



STUDY ON THE USAGE OF ANTIBIOTICS AND THE CURENT COMPLIANCE TO THE RESTRICTED ANTIBIOTIC ≥3 POLICY IN MAX HEALTHCARE, SAKET

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BACKGROUND

- Restriction of certain broad spectrum, high cost, or resistance promoting antimicrobials is a recognized method of antimicrobial stewardship A province wide Restricted Antimicrobials policy exists but has been variably implemented and utilized.
- Resistance to antimicrobial agents is a major public health problem.
- To monitor antimicrobial resistance it is necessary to have regulations for use and misuse of antibiotics in the country, creation of national surveillance system for antibiotic resistance, mechanism of monitoring prescription audits, regulatory provision for monitoring use of antibiotics in human, veterinary & industrial sectors and identification of specific intervention measures for rational use of antibiotics.

OBJECTIVES

- To inform site based administration, prescribers, pharmacists and other allied health workers on the current state of practice surrounding the restricted antimicrobials.
- To analyze the usage of restricted antibiotics and more than 3 antibiotics within Max Hospital Saket from January to April 2015, also to develop a plan in consultation with departments head for minimizing drug abuse.

METHODOLOGY

Type of study : Descriptive cross-sectional

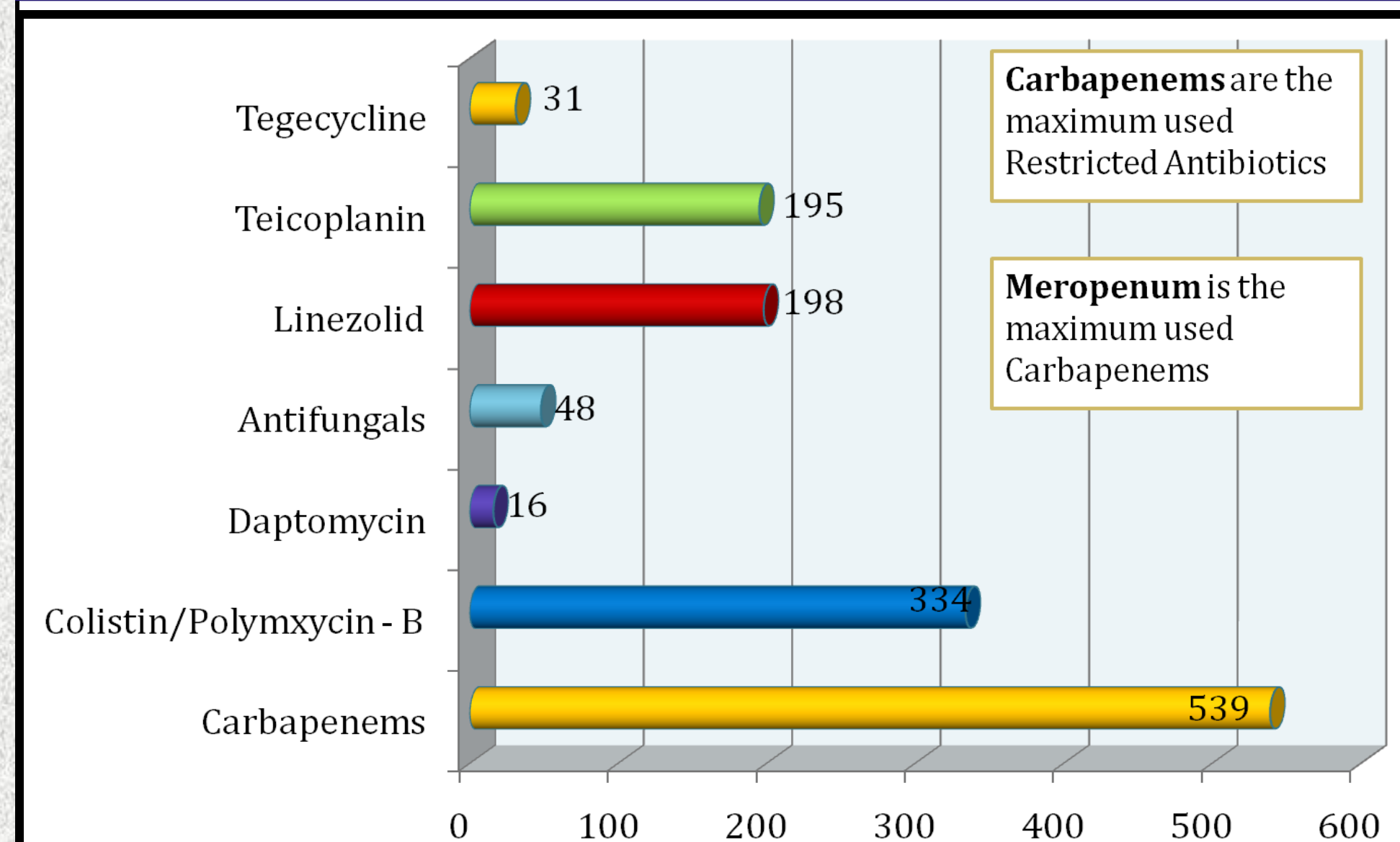
Participants/sample

- The sample in the present study consists of the inpatients in the Max Super Specialty Hospital, Saket.
- The total sample size taken for the study are 11,017 In-Patient records from January-April 2015.

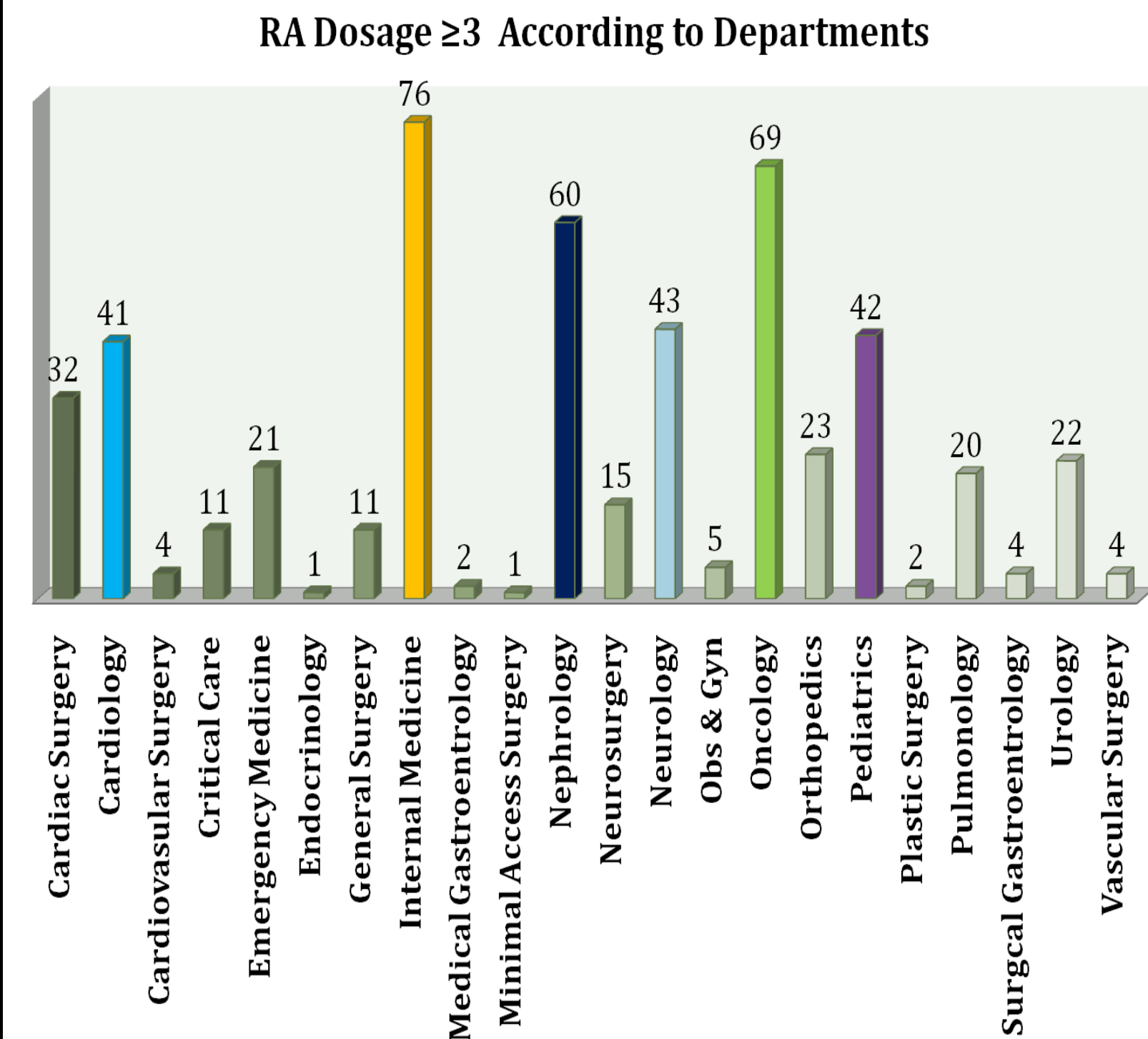
Procedure

- The prospective audit was done as follows
- The data was collected from the indoor patient's records and the antibiotics given were noted from the treatment charts.

