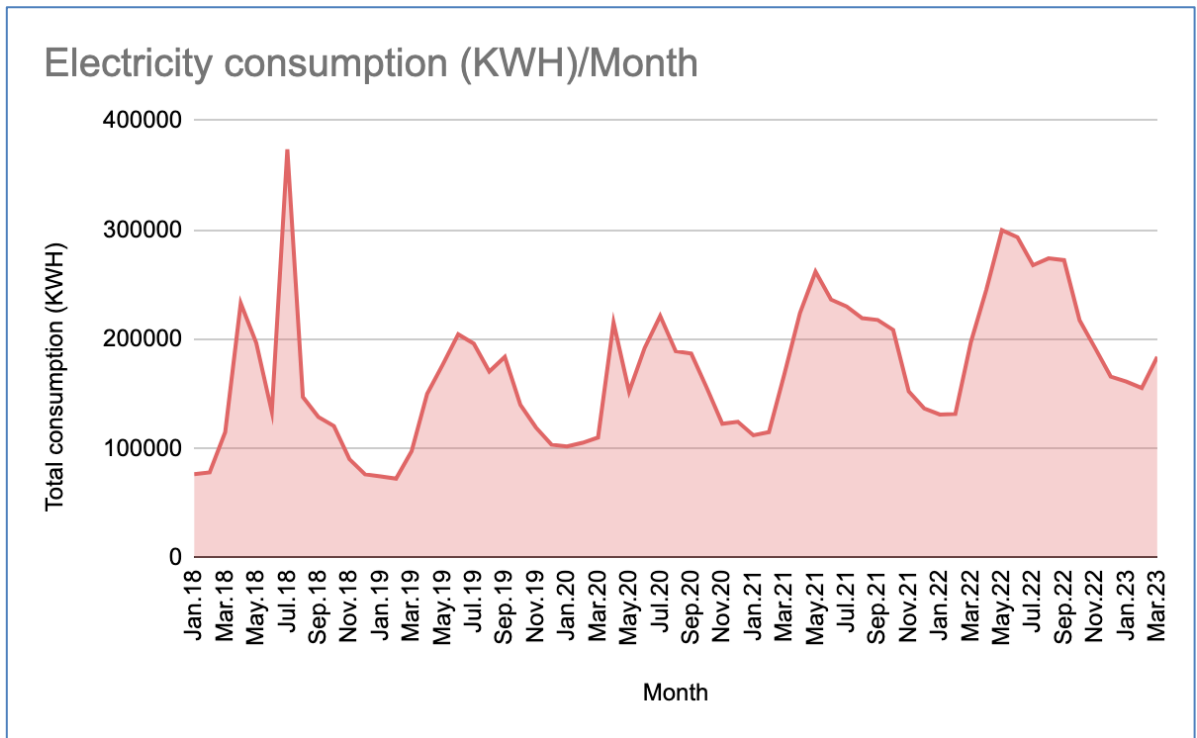


Figure 9 (Electricity consumption every month in Kilowatt Hour from January 2018 till March 2023)

