

An interview study exploring training and education interventions for Antimicrobial Stewardship in the UK

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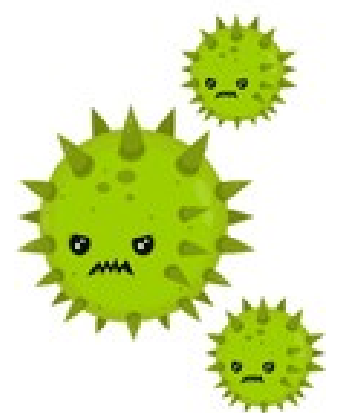
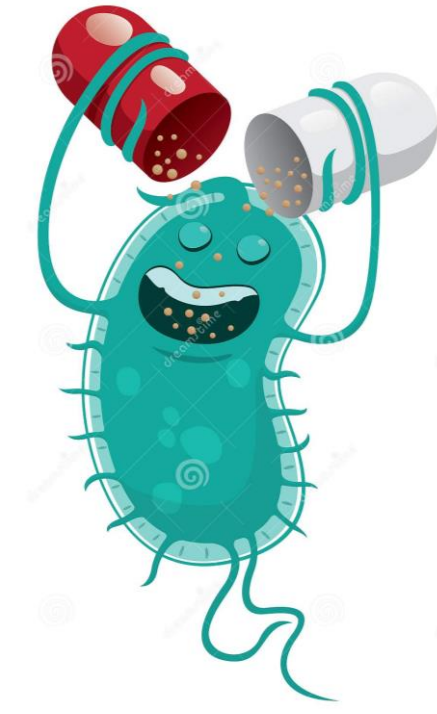
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Background

Training and education interventions are fundamental to healthcare and promoting healthcare professional behaviour change.

There are discrepancies in how training and education interventions are developed, delivered and evaluated in healthcare. This can be due to a lack of theory and evidence being used to develop such provisions or implementation barriers.

Antimicrobial stewardship (AMS) offers an example of where training and education interventions are used to promote the appropriate use of antibiotics, to tackle the global issues of antimicrobial resistance. AMS can provide us with a good example of understanding how such interventions are developed and implemented within healthcare.



This study identified barriers and enablers to developing and implementing AMS training and education interventions into hospital-based care in the UK.

Methods

Semi-structured interviews with **individuals responsible for developing and/or delivering AMS education and training in UK hospital-based care** were carried out. Individuals were recruited via professional networks and social media.

Participants were asked about current training, staff receiving training and modes of delivery. The barriers and enablers to developing and implementing AMS training and education were then explored.

Interviews were analysed using inductive thematic analysis followed by deductive framework analysis (Gale et al., 2013), using the **Theoretical Domains Framework** (Cane et al., 2012) to categorise reported barriers and enablers to identified behaviours.



Conclusions and next steps

- There is **great variation** in how AMS training and education is provided across hospital-based care in the UK.
- There are several barriers to developing and delivering AMS education and training, therefore **implementation within secondary care is challenging**, with **little information about evaluation** of such interventions and therefore the impact on healthcare professional behaviour change is unknown.
- Future research needs to 1) **optimise** training and education interventions, 2) support **implementation** of such interventions and 3) understand what is **effective** in what context.
- Our research team is planning a future feasibility study to explore establishing an **implementation laboratory** within UK hospital-based care, to test optimised AMS education and training interventions.

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Results

Participants: 27 interviews with hospital-based AMS education and training providers (5 from Northern Ireland, 4 from Wales, 2 from Scotland and 23 from England) were carried out.



Overview of training provision: AMS training and education varied greatly between organisations, with training being developed based on local issues. AMS training and education was predominantly delivered in a workshop or lecture format, utilising case studies to support learning. Interventions mainly focused on training new junior doctors at inductions, with other professions (e.g., nurses) rarely having access to such training.

Determinants of developing AMS training and education were identified, including the following:

"I'd certainly use national material, if it was available, and I knew about it, and it kind of delivered the bits that I want to deliver ... but I'd have to adapt it and any national and international material, I'd want it to be adaptable, to tailor it to our local need." P7

Beliefs about consequences & Environmental context and resources

"I think it definitely is part of my role (to develop training), and I should be able to make the time and resources available." P13

Professional/Social role & identity

"I really enjoy doing it. I hope I come across quite passionate about the topic ... I enjoy preparing the materials and updating them and trying to think different ways of presenting them." P14

Emotions

"So a lot of it is kind of reactionary rate. So you know, something will happen or something will change ... we then have to get that message out." P10

Environmental context and resources

Several barriers were discussed to the implementation of AMS education and training, some examples are:

"So for the junior doctors induction, we used to have a couple of slides with infection prevention, because they wouldn't give us our own slot, which I think tells you what trust boards and executives prioritise, which is really frustrating." P13

Environmental context and resources & Emotions

"There'll be misunderstandings, then you've just taught your junior doctors, but actually, they don't feel like they can go against what the consultants saying ... they don't feel empowered enough to I think, really challenged that, that sort of advice or decision." P20

Beliefs about consequences

References

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