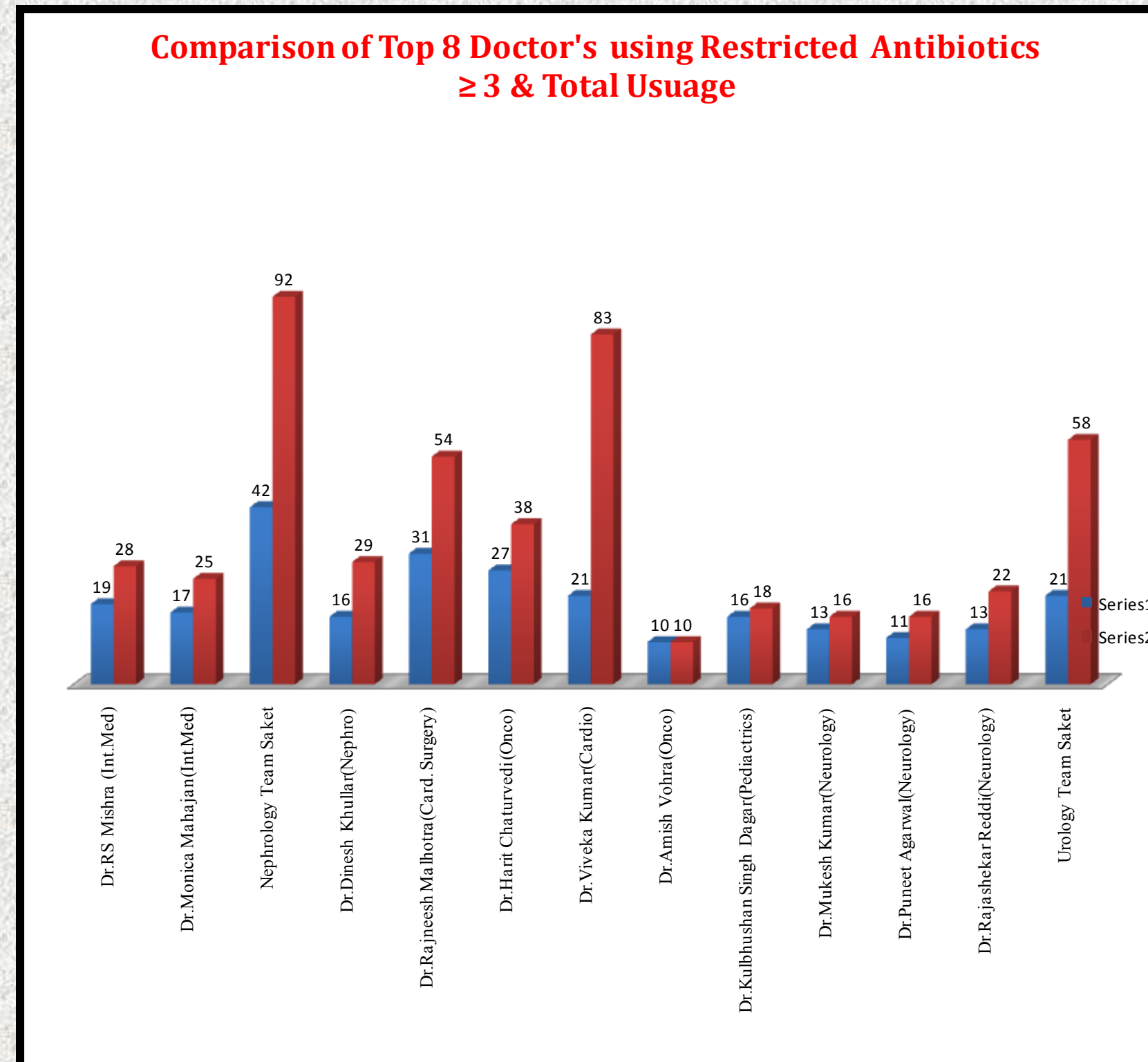
