

ANTIBIOTIC RESISTANCE: PERCEPTIONS

PRESENTATION

The aim of the survey is to evaluate the perception of medical residents about antimicrobial resistance and antimicrobial use in hospitals. Data will be considered in a aggregated way, respecting confidentiality of the respondents.

Your opinion is important to us. Thank you!

A) GENERAL INFORMATION

1. In which hospital do you work?
2. Designation PGY-1 ☐, PGY-2 ☐, PGY-3 ☐, PGY-4 ☐, PGY-5 ☐
3. When was your entry year to your undergraduate medical training?
4. In which country did you get your graduate in medicine?
5. What is your speciality?
6. Have you previously rotation on an Infectious diseases ward? Yes ☐₁ No ☐₂

B) DECISION MAKING

1. Have you prescribed an antibiotic within the past month?

Yes ☐
No ☐

*1. How many prescriptions for antibiotics have you written in the last 7 days?

☐ 2 ☐ 1
3 to 5 ☐ 2
☐ 5 ☐ 3

*2. When you prescribe antibiotics in the hospital, who is taking the decision? (Choose the most appropriate choice)

- Myself ☐
- More experienced resident ☐
- My attending ☐
- Another specialist ☐

*3. How confident do you feel in the following scenarios when prescribing an antibiotic by yourself?

	Very unconfident	Unconfident	Confident	Very Confident	Uncertain
• Making an accurate diagnosis of infection /sepsis?	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Not prescribing an antibiotic if the patient has fever but no severity criteria, and if you are not sure about your diagnosis	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Choosing the correct antibiotic	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Choosing the correct dose and interval of administration	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Using a combination therapy if appropriate	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Choosing between IV and PO administration	☐ 1	☐	☐ 3	☐	☐ 5
• Finding interactions between antibiotics and other drugs	☐ 1	☐	☐ 3	☐	☐ 5
• Interpreting microbiological results	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Planning to streamline/stop the antibiotic treatment according to clinical evolution and investigations	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Planning the duration of the antibiotic treatment	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*4. What influences or guides your prescribing decision?

- Previous experience/knowledge/training

Tick all that apply
☐ 1

- Seeking advice from a senior colleague
- Seeking advice from an ID specialist
- Seeking advice from a microbiologist
- Seeking advice from a pharmacist
- Use of local/national guidelines/policies/protocols
- Unsure
- Other

Please specify

☐	2
☐	3
☐	4
☐	5
☐	6
☐	7

C) PERCEIVED IMPORTANCE OF THE PROBLEM OF ANTIBIOTIC RESISTANCE

	Yes	No
Unsure		
*1. Do you think that antibiotic resistance is a national problem?	☐ 1	☐ 2
☐ 3		
Do you think that antibiotic resistance is a problem in	☐ 1	☐ 2
☐ 3		
your hospital?		
Do you think that antibiotic resistance is a problem in	☐ 1	☐ 2
☐ 3		
your clinical practice?		

*2. In you institution, how often do you think *E. coli* is resistant to quinolones?

<5%	☐ 1	
5-20%	☐ 2	
21-50%	☐ 3	Unsure ☐ 5
>50%	☐ 4	

*3. How often do you think *S.aureus* is resistant to meticillin in your hospital?

<5%	☐ 1	
5-20%	☐ 2	
21-50%	☐ 3	Unsure ☐ 5
>50%	☐ 4	

D) ANTIBIOTIC PRESCRIBING

1. What proportion of antibiotics do you consider to be unnecessary or inappropriate prescriptions in your hospital?

- | | |
|--------|---------------------------------------|
| <10% | ☐ ₁ |
| 11-20% | ☐ ₂ |
| 21-50% | ☐ ₃ |
| Unsure | ☐ ₅ |
| >50% | ☐ ₄ |

2. How many antibiotic prescriptions around you think are unnecessary?
(The patient did not need antibiotics at the time)

- <10 ☐ ₁
- 10-20 ☐ ₁
- 21-50 ☐ ₁
- > 50% ☐ ₁
- I do not know ☐ ₁

*3. The following scenarios are potential causes for resistance; please identify which, in your opinion, are the most or least important.

	Very important	Important	Neutral	Unimportant	Very Unimportant
• Too many antibiotic prescriptions	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Too many broad spectrum antibiotics used	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Too long durations of antibiotic treatment	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Too low a dose of antibiotics	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Excessive use of antibiotics in livestock	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Poor hand hygiene	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Not removing the focus of infection (e.g. medical devices or catheters)	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Paying too much attention to pharmaceutical representatives/advertising	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅

E) ATTITUDES ABOUT CURRENT AND POTENTIAL INTERVENTIONS TO EVALUATE THE PROBLEM OF ANTIBIOTIC PRESCRIBING

*1. How is the training that you received in your hospital on antibiotic use and resistance?

- Excellent ☐₁
- Good ☐₁
- Poor ☐₁
- Very poor ☐₁
- Non-existent/Null ☐₁

*2. What measures do you think would be the most helpful in improving antibiotic prescribing?

	Very helpful	Helpful	Neutral	Unhelpful	Very unhelpful
• Educational sessions on prescribing	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Availability of local / national guidelines / policies / protocols	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Availability of local/national resistance data	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Computer-aided prescribing	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Presence of an antimicrobial management team	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Readily accessible advice from ID physician	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Advice from senior colleagues	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Speaking to a pharmaceutical representative	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
•					
• Restriction of prescription of certain antibiotics	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Restriction of prescription of all antibiotics	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅
• Regular audit and feedback on antibiotic prescribing on your ward	☐ ₁	☐ ₂	☐ ₃	☐ ₄	☐ ₅

*3. In the last year, have you received any training in antibiotic prescribing?

Tick all that apply

- Lecture ☐₁
- Workshop ☐₂
- Informal educational in the clinical workplace ☐₃

- Web-based learning ☐ 4
- Self-directed learning ☐ 5
- No formative activities ☐ 6
- I don't know ☐ 7