

AIM- TO STUDY THE WORKLOAD OF THE ELECTRICITY SUPPLY IN TERTIARY CARE HOSPITAL.

HISTORY AND DESCRIPTION OF ORGANISATION

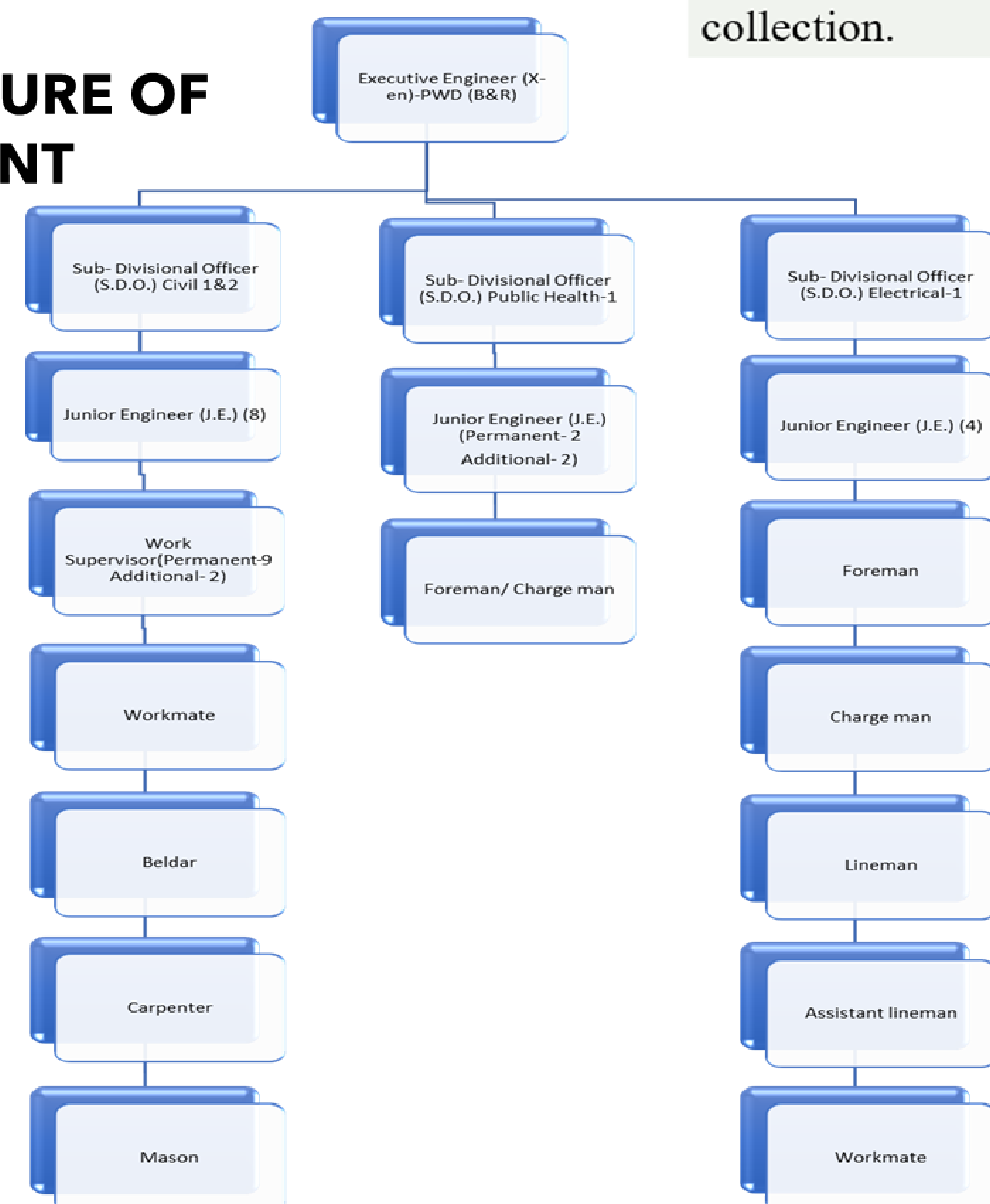
Pandit Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences (PGIMS Rohtak) is a government medical institution in Rohtak, Haryana, India. Established in 1960 as Medical College, Rohtak, it initially operated in collaboration with Government Medical College, Patiala. In 1963, the institute shifted to Rohtak and has since expanded into a comprehensive center for medical education and research. Incorporated into Pandit Bhagwat Dayal Sharma University of Health Sciences in 2008, PGIMS Rohtak now occupies a 350-acre campus and is renowned for its medical education and healthcare facilities both nationally and internationally.

ORGANISATION'S MISSION AND VISION

VISION- To be a premier healthcare institution known for excellence in medical education, research, and patient care, producing competent and compassionate professionals.

