

O0588 **Geographical differences need to be considered in efforts to control multidrug-resistant Gram-negative bacteria**

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Background: The increase in multidrug-resistant Gram-negative (MDR-GN) bacteria is a growing burden on health-care. Due to the lack of effective therapy the role of infection prevention and control measures (IPCM) is even more essential in reducing the spread of resistant strains. Although guidelines to control MDR-GN have been developed at European and countries' level their implementation and coordination is less established.

Materials/methods: We conducted a cross-sectional online survey to identify major limitations in implementing available guidelines in controlling MDR-GN and to identify differences in resource needs. The EUCIC Advisory Board and national Committees were contacted for participation. The survey explored four areas for reduced implementation: 1. structure (e.g. not enough single bed rooms); 2. budget (e.g. not possible to block beds due to missing reimbursement); 3. culture (e.g. isolation is not considered relevant; pathogen is not considered virulent); and 4. education (e.g. healthcare-workers do not know how to perform IPCM). Analysis of countries was performed according to the WHO regions definitions: Eastern Europe (EE), North-Western Europe (NWE) and Southern Europe (SE).

Results: All the 34 EU countries representatives completed the survey with a total of 453 respondents from the national committees. Overall, the three most important areas of improvement were: 1) scarce infection control staff; 2) insufficient infection control training 3) inadequate clinical staff. Major differences were observed among countries: NWE and SE deemed educational programs to train staff as the most urgently needed, while EE required significant changes in hospitals / wards architecture. In SE, a change in the political awareness of antibiotic resistance and improved healthcare management was considered essential. All regions did not require new specific legislation targeting resistant bacteria (Fig 1).

Conclusions: Low compliance with IPCM is a multi-factorial problem with regional differences in the underlying reasons. Whereas there is some European consensus on areas for improvement, such as the need for increased infection control staff, other components are more region specific, and need to be considered when planning interventions to reduce the spread of MDR-GN.

