



**UNIVERSITÀ
DEGLI STUDI
DI UDINE**

THE IMPACT OF FRIULI VENEZIA GIULIA ANTIMICROBIAL STEWARDSHIP PROGRAMME: ANALYSIS OF FLUOROQUINOLONES CONSUMPTION AND RESISTANCE RATES

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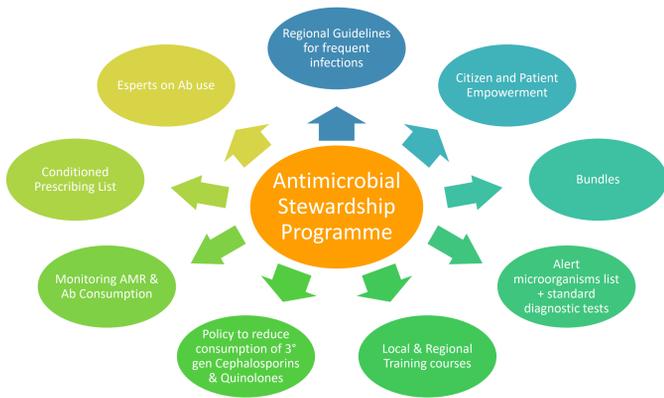
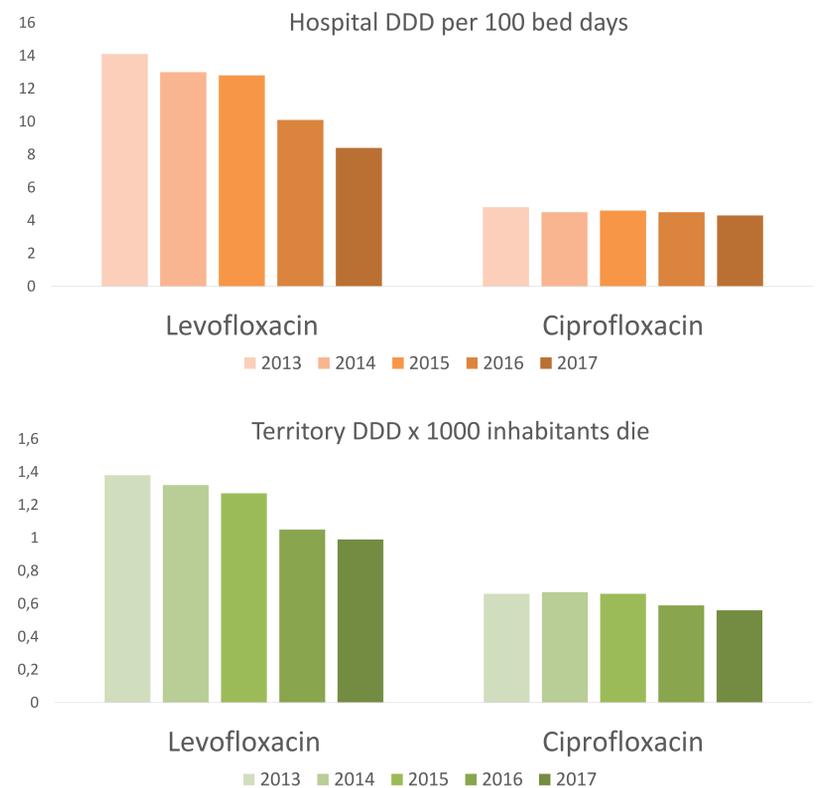
REGIONE AUTONOMA FRIULI VENEZIA GIULIA

BACKGROUND

Friuli Venezia Giulia (FVG) Antimicrobial Stewardship Programme (ASP) is the first regional ASP programme in Italy; started in 2014, it involves 19 hospitals and 5 Local Healthcare Trusts. Production of Regional Guidelines and training for professionals are the main ASP activities adopted.

MATERIALS AND METHODS

Data of antibiotic consumption are provided by FVG Pharmaceutical Service as DDD (defined daily dose). Trend of consumption in the period 2014-2017 is estimated. Data of bacterial FQs susceptibility (from 2015 to 2017) are provided by FVG Registry of Antimicrobial Resistance.

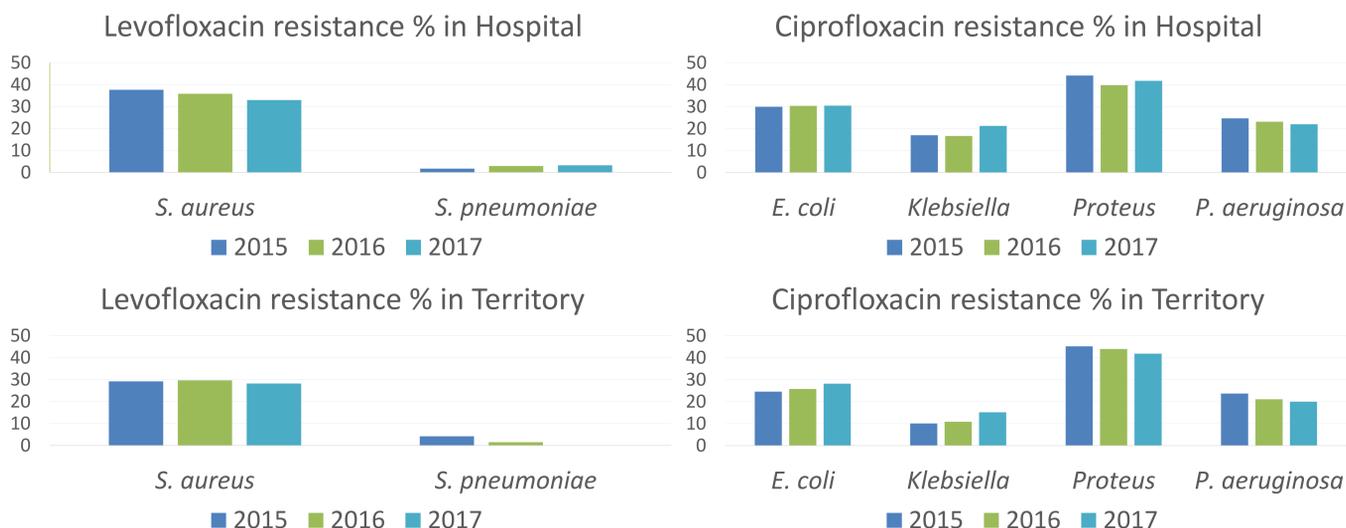


RESULTS

Between 2013 and 2017 a gradual decrease in Levofloxacin use for hospitals (from 14.1 to 8.4 DDD per 100 bed-days) and territory (from 1.38 to 0.99 DDD per 1000 inhabitants die) and in Ciprofloxacin use for hospitals (from 4.8 to 4.3 DDD per 100 bed-days) and territory (from 0.66 to 0.56 DDD per 1000 inhabitants die) is reported. A significant decrease between 2015 and 2017 is observed in *P. aeruginosa* Ciprofloxacin-R (from 24.2% to 20.9%, $p < 0.05$), in *Proteus* Ciprofloxacin-R (from 44.8% to 41.9%, $p < 0.05$) and in *S. aureus* Levofloxacin-R (from 32.8% to 30.2%, $p < 0.05$).

PURPOSE AND HYPOTHESIS

One of the main goals of ASP is the decrease of consumption of Fluoroquinolones (FQs) and the reduction of the spread of FQs resistant pathogens.



CONCLUSIONS

The decrease in FQs use and the reduction in susceptibility of target pathogens prove FVG ASP positive impact. As a regional approach in the fight against antimicrobial resistance is proving to be efficient, it needs to be further strengthened and carried forward in the next years.