



The Global Point Prevalence Survey of Antimicrobial Consumption and Resistance (Global-PPS): Antimicrobial Prescribing Quality Indicators in Egyptian hospitals

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INTRODUCTION AND PURPOSE

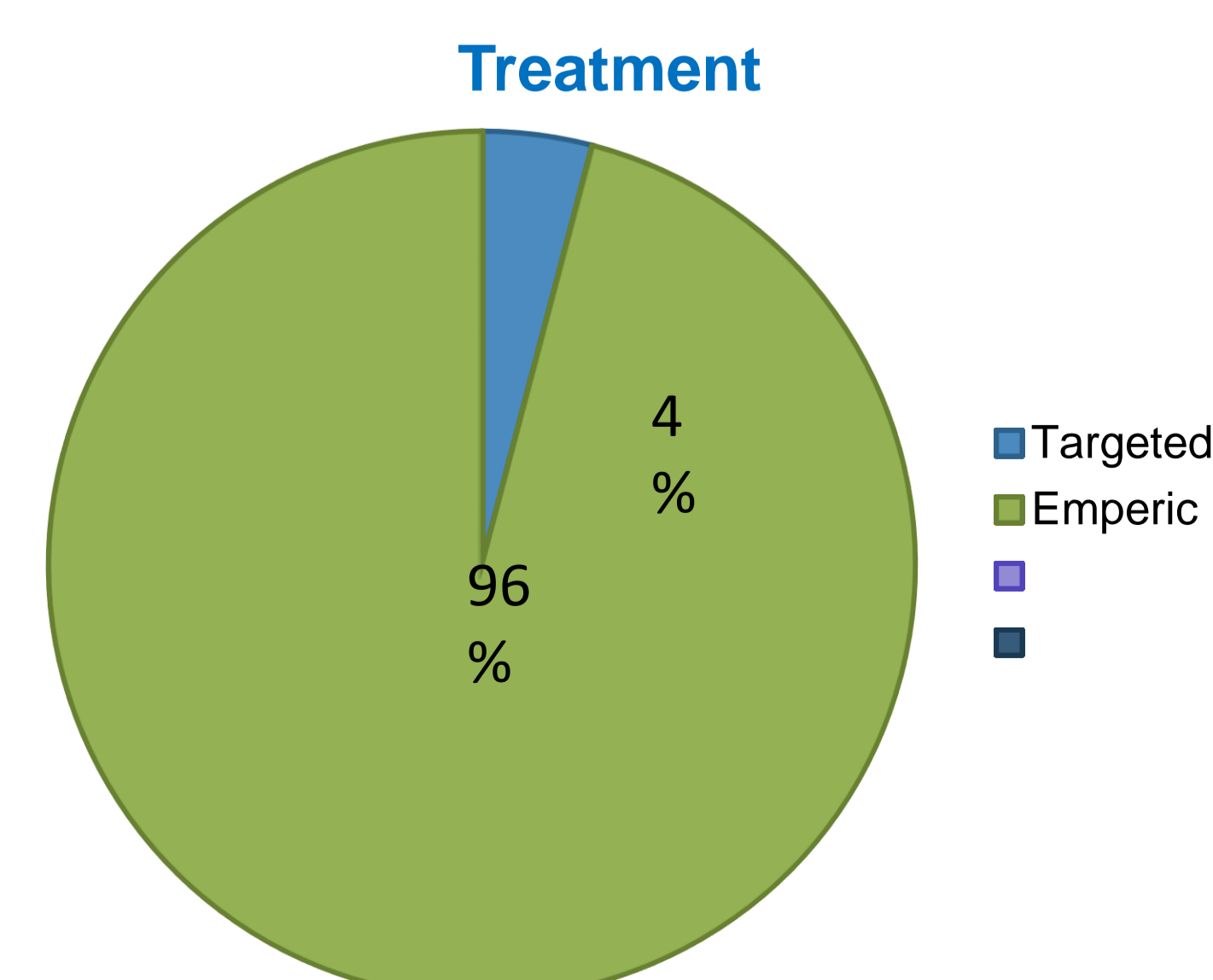
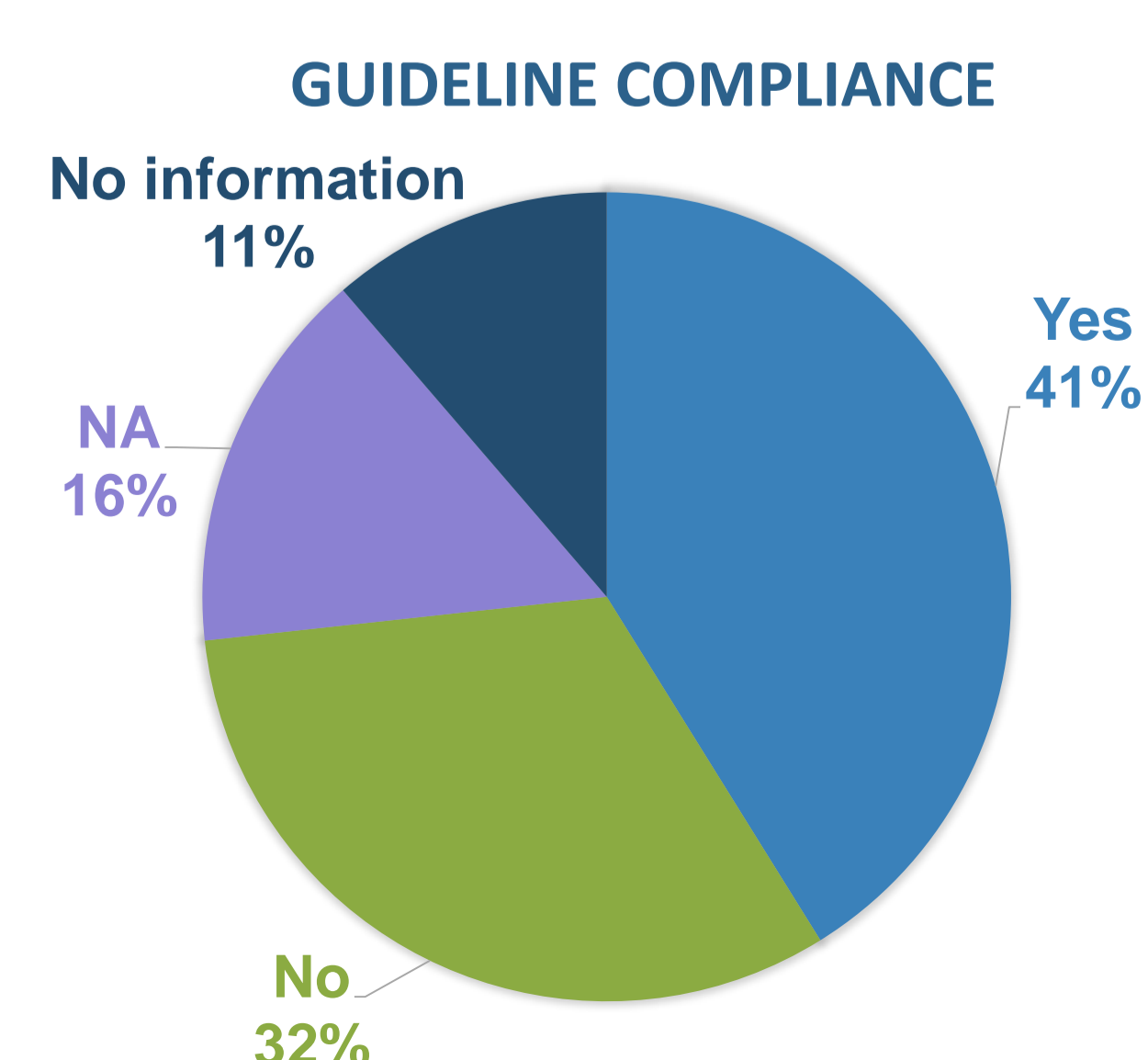
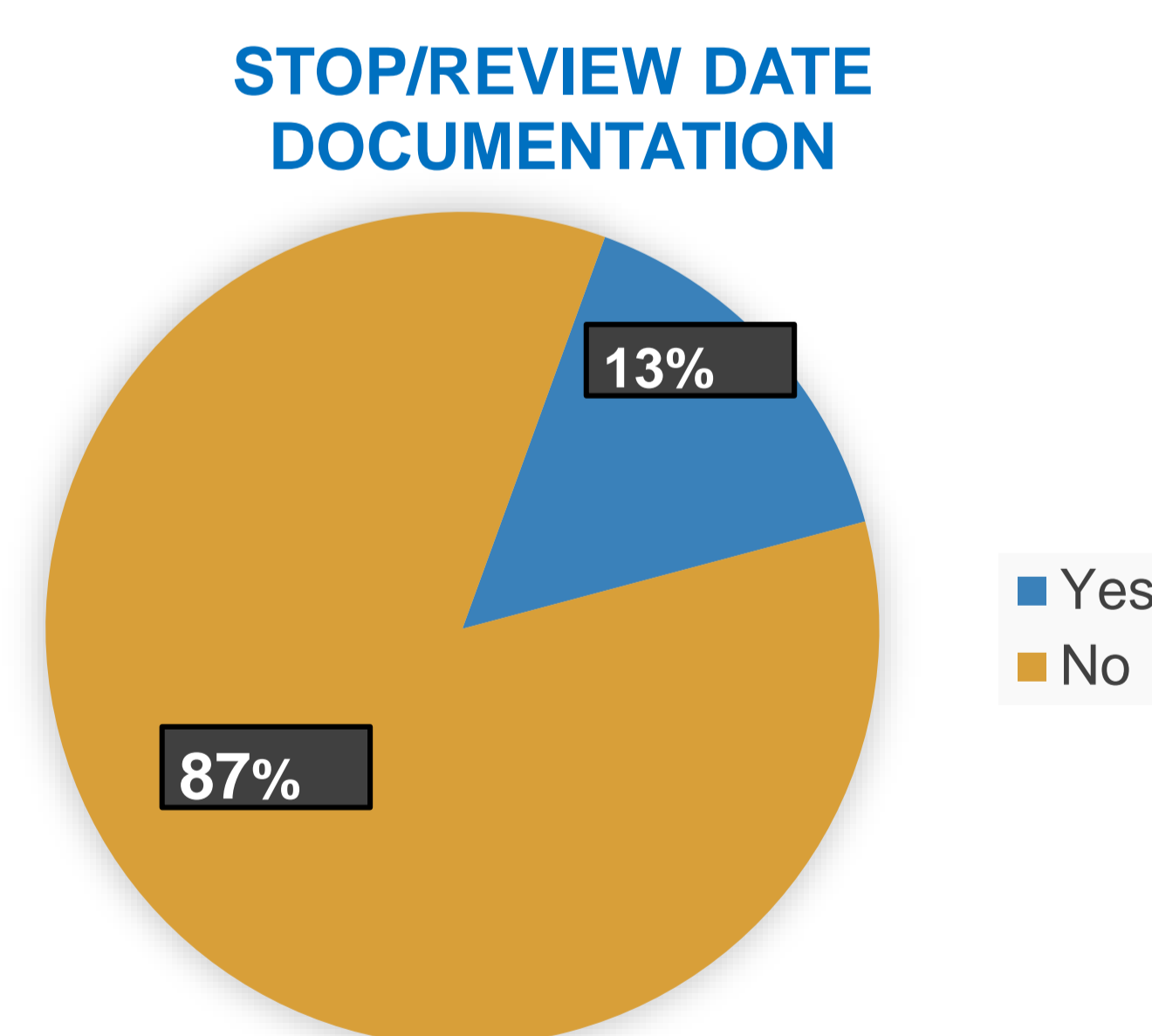
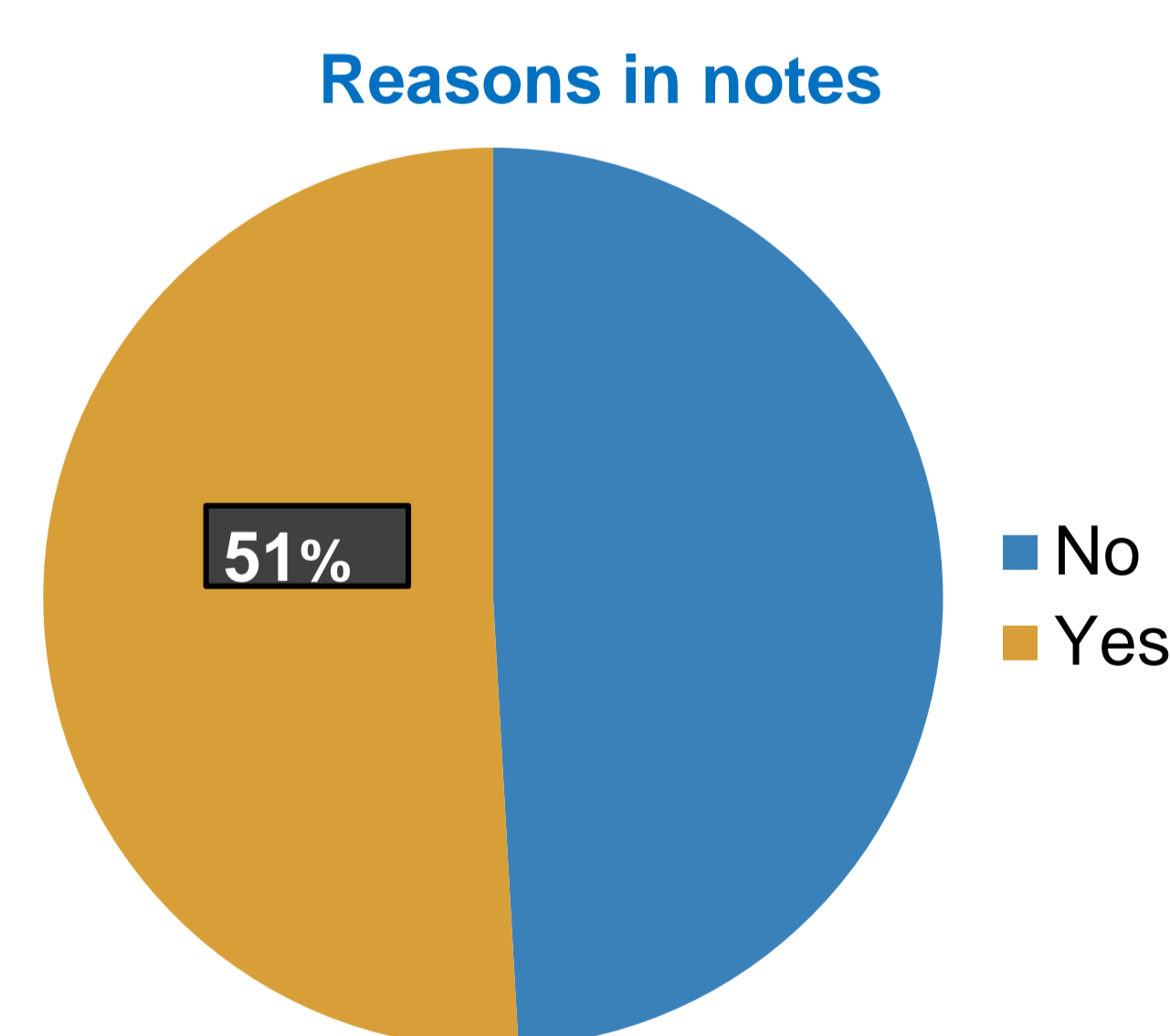
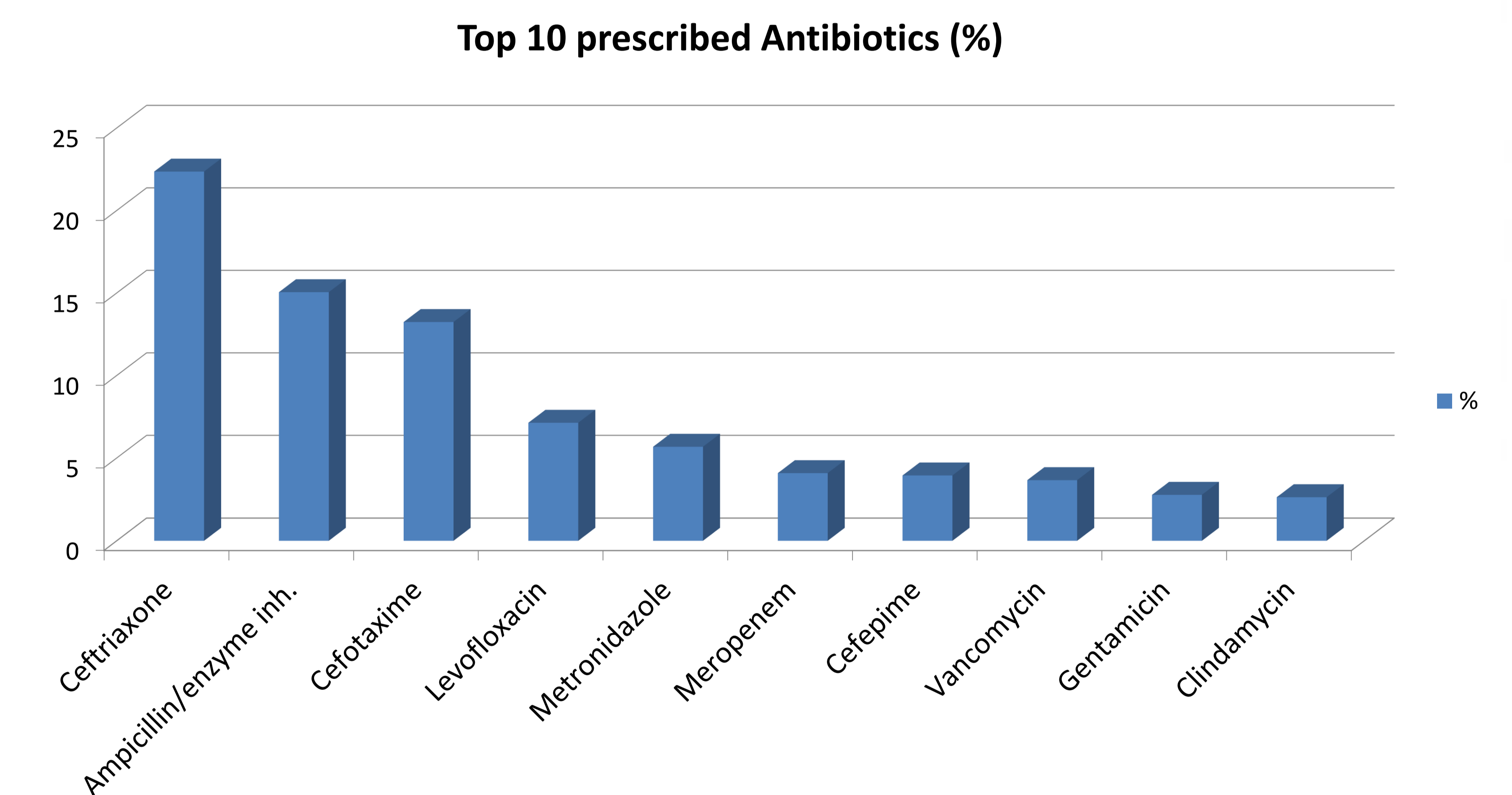
The quality of antimicrobial prescribing plays an important role in optimizing the antimicrobial therapy, especially in the inpatient settings. Identifying quality indicators for the prescriptions of antimicrobials is required to ensure the rational antimicrobial use, improve patients` outcomes, and slow down the emergence of resistance. A uniform and standardized method for surveillance of antimicrobial use in hospitals was used to determine the antimicrobial prescribing habits for hospitalized patients in order to set appropriate interventions for antimicrobial prescribing optimization.

