Preparing the future pharmacy workforce: competency-based undergraduate curricula for teaching, learning and assessment with a focus on antimicrobial stewardship

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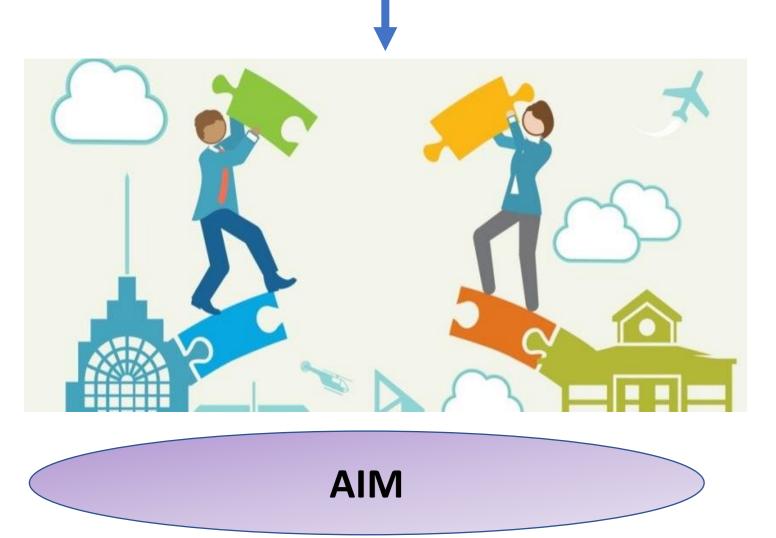
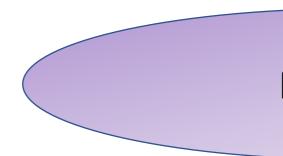Correspondence: a.tonna@rgu.ac.uk

INTRODUCTION

❖ Competency-based teaching, learning and assessment underpins the requirements for initial training and education of pharmacists in the UK and is set by the General Pharmaceutical Council.

❖ This pedagogic approach is conducive when teaching antimicrobial resistance (AMR) and antimicrobial stewardship (AMS).

❖ It ensures student pharmacists gain the necessary skills and behaviours to apply knowledge effectively in clinical practice.

BRIDGING THE GAP BETWEEN SKILLS AND BEHAVIOURS

AIM

To ensure that the future workforce has the necessary knowledge and skills to address AMS and AMR, a UK-wide national AMS competency framework specifically for student pharmacists has been developed.

METHOD

❖ A working group of academics and pharmacy practitioners from all four nations and with expertise in AMS was set up in September 2022.

❖ Student pharmacists from a national organisation and a professional pharmacy body are also members.

❖ Development of the consensus indicative curriculum for student pharmacists was adapted from published frameworks including those for UK undergraduate medical students, and a UK wide set of generic AMS competencies for undergraduate healthcare professional education.

OUTCOMES

❖ The final curriculum consists of 6 domains: Infection prevention and control, antimicrobials and antimicrobial resistance, antimicrobial prescribing and stewardship, vaccine uptake, person-centred care and interprofessional collaborative practice.

❖ Each domain includes a competency statement together with 74 accompanying descriptors clearly outlining the knowledge and application required by the newly qualified pharmacist.

❖ The group is now progressing the development of a practice-based assessment framework to support pharmacists supervising students on placement.

EXAMPLE

Domain 2
Antimicrobials and antimicrobial resistance

Competency statement
All newly qualified pharmacists need to understand the core knowledge underpinning the action of antibiotics and the concept of antimicrobial resistance; and use this knowledge to help prevent antimicrobial resistance.

Descriptors Examples (2 of 8)

2.01. Demonstrate an understanding of the major classes of antimicrobials, their mechanisms of action and their spectrum of antimicrobial activity in terms of Gram-positive, Gram-negative, anaerobic and atypical bacteria and viruses, fungi and parasites

2.08. Demonstrate an understanding of the concept of One Health where AMR is concerned and the inter-dependencies between human health, animal health, agriculture, food and the environment

CONCLUSION

❖ This project is timely to support development of future pharmacists as leaders in AMS since they will be independent prescribers at the point of registration from 2026.

❖ Though it is not mandatory to implement this curriculum, it provides a benchmark for embedding the competencies into undergraduate pharmacy curricula and allows identification of topics that may not be adequately covered. It also promotes consistency of approach across schools.

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