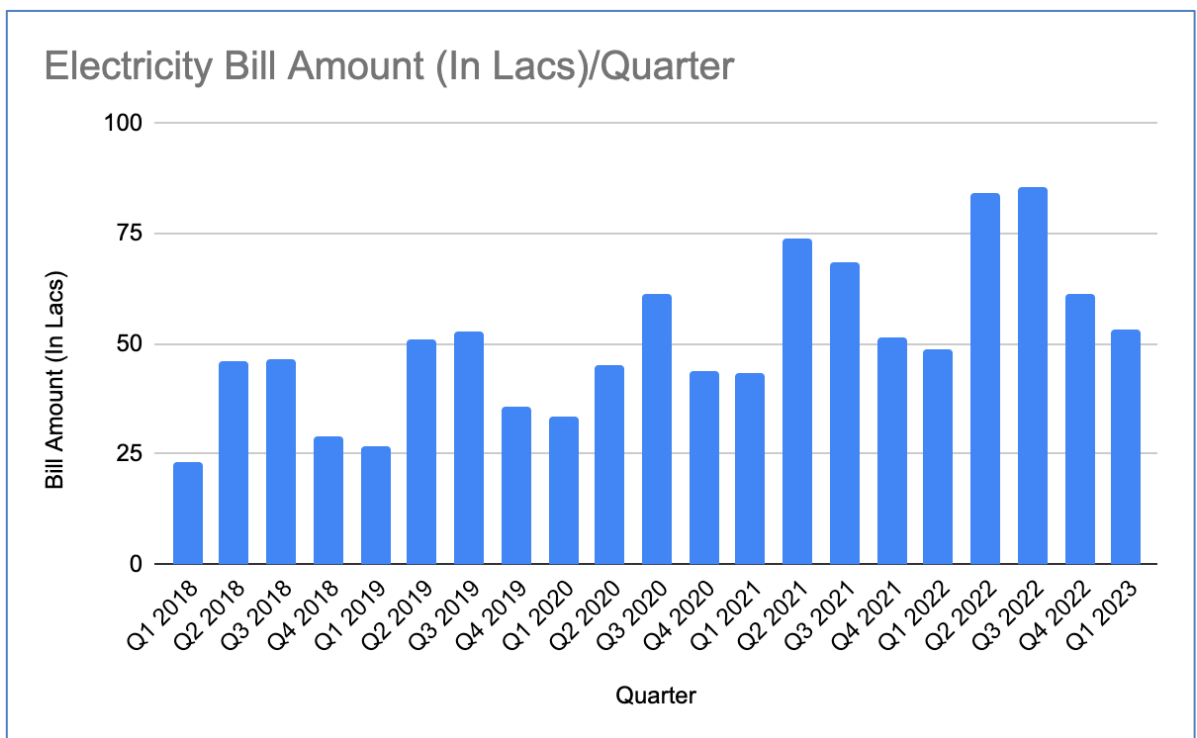


Figure 10 (This shows the electricity bill amount in Lakhs for every quarter since 2018 till the first quarter of 2023)

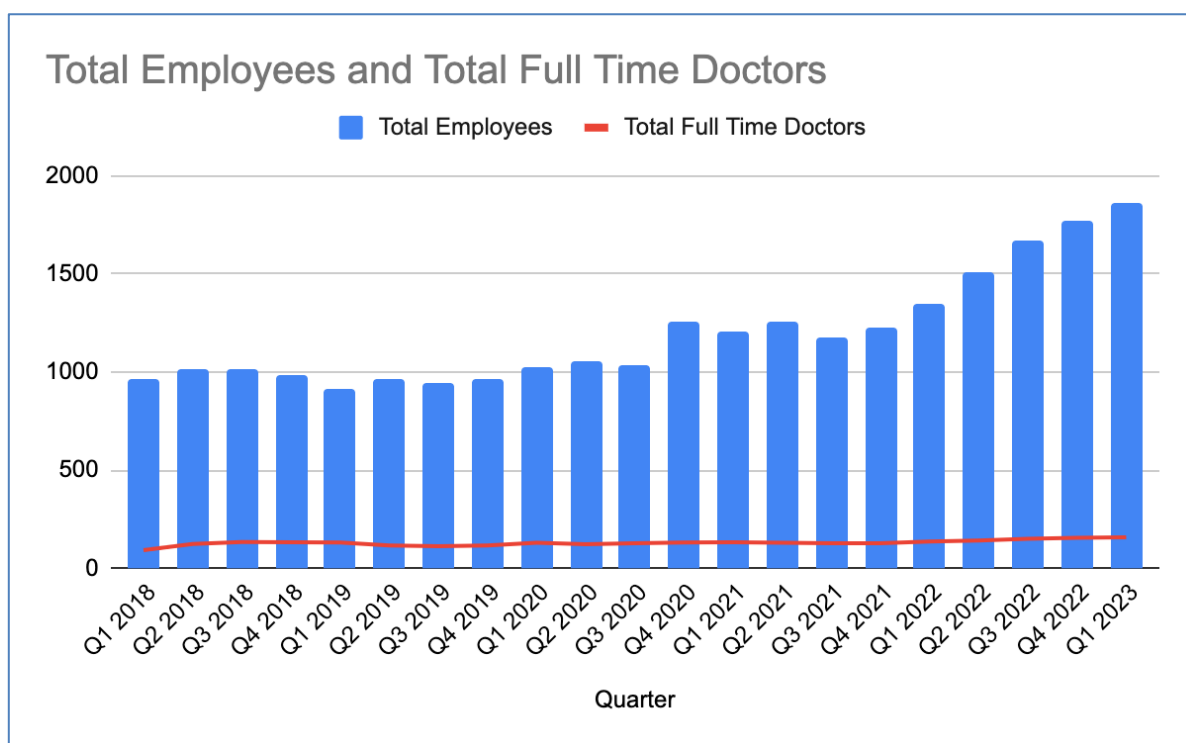


Figure 11 (This shows the number of Employees and number of Doctors working at the hospital. The data is consolidated from a monthly to a quarterly format for easier comprehension.)

