BACKGROUND

Intensive care units (ICU) are often considered to be a hotspot for development and dissemination of antibiotic resistance. We compared non-susceptibility (NS) in hospital-acquired infections (patients in hospital >48 hrs) between ICU and other wards, and between blood and respiratory infections (RTI).

METHODS

BSAC Resistance Surveillance Project: 32 clinical centres contributed clinically significant isolates.

- One central laboratory for RTI, one for blood.
- BSAC agar dilution MIC method with BSAC/EUCAST breakpoints; PCR for mecaA.
- Excluded: patients in hospital <48 hrs or missing data on treating specialty.

RESULTS

Graphs compare non-susceptibility in and out of ICU for RTI and blood infections. 3594 isolates were included in analysis, 2105 from RTI and 1489 from blood.

The proportion from ICU was much higher among RTI than blood isolates. (There may be some bias in selecting ‘clinically significant’ RTI isolates outside ICU.)

The distribution of patient age was very similar for RTI and blood infections. ICU included slightly more middle-aged patients and fewer very young or >75 years old.

CONCLUSIONS

- For hospital-acquired RTI and blood infections, non-susceptibility was not universally more prevalent in ICU than other settings.
- RTI S. aureus from ICU were substantially less likely than others to be non-susceptible.
- Non-susceptibility in Pseudomonas aeruginosa was generally more common in ICU for both RTI and blood infections.

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