

EVOLUTION OF ANTIBIOTIC PRESCRIBING APPROPRIATENESS ACCORDING TO WHO AWARE CRITERIA IN URINARY TRACT INFECTIONS OF HOME CATHETERIZED PATIENTS.

M.M. LAPENNA¹, C. LAMESTA², R. PETTI², R. LOMBARDI².

¹UNIVERSITÀ DEGLI STUDI DI BARI ALDO MORO, FARMACIA OSPEDALIERA, BARI, ITALY.

² Dipartimento Farmaceutico Azienda Sanitaria di Foggia , ITALY.

BACKGROUND

International guidelines discourage the routine use of antibiotics during bladder catheter replacement in asymptomatic home-care patients, yet inappropriate use persists, contributing to antibiotic resistance. WHO AWaRe recommendations classify antibiotics into ACCESS, WATCH, and RESERVE to guide appropriate prescribing in urinary tract infections (UTIs)

AIM AND OBJECTIVES

To assess the evolution of antibiotic prescribing appropriateness according to AWaRe criteria in UTIs of patients with home bladder catheters, quantifying prescribing patterns including Defined Daily Doses (DDD), and comparing data from 2023-2024 to detect progress in antibiotic stewardship.

MATERIAL AND METHODS

Retrospective analysis of home bladder catheter patients, reviewing AWaRe prescriptions for UTIs in 2224 subjects in 2023 and 2264 in 2024. Distribution by gender, amount of antibiotics prescribed in DDD, and percentage reduction in antibiotic use between periods were evaluated.

RESULTS

Total antibiotic volume decreased by 57%, from 33,465 DDD in 2023 to 14,380 DDD in 2024. Overall AWaRe antibiotic use dropped from 87.9% to 34.3% of patients, with a 60.2% decrease. Among AWaRe categories, ACCESS antibiotics increased from 12.6% to 18%, driven by nitrofurantoin (3.81% → 6%) and sulfamethoxazole/trimethoprim (8.79% → 12%). WATCH antibiotics declined from 36.65% to 34%, with reductions in fluoroquinolones such as ciprofloxacin (20% → 18%) and levofloxacin (14.36% → 14%). Significant decreases were observed for amoxicillin/clavulanate (from 8,337 DDD, 24.91%, to 4,375 DDD, 30%) and fosfomicin (from 7,680 DDD, 22.95%, to 2,266 DDD, 16%). This improvement resulted from: healthcare worker training; updated protocols with clinical evidence prioritizing ACCESS antibiotics and reducing fluoroquinolones; non-pharmacological strategies (antimicrobial catheters and rigorous hygiene); and microbiological assessment for targeted antibiotic therapy. Gender analysis indicated a more personalized, evidence-based prescribing approach.

-57%

TOTAL DDD
2024 Vs 2023

CONCLUSIONS AND RELEVANCE

Conclusion and relevance Integrated stewardship actions led to a substantial quantitative reduction (-57% total DDD) and qualitative improvement in antibiotic prescribing in patients with home catheters, representing a crucial step toward limiting antibiotic overuse and preventing antibiotic resistance in this vulnerable population.

REFERENCES AND/OR ACKNOWLEDGEMENTS

- Linea Guida Regionale per la prevenzione delle infezioni da catetere urinario. 2024.
- World Health Organization. WHO AWaRe Antibiotic Book. Linee guida per la prescrizione degli antibiotici, 2022.
- Rete Infettivologica Italiana. Infezioni delle vie urinarie e catetere vescicale: gestione e trattamento. Aggiornamento 2022.

