



# The Global Point Prevalence Survey of Antimicrobial Consumption and Resistance (Global-PPS)

## Results of antimicrobial prescribing in Guinea

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### INTRODUCTION AND PURPOSE

A uniform and standardized method for surveillance of antimicrobial use in hospitals was used in order to assess the quantity and quality of antimicrobial prescriptions and resistance at Donka National Hospital, CHU Conakry, Republic of Guinea. Donka is a University Teaching Hospital, one of two in Conakry, with a hospital size of 260 beds. BioMérieux provided unrestricted funding support for the survey.

### METHODS

A cross-sectional Point Prevalence Survey (PPS) was conducted in April 2015 including all adult and paediatric medical and surgical services. Detailed data were collected for all patients receiving anti-infective agents present at 8:00 am on the day of the survey. Information was retrieved from the patient's medical and nursing records as well as the prescription books. Data-entry was done using a web-based tool made available by the University of Antwerp, Belgium. See [www.global-pps.com](http://www.global-pps.com)

### RESULTS

Among adults (n=83), 74.7% were on antimicrobial agents, 59.6% in medicine and 100% in surgery. All children (n=12) and neonates (n=26) received at least one antimicrobial (Figure 1). Antibacterials for systemic use (ATC J01) were most often prescribed (81.7%, Figure 1), followed by antimalarials (8.1%) and drugs to treat tuberculosis (6.5%) (Figure 2).

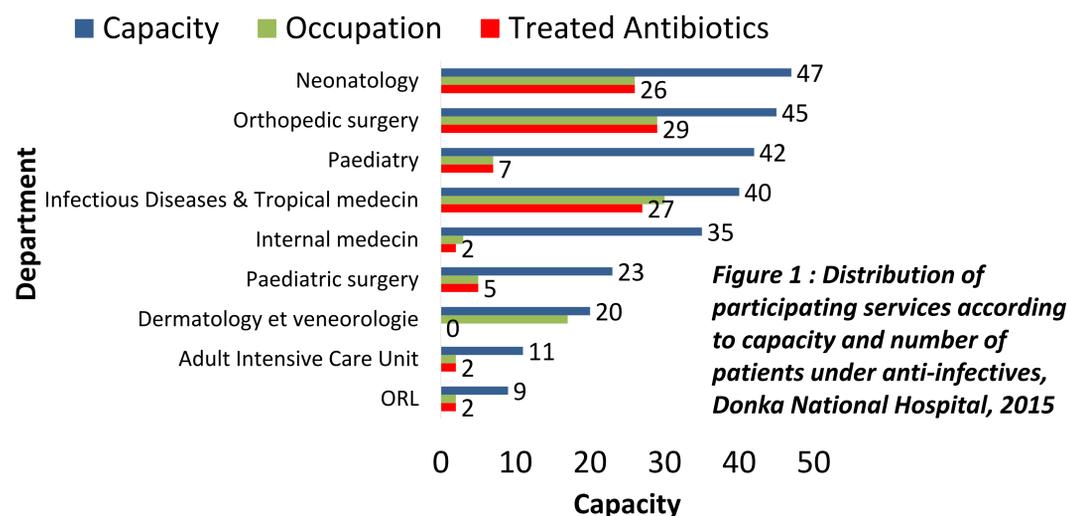


Figure 1: Distribution of participating services according to capacity and number of patients under anti-infectives, Donka National Hospital, 2015