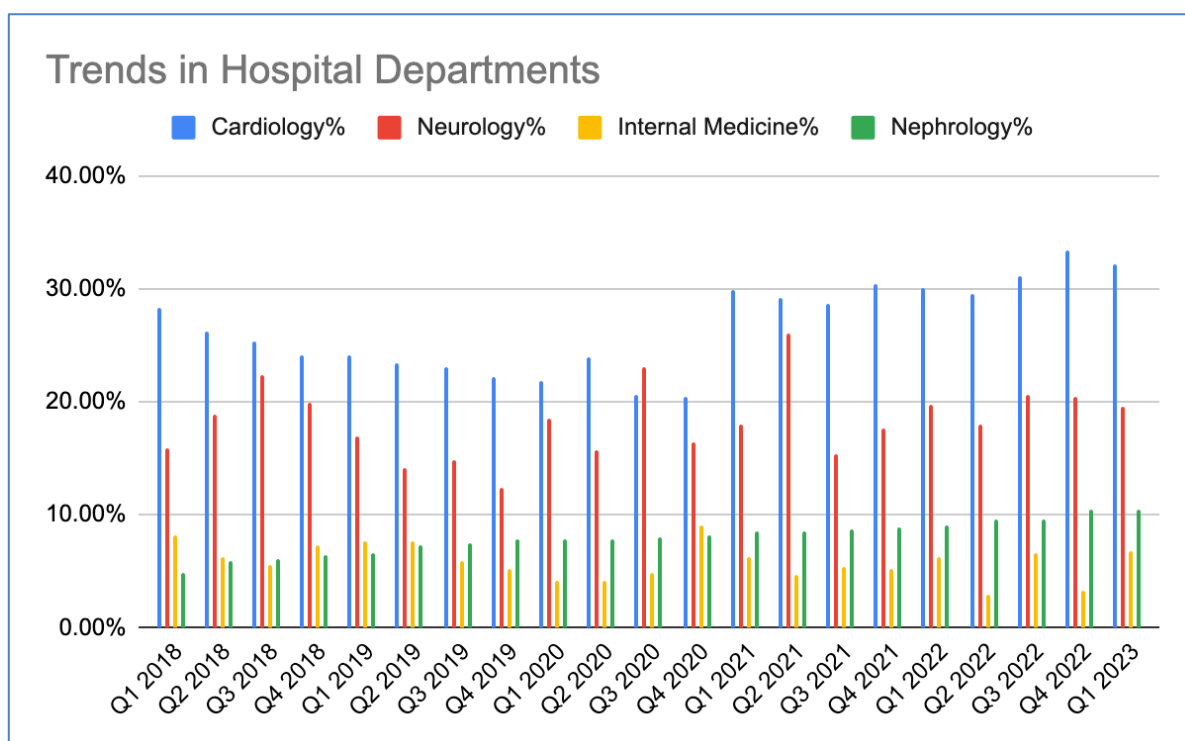


Figure 12 (The graph shows changing trends in the Cardiology, Neurology, Internal Medicine and Nephrology Departments of the hospital in Percentages. The data is taken from 2018 to 2023)

It was worth noting that the increase in financial benefits varied across different departments.(Figure 12) The Cardiology department saw the maximum increase, followed by the Neurology department. The rise might have been due to the high prevalence of cardiac diseases in the population and neurological disorders tend to be complex and chronic, requiring long-term management. These conditions often require regular check-ups, medication, and in some cases, surgical intervention - all of which are covered by the health schemes.

The Nephrology and Internal Medicine departments also saw noticeable increases as both specialties often act as primary care providers, managing chronic conditions like hypertension, diabetes, and kidney diseases, which are quite prevalent.