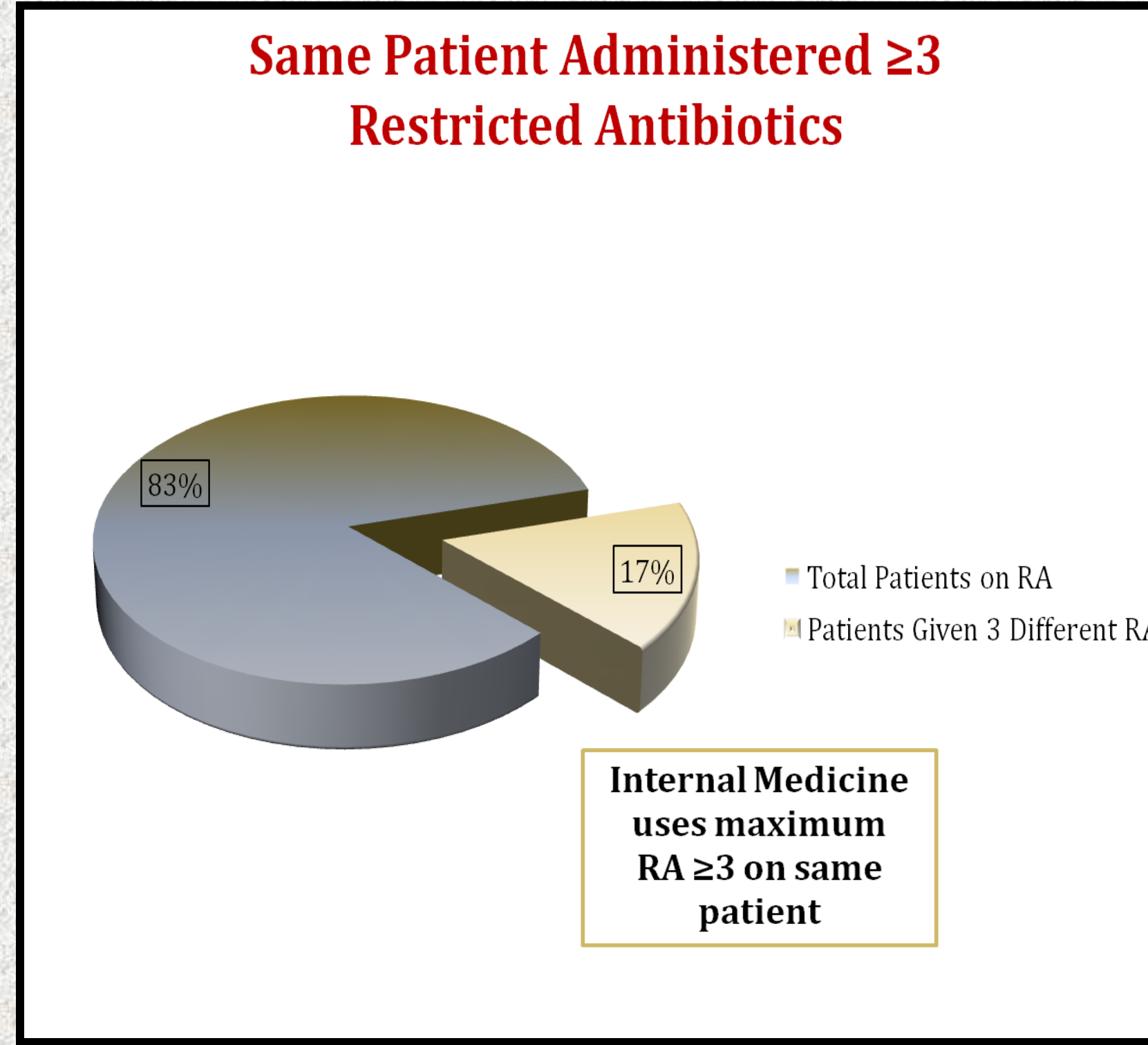
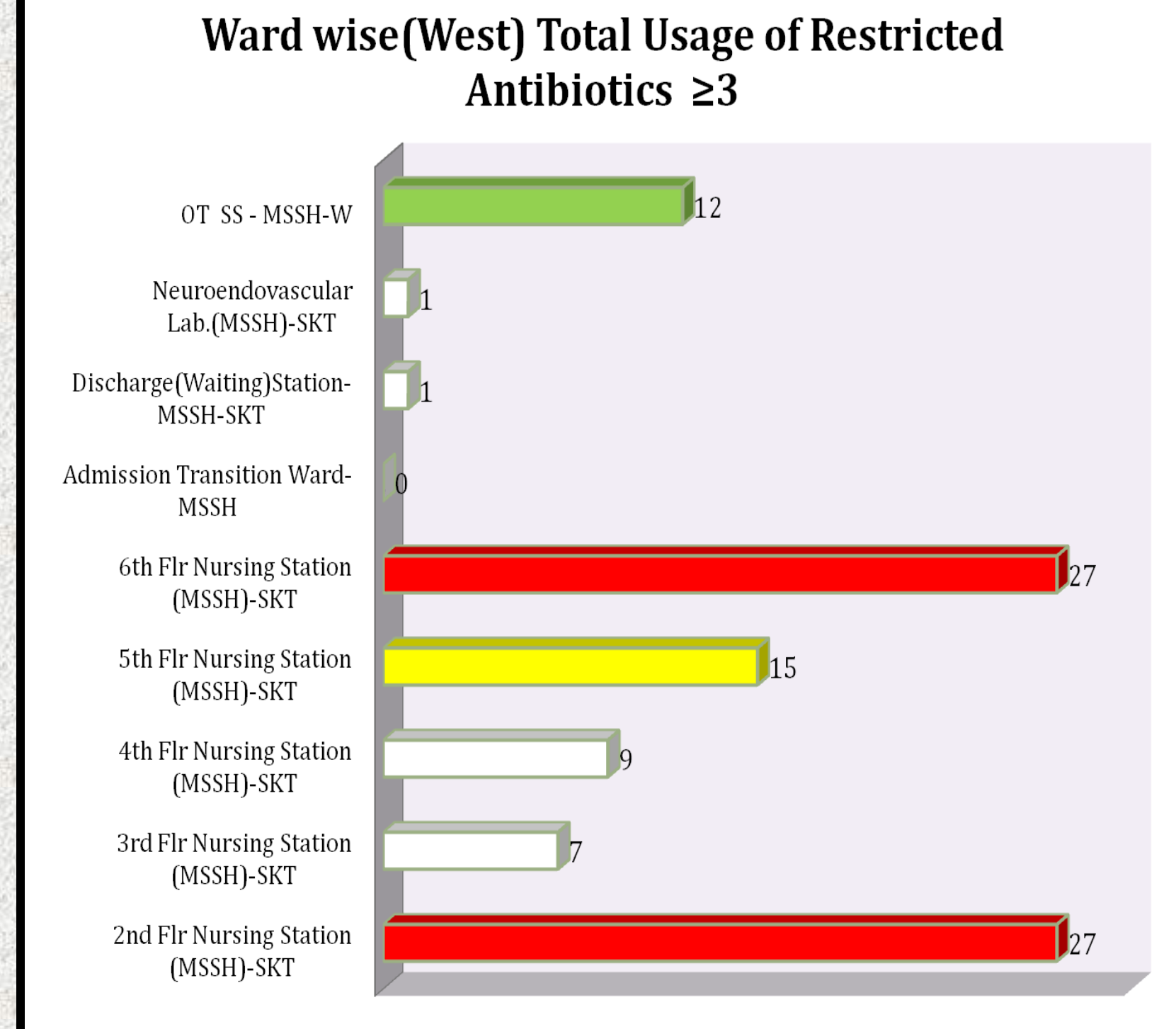
