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O0328 Infection control specialists' perception of antimicrobial resistance in European hospitals: the Percept-R study.

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Background: The societal/cultural, administrative contexts and policy could play a role in the differences of strategies to control the antimicrobial resistance (AMR). We aimed to investigate the perception of infection control specialists (ICS) regarding AMR and IPC, the variability of local strategies and the impact of local/national contextual factors in a large panel of European hospitals.

Materials/methods: Sixteen case-vignettes simulating hospital situations in the field of AMR and IPC were submitted to ICS from 223 hospitals in 15 European countries (Figure). Each participant scored five randomly-assigned case-vignettes, regarding their risk perception, and control measure they would apply on an online database. The intra-class correlation coefficient (ICC) was used to assess agreement for the risk perception on a 7-point Likert scale. Each participant was asked to complete a questionnaire on the insetting IPC organization, epidemiology, perception and attitude regarding IPC/AMR and working conditions/organization. The national context was assessed through sociocultural, economic and ECDC AMR/IPC indicators.

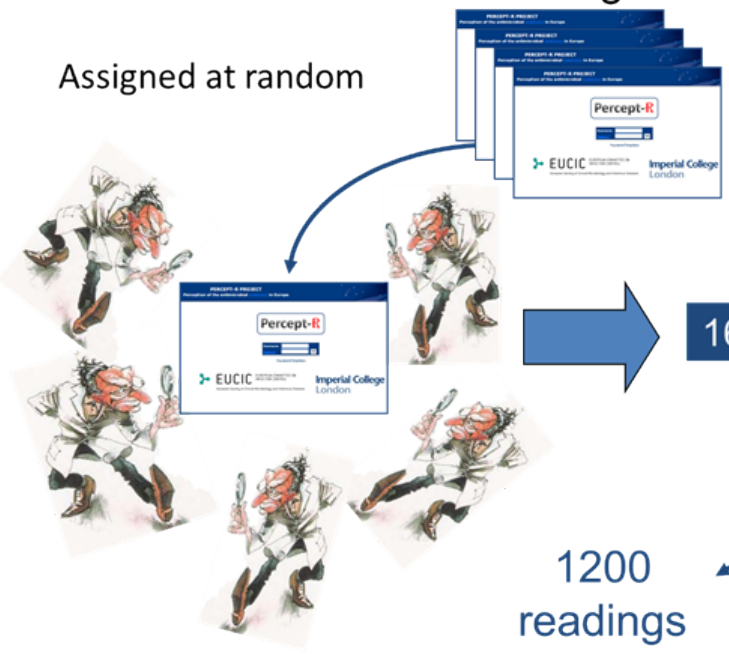
Results: 149 ICS scored 655 case-vignettes. The individual (positive patients) and collective risks (contact patients) were estimated high in 72% and 75% of situations, respectively (55% to 89% according to MDRO). The intra-country agreement regarding the individual risk varied from 0.00 (ICC: 0-0.25) to 0.51 (0.29-0.74), and globally 0.20 (0.07-0.33). The IPC strategy included alcohol hands rub (82%), gloves (76%, 20%-100% according to countries), and single room (80%, 59%-93% according to MDRO). 88% (62%-100% according to countries) felt their strategy in line with national recommendations. 69% ICS (47-100% according to countries) had a defined goal to prevent AMR in their hospital, and 76% (29-100%) had an appropriate staffing. A lower perception of both individual/collective risks was inversely correlated with local MDRO epidemiology ($p<0.01$), and lower perception of management ($p=0.01$). At national level, perceptions of both risks were inversely correlated with long-term orientation, and uncertainty avoidance ($p<0.01$), and positively correlated with country's economic performance indicators ($p<0.01$).

Conclusions: This survey is the first to assess the variability of AMR perception, IPC strategies and local/national determinants across European ICS. These results confirm the importance of socio-economic and cultural indicators when planning national campaigns, implementing new tools or developing guidelines.

Method

16 case-vignettes

Assigned at random



16 x 5 IPS = 80 readings

1200 readings expected

X15 countries

Questionnaires submitted to IPS

1 Individual and collective risk

Is this situation of antibiotic resistance a risk to the MRSA positive patient?

Please, tick the most appropriate value matching your opinion of individual risk for the patient. The magnifying glass at the right part of the slide enables you to see again all data regarding this case without exiting the questionnaire.

YOUR OPINION

1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

No risk — High risk

See again the scenario 1

What is influencing you for this answer? (Tick as many boxes as appropriate)

- ☐ 1 The type of organism (species)
- ☐ 2 The resistance pattern of the organism
- ☐ 3 The clinical situation of the patient

CONFIRM

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2 Infection control measures

Are specific precautions required for contact patients?
(present in the same ward and cared for by the same staff as the positive patient)

Please, tick the most appropriate control strategy for contact patients. The magnifying glass at the right part of the slide enables you to see again all data regarding this case without exiting the questionnaire.

YOUR OPINION (Tick as many boxes as appropriate)

- ☐ 1. Standard precautions (hand hygiene with soap)
- ☐ 2. Standard precautions (hand hygiene with alcohol hand rub)
- ☐ 3. Contact patient in single room
- ☐ 4. Systematic worn of gloves for healthcare professionals
- ☐ 5. Systematic worn of gowns for healthcare professionals
- ☐ 6. Label of the patient status on the door of the room
- ☐ 7. Cares performed in last instance (after non-colonised patient
- ☐ 8. Hospital discharge as soon as possible
- ☐ 9. No transfer to other units or hospital
- ☐ 10. Restriction of antibiotic treatments
- ☐ 11. Dedicated area for colonised patients
- ☐ 12. Dedicated staff for colonised patients
- ☐ 13. Increase in environmental decontamination
- ☐ 14. Follow-up with alert at readmission
- ☐ 15. Follow-up of carriage with faecal screening
  - If so, for all contact patients?
  - For a list of selected of patients considered as high risk?
  - how many screenings needed to exclude a carriage?

See again the scenario 1

CONFIRM

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3 Organisation

Organisation of infection prevention and control (IPC) in your hospital

		Yes	No
1	Is an Infection Prevention and Control committee in place within your hospital?		
2	Is IPC included on the hospital administration agenda?		
3	Are there defined goals to prevent AMR? (e.g. antimicrobial resistance rates)		
4	Is the staffing for IPC appropriate? Number of full time post IPC doctors Number of full time post IPC nurses		
5	In your opinion, is the microbiology laboratory accurate in identifying MDROs?		
6	Is alcohol-based hand rub available at the point of care?		
7	Are sinks stocked with soap and single-use towels?		
8	Are national/international guidelines for AMR control adapted to your local situation?		
9	What is the approximate average percentage of single bed rooms in your hospital?	Rate	

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4 Perception

Your personnal point of view on infection control measures to prevent AMR

		Disagree 1	2	3	4	Agree 5	6	7
22	I am perfectly aware of recommendations regarding best practices for the prevention of AMR							
23	I think strict adherence to national guidelines for AMR control is necessary							
24	My colleagues in other hospitals respect national recommendations for the control of AMR							
25	The way I follow national recommendations for AMR control is a good example to follow for my colleagues in other hospitals							
26	I feel able to apply national guidelines for AMR control in my hospital							
27	I am open to improve my practices in AMR prevention							

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