



ANTIBIOTIC STEWARDSHIP INTERVENTIONS IN CRITICALLY ILL PATIENTS: ACCEPTANCE RATE AND IMPACT ON THERAPY OPTIMIZATION

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BACKGROUND AND IMPORTANCE

- Antimicrobial stewardship programmes (ASP) have gained increasing relevance in recent years, particularly in critically ill patients admitted to intensive care units (ICU).
- These patients often receive multiple antibiotics due to their clinical complexity, which makes stewardship interventions essential for improving treatment adequacy and reducing unnecessary exposure.

- The PROA UVI team at our hospital is made up of:

-  1 MICROBIOLOGIST
-  2 INTENSIVE CARE SPECIALISTS
-  1 HOSPITAL PHARMACIST

OBJECTIVES

- To evaluate the acceptance rate of antibiotic stewardship interventions in critically ill patients.



MATERIAL AND METHODS

A RETROSPECTIVE, OBSERVATIONAL and SINGLE-CENTRE study (January-June 2024).

All ASP interventions regarding antimicrobial therapy in ICU patients were included.

Interventions classification:

- 1) Antibiotic discontinuation.
- 2) De-escalation.
- 3) pK/pD optimization.
- 4) Escalation.
- 5) Requests for additional diagnostic tests such as blood cultures.

RESULTS

189 RECOMMENDATIONS → 160 (84.7%) WERE ACCEPTED.

- 1) ANTIBIOTIC DISCONTINUATION (n=111) → 92 (82.9%) were accepted.**

- J01XX group antibiotics (linezolid, tedizolid, daptomycin) (n=46) → 82.6%.

- 2) DE-ESCALATION (n=39) → 32 (82.1%) were accepted.**

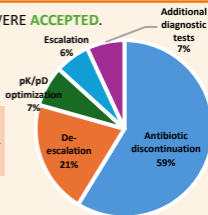
- Ceftolozane/tazobactam, ceftazidime/avibactam and ceftaroline (n=18) → 66.7%.

- Carbapenems (n=10) → 90%.

- 3) pK/pD OPTIMIZATION (n=14) → 12 (85.7%) were accepted.**

- 4) ESCALATION (n=12) → 11 (91.7%) were accepted.**

- 5) ADDITIONAL DIAGNOSIS TEST (n=13) → 13 (100%) were accepted.**



CONCLUSION

- Antibiotic discontinuation was the most frequent ASP intervention, whereas request for additional diagnosis test and escalation achieved the highest acceptance rates.

- Overall, the high acceptance rate (84.7%) highlights the value of multidisciplinary stewardship teams in optimizing antimicrobial therapy and ensuring adequate treatment of critically ill patients.