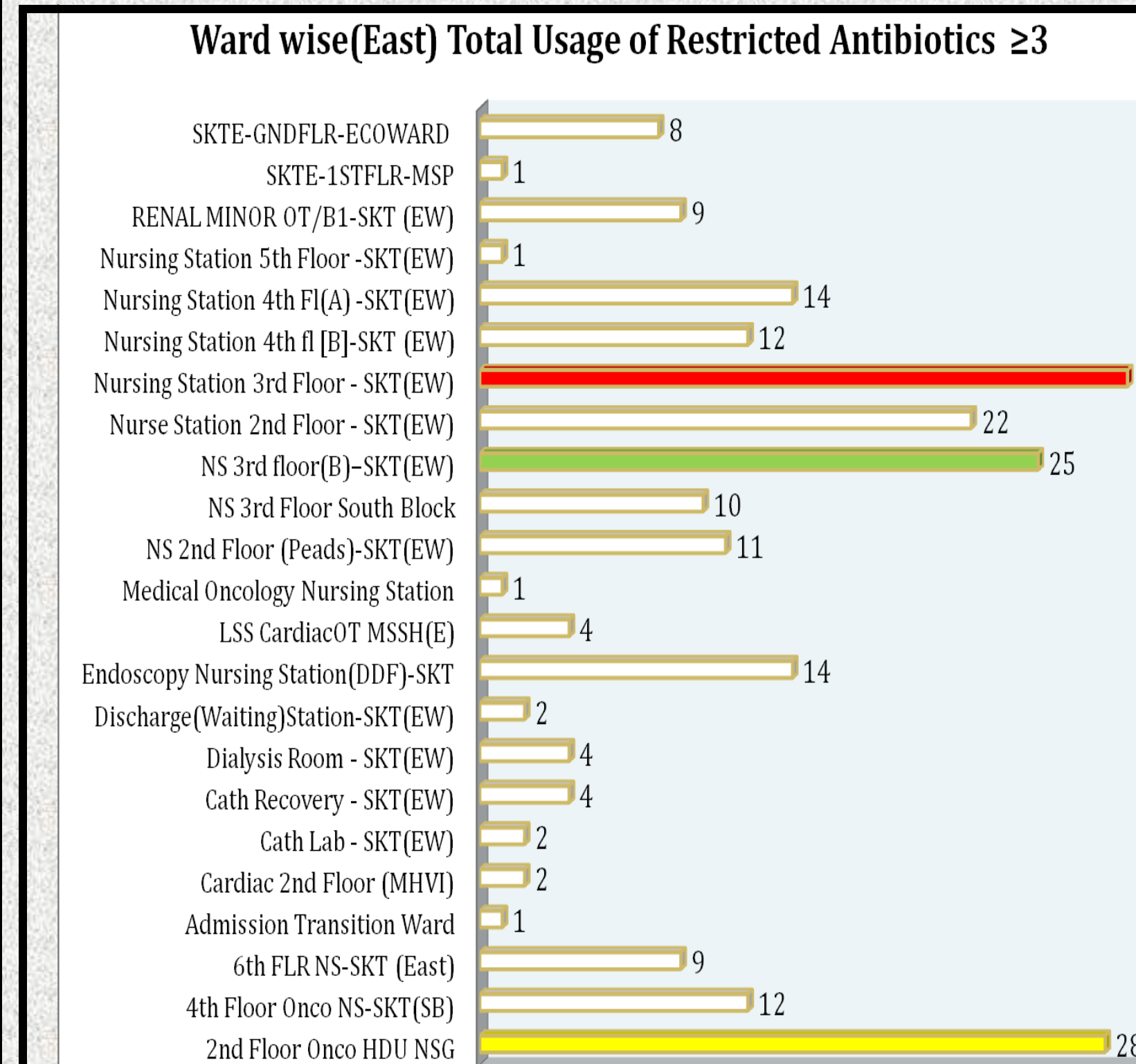