MISSION- The mission of PGIMS Rohtak is to provide top-notch medical education, deliver excellent healthcare services, promote medical research, engage in community health initiatives, and collaborate with other institutions for the benefit of society.

ORGANISATION STRUCTURE OF ELECTRICITY DEPARTMENT IN PGIMS, ROHTAK



OBJECTIVE

1. To study the existing workload per bed, infrastructure, and electrical complaints of Pt. B.D. Sharma PGIMS, Rohtak.
2. To study the electricity bills (per month amount) paid by PGIMS/UHS, Rohtak from January 2023 to April 2024.

METHODOLOGY

Dividing the electricity consumption to number of patients admitted to PGIMS Rohtak each month from January 2023 to April 2024 and then dividing them with days of each month to calculate average consumption price per bed per day.

Theoretical	Practical
Gives conceptual framework	Need based changes in research
Gives theoretical framework of data collection.	Difficulty in collecting data from 3 separate electrical departments.

CHALLENGES FACED-

- Data Fragmentation
- Lack of inter department transparency.
- Limited participation of staff.

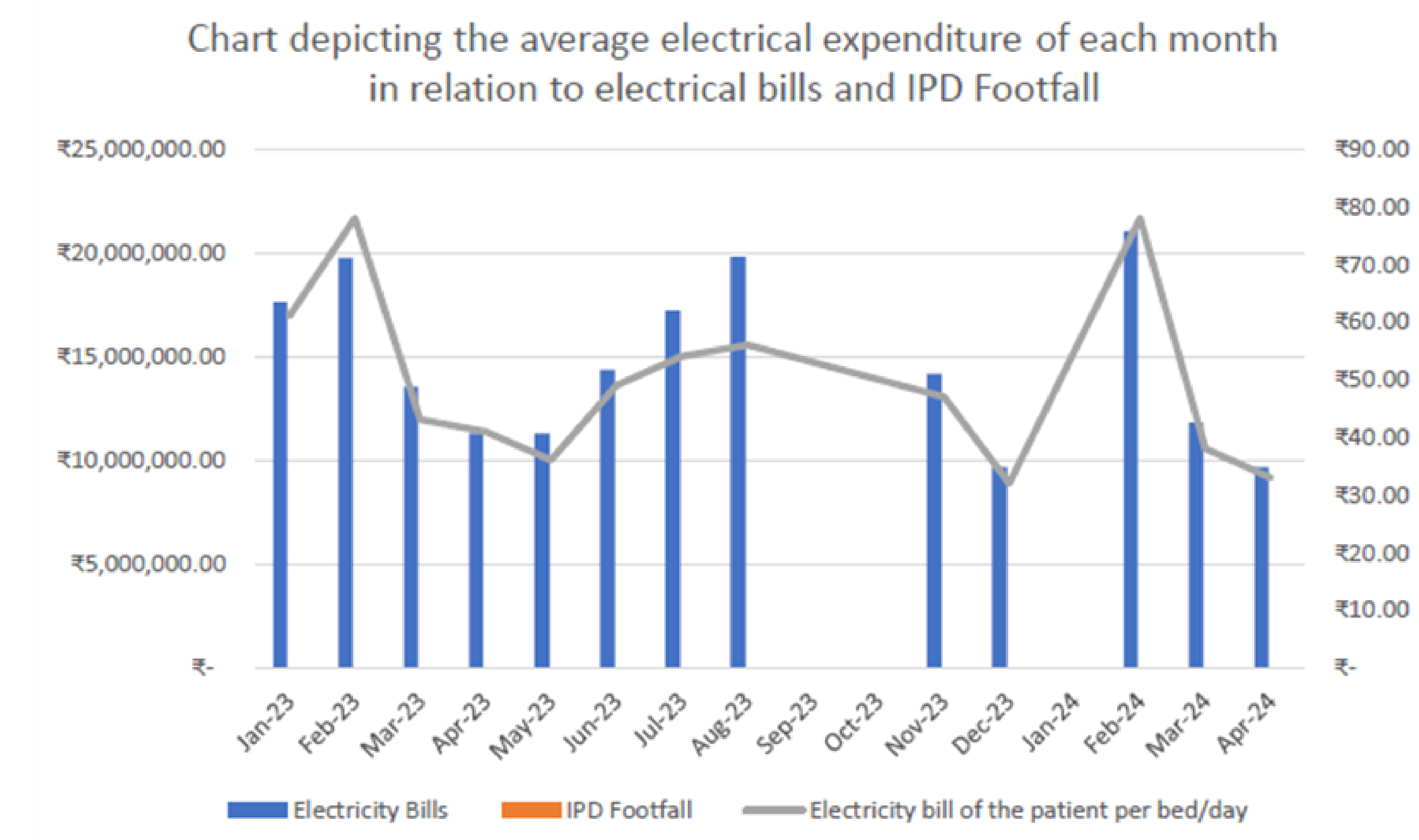
LEARNINGS-

- Realizing the critical role of reliable electricity in healthcare settings.
- Learning about various energy-saving measures
- Value of Continuous Improvement

