ASSESSMENT OF ANTIMICROBIAL DRUG PRESCRIBING AND USAGE PATTERN AMONG UTI

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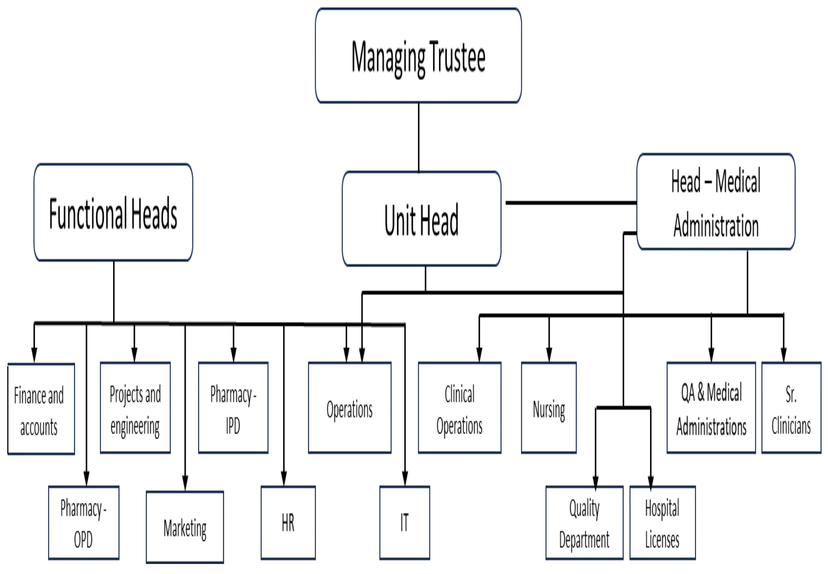
HISTORY: Eternal Hospital, a unit of eternal heart care center and research institute (EHCC) , is a tertiary care facility located in Sanganer, Jaipur founded by renowned interventional cardiologist Dr. Samin K. Sharma, EHCC began in 2013, with its Sanganer branch launching in October 2019, it is the only hospital in Rajasthan accredited by both JCI and NABH.

VISION: To provide high quality care and to touch the lives of the people through excellence in clinical care at an affordable cost.

MISSION: To provide compassionate, accessible, high quality, patient centered, cost effective healthcare to one and all through best-in-class medical practice, technology and to work continuously to improve & sustain clinical outcomes, patient safety and satisfaction.

ORGANIZATION STRUCTURE



SWOT ANALYSIS

Strength:
- Special Expertise
- Reputation
- Cost Advantage
- Technology Advantage

Weakness:
- Limited Staff
- Weak inter-departmental communication.
- Marketing deficiencies

Opportunity:
- New Government Health schemes and affiliation with government institution.
- New technological advancement.

Threats:
- Insurance plan changes.
- Changes in government health schemes.
- Economic Slowdown.

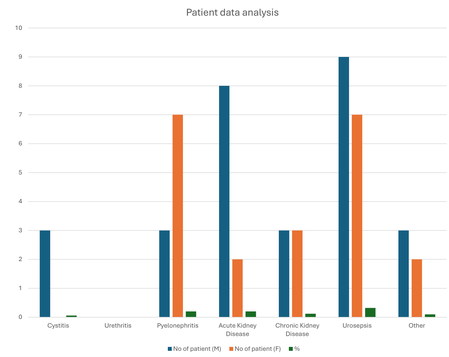
OBJECTIVE AND METHODOLOGY

Objectives: To comprehensively evaluate the diagnosis, Prescribing pattern, Antimicrobial resistance and treatment strategies of urinary tract infection (UTIs), Including their association with hospital stay duration and adherence to WHO AWaRe antibiotic classification.

Methodology:
- Observational, prospective study over 3 month (May – July)
- Sample size:- 50 patients diagnosis with UTI.
- Data collected from patient files using a structured checklist

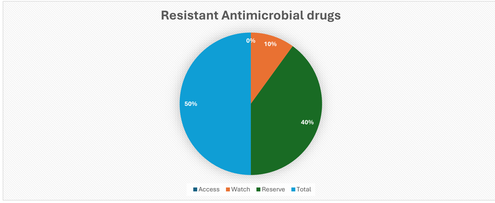
DATA ANALYSIS AND INTERPRETATION

Diagnosis	No of patient (M)	No of patient (F)	%
Cystitis	3	0	6%
Urethritis	0	0	0%
Pyelonephritis	3	7	20%
Acute Kidney Disease	8	2	20%
Chronic Kidney Disease	3	3	12%
Urosepsis	9	7	32%
Other	3	2	10%



Conclusion: The most common diagnosis among the patients was Urosepsis (32%), followed by Pyelonephritis and Acute Kidney Disease (20% each)

WHO AWaRe drugs	Resistant Antimicrobial drugs	Resistant drug frequency	%
Access	0	0	0%
Watch	1	38	60.3%
Reserve	4	25	39.6%
Total	5	63	



Conclusion: The highest antimicrobial resistance was observed in the Watch group drugs (60.3)

PRACTICAL AND THEORETICAL EXPOSURE

Gained knowledge on WHO AWaRe classification (Access, Watch, Reserve) theory at IIHMR ; Practically evaluated patient files to categorize prescribed antibiotics into Access, Watch and Reserve groups.

RECOMMENDATIONS:
- Promote Access group antibiotic use.
- Implement regular audits and AMR tracking.
- Train staff on NABH and rational prescribing.

CHALLENGES:
- Difficulty in accessing culture reports for some patients due to documentation gaps.
- Coordination with multiple department (ICU, IPD, LAB) required consistent follow-up and communication.

LEARNINGS:
- Gained experience in data collection and analysis from IPD records using a checklist tool.
- Improved knowledge about antimicrobial resistance (AMR) and its clinical implications.
- Became familiar with NABH guideline related to prescription practice and documentation.