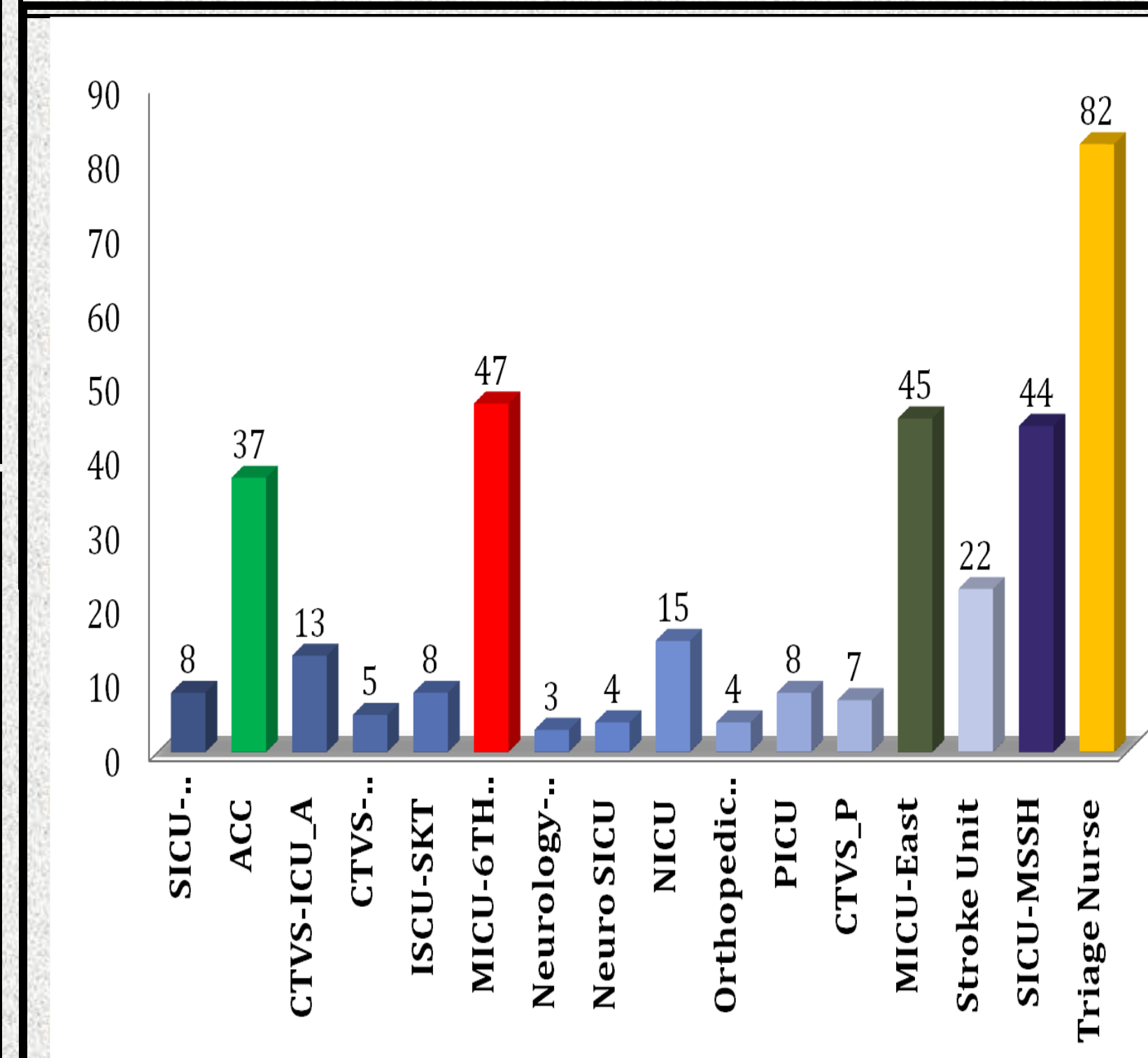
DATA ANALYSIS