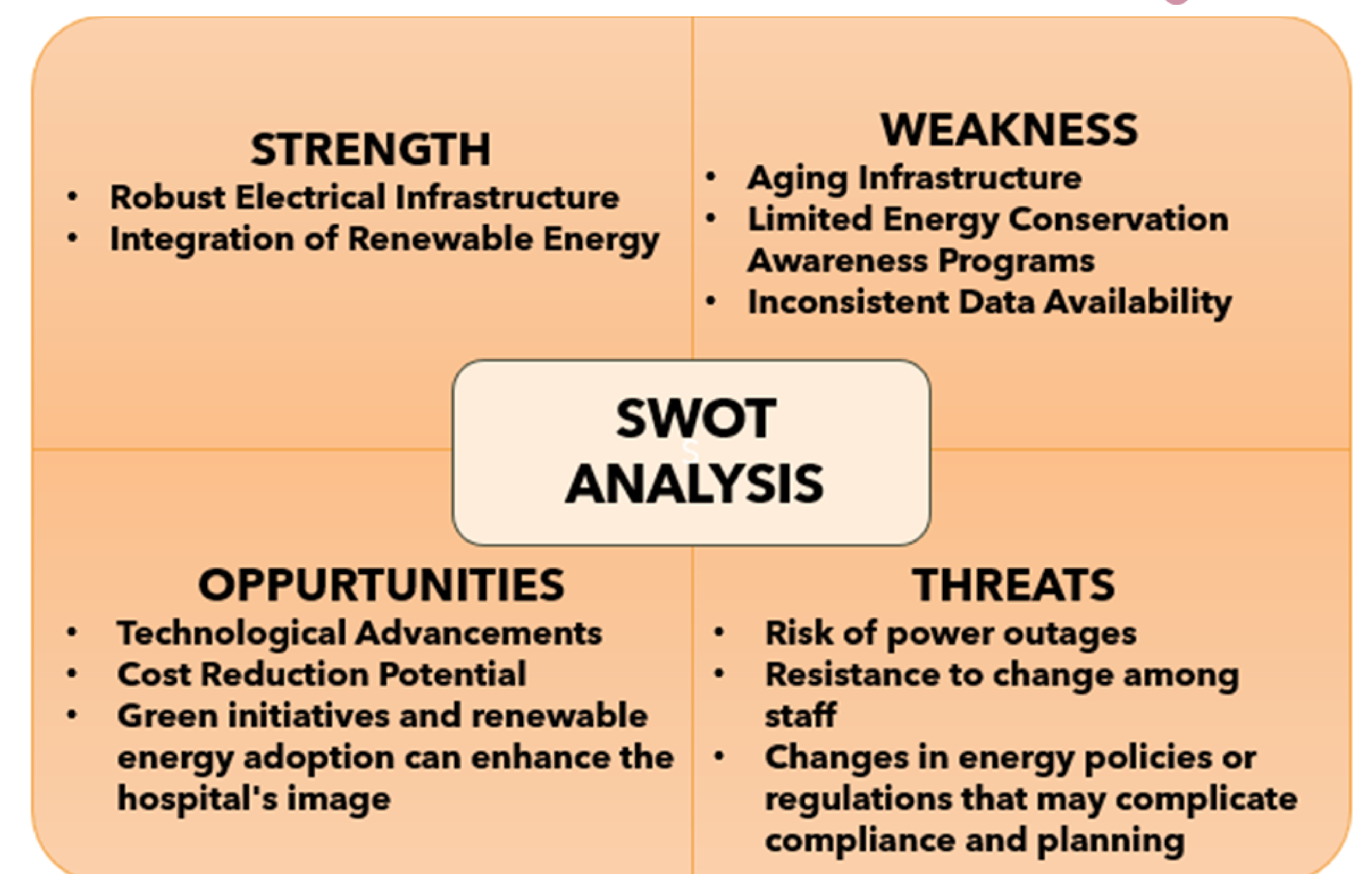
USEFULNESS-

- Learned about the ground realities.
- Got real world experience of conducting research.

ANALYSIS-



CONCLUSION- Electricity costs ₹49.69 per patient per bed/day on an average that varies due to seasons, hospital efficiency, and external factors.



RECCOMENDATIONS-

- Use tiles with high Solar Reflective Index to lower energy
- Use Motion Sensors for Lighting and Fans
- Implement Photo Sensors for External Lighting
- Install Automatic Closing Doors
- Green roofs and walls
- Reducing Phantom Load by Smart power strips
- Machine learning (ML) techniques of historical weather and energy use.
- Installing the capacitors with an improvement in power factor
- Regular Audits