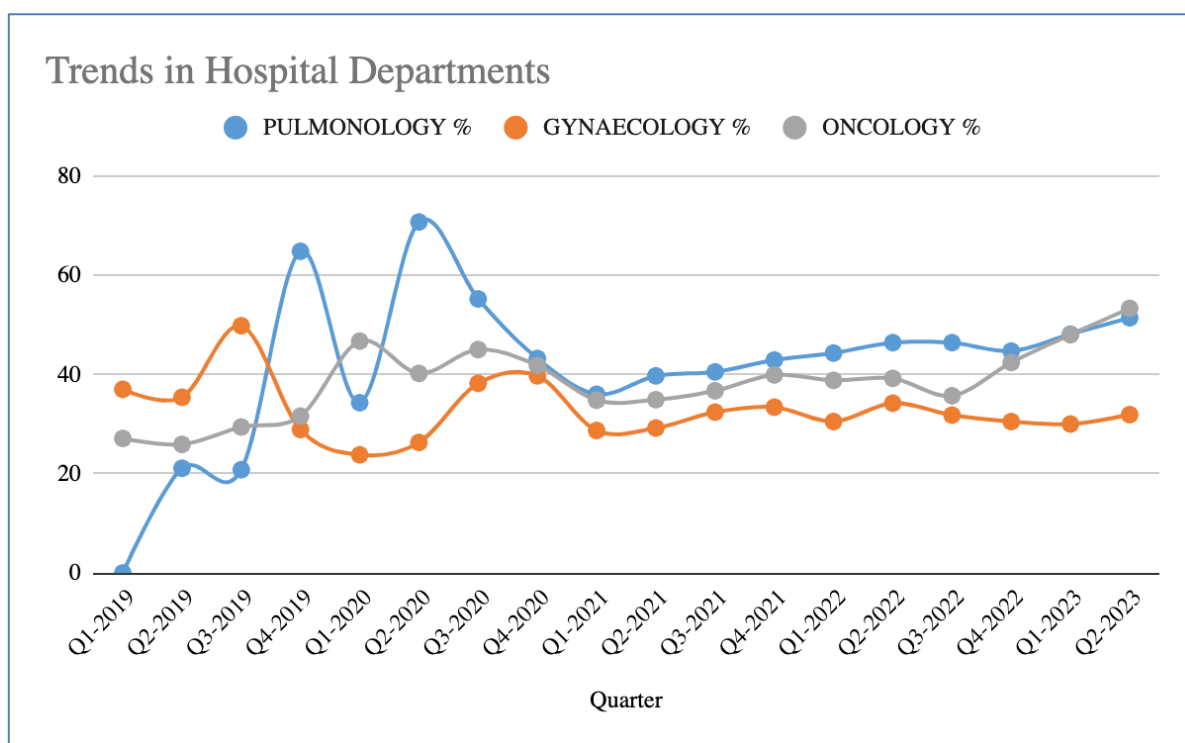


Figure 13 (The graph shows changing trends in the Pulmonology, Gynaecology, and Oncology Departments of the hospital in percentages. The data is taken from 2019 to 2023)

The department of Pulmonology saw a rise in patients during the last quarter of 2019 and the second quarter of 2020 during the first wave of covid-19. Pulmonology saw more cases during COVID due to the virus primarily affecting the respiratory system, causing pneumonia, ARDS, exacerbating pre-existing conditions, and requiring respiratory care and follow-up. The Oncology department also saw an influx of patients after the empanelment. Cancer treatments, such as chemotherapy, radiotherapy, and surgeries, are costly procedures, often limiting patient access. The inclusion of these services under the government schemes made them more affordable. However, there was no effect seen in departments like gynaecology, maybe due to lack of awareness among the population about the importance of gynaecological care during pregnancy and limited outreach.

In summary, the introduction of government health schemes - RGHS and Mukhyamantri Chiranjeevi Yojana led to significant changes in hospital operations. A noticeable shift from cash to credit payment was observed, accompanied by an increase in patient admissions, medical procedures, and laboratory and radiology tests, thus elevating healthcare resource utilization. Financially empowered patients accessed medical care more freely, resulting in a

surge in service utilization. This led to a rise in claim submissions, and subsequent reimbursements by governing bodies boosted hospital revenue. However, these trends were also influenced by external factors, such as the COVID-19 pandemic and healthcare professionals' strikes, highlighting the complex interaction of policy initiatives and global health events in shaping healthcare delivery.

CHAPTER – 5

DISCUSSION

The worldwide health crisis induced by the COVID-19 pandemic placed a significant burden on individuals, particularly those in developing countries like India, who often rely on out-of-pocket expenses for medical costs. Discussing the financial impact of the pandemic on private hospitals in India, revealed that these institutions navigated substantial economic loss due to considerable reduction in operational activities. This health system proved to be unsatisfactory for both – People looking to avail healthcare services and Private hospitals. The access to proper healthcare services, is closely tied to people's financial capacity. Therefore, many families and households in country and round the world faced the risk of great expenditure due to COVID-19 hospitalizations. Following the anxiety and fear related to potential exposure to the virus, patients experienced a considerable psychological impact and combined with their disturbed regular health routine, they further worsened their physical health.