Restricted antibiotics Usage ≥3



USAGE ≥3 RESTRICTED ANTIBIOTICS IN AN ICU'S



RESULT & INTERPRETAIONS

- The three maximum administered Restricted antibiotics are:
 - Carbapenems
 - Polymyxin
 - Linezolid
- The three departments administering maximum number of Restricted antibiotics:
 - Internal medicine
 - Oncology
 - Nephrology
- Top 3 Departments administering 3 or more antibiotics on the same patient are :
 - Internal Medicine
 - Oncology
 - Nephrology
- The three ICU's administering maximum number of Restricted antibiotics both normal and ≥3 RA's are:
 - Triage Nurses
 - Medical ICU 6th Floor (West wing)
 - Medical ICU (East wing)
- The doctors from these specialty uses maximum number of restricted antibiotics:
 - Nephrology
 - Internal Medicine
- Out of the total patients i.e. (1022) on Restricted Antibiotics ; 202 patients were such who received 3 or more different types of antibiotics.

RECOMMENDATIONS

- Awareness about the resistance to restricted antibiotics.
- Prohibiting the use of restricted antibiotics as first line treatment drugs.
- Auditing to be carried out on regular basis.
- Justification forms for all cases to be filled whenever following compliance with the Restricted Antibiotic Policy.
- Improve the clinical diagnosis of infection .
- Multidisciplinary care delivery involving pharmacy, microbiology etc.

CONCLUSION

- Justification forms filled for using the Restricted Antibiotics were only 25% which shows a great deal of un-compliance practice followed.
- Reducing the use of antimicrobials to only those situations where they are warranted, at the proper dose and for the proper duration, is the prerequisite for sustainable control of antimicrobial resistance.