

Pharmacists' Knowledge, Attitudes, and Perceptions Towards Antimicrobial Stewardship and Resistance During the COVID-19 Pandemic at Secondary Care Settings in the UK.

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Background

Antimicrobial resistance (AMR) is a rapidly escalating pandemic, presenting a critical global health challenge [1]. In response, the UK Government developed a 5-year national action plan, 'Confronting Antimicrobial Resistance 2024 to 2029,' to optimise antimicrobial use [2]. The WHO advocates for antimicrobial stewardship (AMS), and the Royal Pharmaceutical Society emphasised pharmacists' role [3]. Investigating pharmacists' knowledge, attitudes, and perceptions (KAP) towards antibiotic prescribing and AMS enhances global efforts to combat AMR [5]. This study aims to investigate pharmacists' KAP regarding antibiotic prescribing, AMR, and AMS practices during the COVID-19 pandemic to improve global efforts.

Methods

In 2023, a prospective cross-sectional study was conducted using an online survey questionnaire via Qualtrics to evaluate pharmacists' KAP regarding antibiotic prescribing, AMR, and AMS. Ethical approval was obtained, and implicit consent was assumed. The participants were registered pharmacists working in a secondary care setting at an NHS Foundation Trust within the UK during the COVID-19 pandemic. The study involved patient and public involvement from the Citizens Senate and was registered with the ISRCTN and OCTOPUS registries. Data was analysed using descriptive statistics and IBM SPSS Statistics. A sample size of 125 was considered for a 5% margin of error and 95% confidence level.

Results

- The results showed that most respondents were aged 25-31 (44.0%), held postgraduate degrees (70.4%) and had 6-20 years of experience (41.6%).
- In terms of knowledge, high percentages agreed that antimicrobial resistance is a public health concern (84.8%), and implementing AMS promotes prudent antibiotic use (61.6%).
- Regarding attitudes and perceptions, the respondents indicated agreement with updated antibiotic guidelines (56.8%) and supported informed decisions with input from microbiologists and AMS teams (79.2%).
- As for AMS practice, the respondent pharmacists agreed on the importance of antibiotic review post-culture (80%) and acknowledged the effective use of technology to facilitate multidisciplinary meetings (63.2%).

Figure 2. Attitude and perception of pharmacists towards antibiotic prescribing and AMS during the pandemic.

Time pressure challenges affected antibiotic decision-making

The changing clinical conditions of COVID patients influenced antibiotic prescribing

Prescribing broad-spectrum antibiotics is often viewed as more effective when dealing with resistant pathogen

The antibiotic guidelines in my trust were updated

Communication with microbiologists and stewardship team supported more informed decisions about antibiotic use

Patients should continue antibiotics even with negative culture

Clinical judgment was prioritised over antimicrobial guidelines

Strongly disagree

Disagree

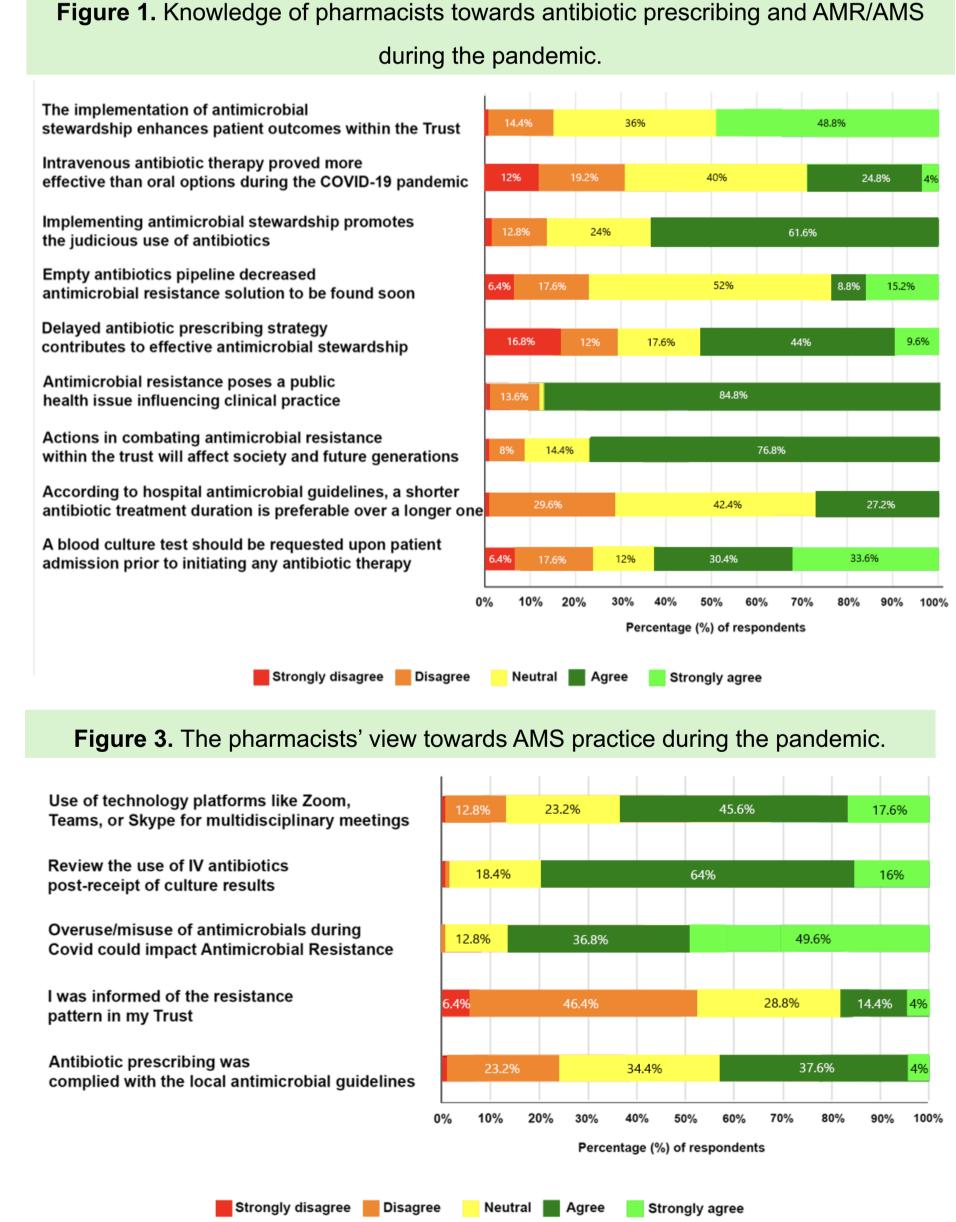
Disagree

Neutral

Agree

Strongly agree

Strongly agree



Conclusion

Pharmacists play a pivotal role in co-leading AMS during the COVID-19 pandemic. Their strong knowledge, attitudes, and perceptions highlight their potential to enhance multidisciplinary collaboration, communication, and the effective use of technology. By optimising AMS practices, pharmacists contribute significantly to global public health, improving patient safety and quality of care, and ultimately saving lives.

References

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