Due to the problems faced by patients and in response to the worsening situation during the pandemic, the Government of Rajasthan introduced the Rajasthan Government Health Scheme (RGHS) and the Chiranjeevi Swasthya Bima Yojana later in 2021. The main objective of the schemes was to protect households from economic burdens due to high cost of healthcare service. The study aimed to explore the impacts of these schemes on patient influx, resource utilization and hospital performance within a private hospital. The results highlighted that these government health schemes drastically brought a change in how patients pay for their medical services. A noticeable shift from cash payments to cashless credit transactions (covered under schemes) was seen, indicating a change in patient behaviour and their preferred mode of payment.

There was an increase in the number of patients visiting the hospital in both OPD and IPD. This increase in patient footfall, from 2018 to 2023, mainly after 2021 post introduction of RGHS and Chiranjeevi also contributed to an increased revenue stream for the hospital. The analysis of graphs further revealed an increase in resource utilization such as pharmacy

services, by a remarkable 275% increase in OPD pharmacy purchases and a 77% rise in IPD purchases. The pharmacy purchases accounted for the maximum part of the revenue generated by the hospital.

Simultaneously, the study also noticed an increase in the use of other services such as dialysis and laboratory and radiology diagnostics. For instance, dialysis services saw a remarkable 228.8% increase in patient numbers. Surgical procedures experienced a 47% rise, and Pathology and Biochemistry tests saw a dramatic 153% increase, demonstrating the substantial impact of these health schemes on patient access to critical services. Another noticeable finding was the effects across different clinical departments of the hospital. They can be primarily attributed to the nature of diseases they manage and the cost of treatments. Cardiology and Neurology, dealing with prevalent and often chronic conditions, saw a significant rise in the number of patients. Internal Medicine and Nephrology departments also experienced growth, reflecting their role in managing ubiquitous conditions like diabetes and hypertension. During the COVID-19, Pulmonology saw an increased number of patients due to the respiratory impact of the virus. Oncology witnessed more patients as expensive treatments like chemotherapy and surgeries were covered under the government schemes, suggesting that the health schemes improved healthcare accessibility for patients.

However, the increase in number of patients also came with several challenges. While the health schemes led to increased patient admissions and resource utilization, it's essential to investigate their impact on the quality of care provided. An increase in patient volume, if not properly managed, might lead to strain on healthcare resources, which could potentially compromise the quality of care. There was significant impact on the hospital's resources, for example there was a significant increase in electricity consumption, hence, the electricity bill amount increased. From the year 2018 to 2023, electricity consumption escalated by 103%, reflecting increase in utilisation of resources and simultaneously, highlighting the need for efficient resource management and sustainable infrastructure development in hospitals to manage such increases in patient volume and healthcare service utilization.

Further research is needed on the impact of these government health schemes on treatment quality, patient waiting times, and overall patient satisfaction is required for a comprehensive understanding of their effects on delivery of healthcare. As the number of patients enrolled

under the scheme increased, more RGHS registration counters were needed to avoid long queues at registration counters. Additionally, lengthy queues were also observed at the OPD pharmacy, and for radiological and pathological investigations. The impact of this on patient waiting times and hospital stay durations demands for further investigation, as it may have direct implications for patient satisfaction and the quality of care provided.

This rise in patient influx also increased the requirement of the extended hospital workforce, mostly after Covid 19 and implementation of the Rajasthan public health schemes. While the increase in healthcare service utilization has its advantages in patient admissions, it also brings some operational challenges to healthcare providers. These challenges should be carefully managed. Considering the study, it is seen that these health schemes have undoubtedly enhanced patient access and resource utilization. However, their effects on the quality of care require further investigation and examination. These findings need a more balanced approach - one that increases healthcare access to patients while efficiently managing the heightened demand for resources.

LIMITATIONS OF THE STUDY

- **Limited Sample:** The research was conducted in a single private hospital, which might not fully represent the experiences of all healthcare institutions in Rajasthan or India.
- **Confidentiality Concerns:** Data on resource utilization were limited due to concerns related to confidentiality. Therefore, the study might not have captured the complete picture of resource usage.
- **Unexplored Areas:** The study primarily focused on financial performance and resource utilization without a thorough examination of quality of care, patient satisfaction, or long-term sustainability of these health schemes.
- **Causality:** While the research has identified correlations (e.g., between scheme implementation and patient influx), it is challenging to firmly establish causality due to potential confounding factors not addressed in this study.

