

## Profile of *Pseudomonas* infections diagnosed in an infectious clinic In Dakar (Senegal)

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### Abstract

#### Introduction:

*Pseudomonas* infections are opportunistic infections marked in some situations by their great severity and their nosocomial character. Thus, the hospital environment is a major source of cross contamination with *Pseudomonas aeruginosa*. The resistance to carbapenems is actually a great issue by reducing therapeutic options. The objectives of this study were to determine the epidemiological, clinical, resistance and therapeutic profile of *Pseudomonas* infections.

#### Methodology:

A descriptive retrospective study was performed, based on hospitalized patients' records in the department of infectious and tropical diseases, for whom *Pseudomonas* infections was diagnosed from 1 January 2013 to 31 December 2017.

#### Results:

Forty-three cases (2.1%) of *Pseudomonas* infections were collected among 2,061 inpatients. The sex ratio was 0.95. The mean age was  $43 \pm 16$ . Nearly half of the patients (21 cases) had HIV infection. Bacteremia and urinary tract infections were the most common with 18 cases, followed by lower respiratory tract infections (5 cases) and skin and soft tissues (4 cases). The isolated strains were *Pseudomonas aeruginosa* (68.8%), *Pseudomonas* spp (28.8%) and one strain for *Pseudomonas oryzyhabitans* (2.2%). Antibiotic resistance was higher for Aztreonam, piperacillin-tazobactam and fosfomycin with 19.4%, 12.9% and 9.7% respectively. One strain producing carbapenemase (3.2%) and another one resistant to colistin (3.2%) were isolated. Also, only one strain was resistant to ciprofloxacin. All strains tested were sensitive to amikacin. More than 6 out of 10 patients (61.2%) had received probabilistic antibiotic therapy. The lethality was 30.2%.

#### Conclusion:

*Pseudomonas* infections are common in our context and have high mortality. They pose the problem of their management with the appearance *Pseudomonas* to imipenem and colistin. Strategies for rational use of antibiotics must be implemented.



### Biography:

Ndeye Aïssatou LAKHE is working at Clinic of Infectious and Tropical Diseases, Fann National University Hospital.

### Speaker Publications:

- 1."Bacteremia: Profile and Antibiotic Resistance at the Infectious and Tropical Diseases Clinic in Fann Hospital, Dakar, Senegal" J Infect Dis Ther 2017, 5:348
2. HIV screening in men and women in Senegal: coverage and associated factors; analysis of the 2017 demographic and health survey; pubmed/ BMC Infect Dis. 2019 Dec 31;20(1):1. doi: 10.1186/s12879-019-4717-5.
3. Knowledge, Attitudes and Practices Regarding Ebola Virus Disease among Students at a School of Medicine in Dakar, Senegal; clinmedjournals/ DOI:10.23937/2474-3658/15101
- 4."Assessment of Knowledge, Attitudes and Practices of Medical Students Regarding Hepatitis B Infection at a Private University of Medicine in Senegal" clinmedjournals/ DOI:10.23937/2474-3658/15101

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