METHODS

The Global-PPS was conducted from Sep. to Oct. 2018 in 43 public hospitals from five different governorates. The collected data included details on the percentage of targeted antimicrobial therapy, the stop/review date documentation, the guidelines` compliances, and the reasons for antimicrobial documentation in notes. A web-based application is used for data-entry, validation and reporting as designed by the university of Antwerp, Belgium (www.global-pps.com).

RESULTS

The percentage of culture-based antibacterials was only 4% from the total antimicrobial prescriptions (127 out of 3302). Documentation of Stop and review date of antimicrobial prescribing was the least quality indicator considered in Egyptian hospitals and represented only 13% from the total prescriptions. About half of prescriptions was reported to document the reason of antimicrobial prescribing in notes. The completely unknown indication of antimicrobial prescribing represented about 12% from the total prescriptions. The compliance to antimicrobial use guidelines was the least considered in surgical wards and represented 34.5% from the total treated patients. The broad spectrum third generation cephalosporins were the most commonly prescribed classes of antibiotics and represented nearly half of antimicrobial prescriptions.



CONCLUSION

The quality of antimicrobial prescriptions in Egypt is not optimal. There should be more focus on the indication as well as the selection and the follow-up of the antimicrobial prescribed for the inpatient settings. The Global-PPS tool helped us to identify multiples areas where antimicrobials were prescribed inappropriately. We recommend to re-conduct the survey after implementing the identified interventions to re-assess the antimicrobial prescribing quality.