n=186 antimicrobials

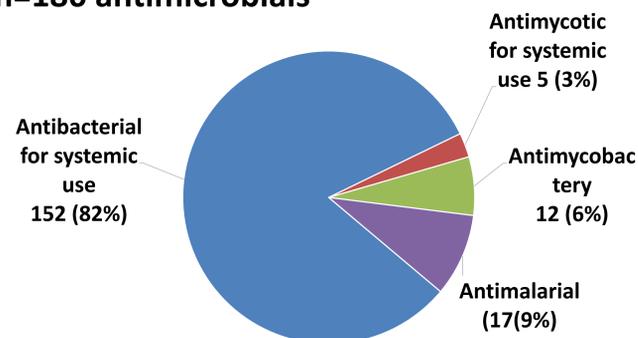
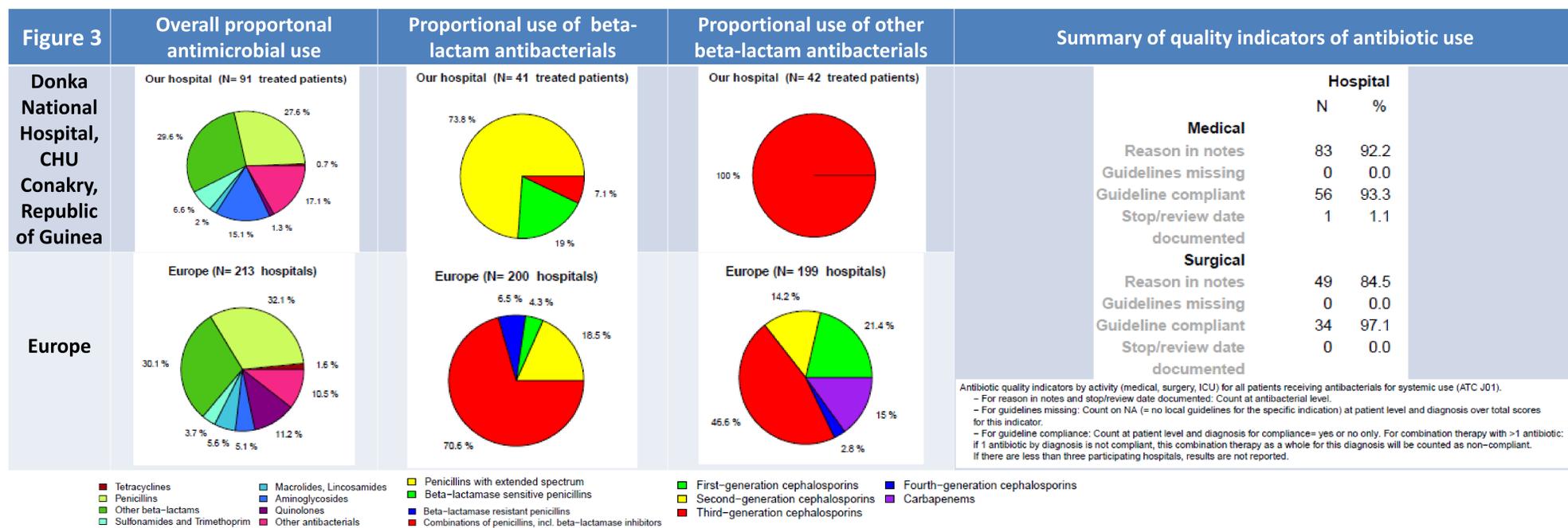


Figure 2: Overall proportional antimicrobial use



Most frequent prescribed antibacterials were cephalosporins of which all third generation cephalosporins. These encompassed ceftriaxone and sefsulodin prescribed in combination with metronidazole for mainly bone and joint infections to patients admitted on an orthopedic surgery ward. Penicillins were the second most often prescribed antibacterials of which most ampicillin, mainly prescribed for skin and soft tissue infections (Figure 3).

Quality indicators: The reason for prescription was commonly documented in the medical charts, in contrast to a stop or review date which was never documented. Most antibiotics were prescribed according to local guidelines (Figure 3).

### DISCUSSION - CONCLUSION

- This study supports the excessive use of antimicrobials at the Donka National Hospital in Guinea.
- There is a need to assess the appropriateness of broad-spectrum antibiotic use.
- Organizational interventions would improve appropriate use of antimicrobials in Guinea.

### FUTURE

- It is planned to organize a national day to raise awareness among health care providers about appropriate use of antibiotics.
- It is aimed to create an antibiotic committee in each hospital and to put referents in antibiotherapy in the various hospitals of Guinea.
- The challenge remains to extend this Global-PPS to the administrative region of Conakry and to all regions of Guinea.