- **Generalizability:** The findings from this study might not be generalizable to other regions or to public hospitals where healthcare delivery and infrastructure can be vastly different.

STRENGTHS OF THE STUDY

- **Foundation for Future Research:** The study lays a strong foundation for future research into the effectiveness of these government schemes and their broader implications on healthcare delivery.
- **Practical Implications:** The findings underscore the need for a more balanced approach in the face of a health crisis - one that enhances healthcare access while efficiently managing heightened demand for resources.
- **Ground-breaking Research:** This research provides critical insights into the impact of the RGHS and Chiranjeevi Scheme on private healthcare institutions in Rajasthan.
- **Patient Behaviour Insight:** The study highlights a significant shift in patient behaviour and payment preferences towards cashless transactions, which is a valuable insight for future healthcare planning and policy-making.
- **Real-world Application:** The research is highly applicable to real-world challenges faced during the pandemic, making it potentially useful to policymakers and healthcare providers.

CHAPTER - 6

CONCLUSION

The findings of this study show the impact of the RGHS and Chiranjeevi scheme significantly on the private hospital's functioning and patient's behaviors and preferences. The major observation was increased patient footfall in the hospital post introduction of these schemes which clearly indicated that people trust and rely more on private hospitals. They don't go for private health care due to high costs. As these schemes offer cashless benefits, there was a significant change in hospital's cash vs credit percentage. Total number of patients paying by cash became 25% in year 2023 decreasing OOP expenditure. The financial coverage provided by the Rajasthan's health schemes, helped to alleviate the economic burden faced by many households as majority of India's population comes from middle class families and cannot afford private healthcare.

This study also concludes that increased patient influx and the substantial rise in overall hospital admissions have positively impacted the hospital's financial performance. There has been a notable increase since the losses incurred during Covid-19, which shows the economic benefits of the scheme for healthcare providers and hospitals.

Beyond financial aspects, the RGHS has played a crucial role in enhancing healthcare accessibility. By mitigating the cost barriers, the scheme has made essential healthcare services more reachable to the broader population of Rajasthan. This is evidenced by the increased use of pharmacy services and the rising number of surgeries and diagnostic procedures. Commonly, people cannot afford a complete health check-up (including all tests) and many pathology tests. The costs of MRI, CT and some other Radiological procedures are also high. Due to cashless benefits, people are now getting themselves checked more often and not avoiding healthcare. Departments such as Cardiology and Neurology saw an increase in patients, reflecting the common nature of the conditions they treat and their coverage under the schemes. On the other hand, departments treating less common diseases or those not covered under the schemes did not see a corresponding increase in patient numbers. This underlines the schemes' role in shaping patient access and departmental activity in the hospital.

However, along with the benefits, the RGHS and Chiranjeevi scheme have brought up certain challenges. The surge in patient footfall has led to a greater demand for available healthcare services, which places operational stress on the hospital. There is an increased need for improved patient management strategies and more infrastructure capacity, for example waiting area, parking, registration counters, bed availability and more. The larger infrastructure needs a larger workforce which leads to increase in operational costs. Furthermore, there has been an increase in healthcare services utilization more than requisite. The availability of cost-covered diagnostics has led to an increase in radiological testing, leading to an increase in radiation exposure among patients. Similarly, medication consumption has also seen a rise. With removed cost barriers, people might acquire more medications than typically needed. These findings throw a light on the need for further research on the proper utilization of healthcare services and the implications of overutilization due to cost coverage by government-sponsored health schemes.

Due to these challenges, it is advised that the private hospitals concentrate on creating and putting into practice plans that will improve their operational effectiveness and service delivery. For instance, spending money on digital health technologies such as online registration, EMR (electronic medical records) and more could improve patient management and streamline processes. Hospitals should also think about ways to improve their infrastructure, such as by spending money on new facilities or renovating older ones. There is room for more investigation into how the RGHS and Chiranjeevi Schemes affect many facets of patient care.

To ensure the sustainability of the positive effects of these government schemes and to make any required improvements, policymakers should strive to understand these dynamics. In conclusion, Rajasthan's healthcare system has significantly advanced with the implementation of the RGHS and Chiranjeevi Scheme. The programme has benefited patients and healthcare providers by providing financial security and expanding access to healthcare services. The introduction of schemes had a significant impact on profitability and facility utilization of private hospitals.

CHAPTER – 7

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