

Evaluation of systemic antibiotics and antifungal use in an intensive paediatric car unit : a five-years study in a french university hospital

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BACKGROUND

- ✓ Antimicrobials overuse and empirical prescriptions are associated with higher prevalence of antibiotics resistance leading to longer duration of illness and increased healthcare costs.
- ✓ To preserve their efficacy and prevent the risks of resistance emergence, **surveillance on antibiotic consumption is essential**.
- ✓ There are limited data published about antibiotics and antifungal consumption in terms of defined daily doses (DDD) in **pediatrics**.

PURPOSE

- ✓ Describe and analyse antibiotic and antifungal drug consumption with DDD/1000 bed-days in a paediatric intensive care unit (ICU) over a 5-years period.

MATERIEL AND METHOD

- ✓ Restrospective & descriptive study.
- ✓ University paediatric hospital.
- ✓ 32 ICU beds.
- ✓ French ATB-Raisin national network methodology.
- ✓ Systemic antibiotics & antifungals dispensation from 2013 to 2018.
- ✓ DDD/1000 bed-days & ratios for each antibiotic and antifungal.

RESULTS

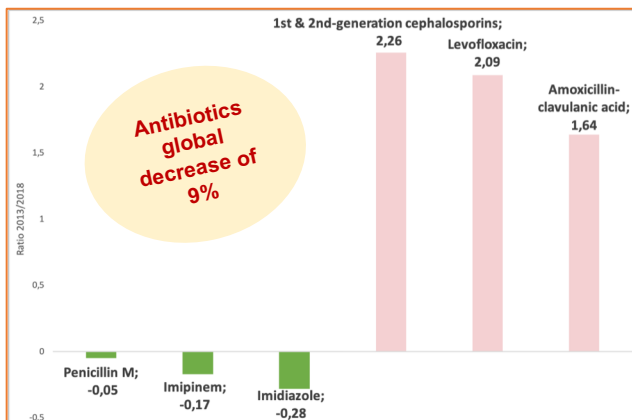


Figure 1. Antibiotics consumption between 2013 vs 2018

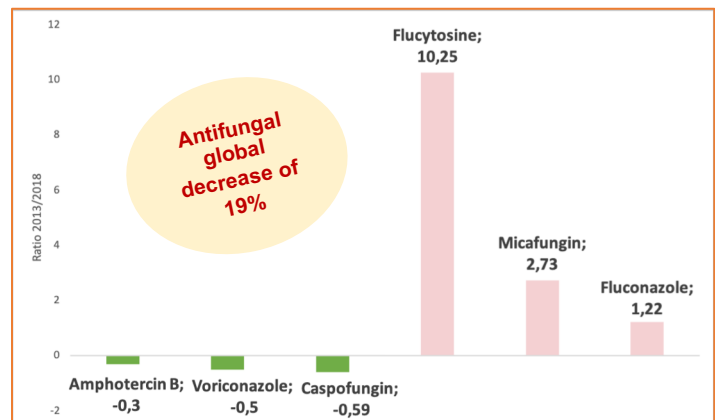


Figure 2. Antifungals consumption between 2013 vs 2018

Fluctuation in consumption is linked to several factors :

Drug shortages

Evolution of recommandations

Patients profiles

CONCLUSION

- ✓ Both the overall numbers of antibiotics and antifungals DDD/1000 beds-days decrease over the 5-years study period. A multidisiplinary analysis allows to understand the consumption evolution in our pediatric ICU.
- ✓ It should be monitored on a continuous basis by pharmacists in healthcare settings.

