Evaluating Changes in Antibiotic Prescribing and AMS Practices at a UK NHS Trust: A Comparative Study of 2019 and the 2020 COVID-19 Period

Authors: Rasha Abdelsalam Elshenawy¹

Publication Type: Rationale / Hypothesis

Publication Date: 7th January 2024

Language: EN

License Type: CC BY 4.0

DOI: 10.57874/nv07-6×75

The hypothesis for the study "Evaluating Changes in Antibiotic Prescribing and AMS Practices at a UK NHS Trust: A Comparative Study of 2019 and the 2020 COVID-19 Period" is grounded in the urgent global public health crisis of Antimicrobial Resistance (AMR). With AMR causing over 1.2 million deaths annually, the COVID-19 pandemic has further complicated this issue, notably increasing antibiotic use and impacting Antimicrobial Stewardship (AMS) practices. This study aims to evaluate and compare antibiotic prescribing and AMS implementation at an NHS Foundation Trust in the UK, before (2019) and during (2020) the COVID-19 pandemic, particularly for respiratory tract infections.

Given the increased antibiotic use reported in the English surveillance programme for antimicrobial utilisation and resistance (ESPAUR) 2023 report post-pandemic, and the WHO's emphasis on tackling AMR, this study seeks to understand the direct implications of the pandemic on AMS practices. The cross-sectional survey with healthcare professionals (HCPs) at the Trust will assess their knowledge, attitudes, and perceptions regarding antibiotic prescribing and resistance during this period.

Furthermore, the study will analyse data using the WHO's AWaRe classification for antibiotic stewardship, a tool designed to combat AMR. By evaluating the 'Five Rights' of antibiotic safety (right patient, right drug, right dose, right route, and right time) before and during the pandemic, the research aims to identify shifts in AMS practices and antibiotic prescribing patterns, thereby contributing to global efforts in AMR containment and effective stewardship. This study underscores the need for robust AMS practices, especially during health crises, to ensure the continued effectiveness of antibiotics and safeguard public health.

Affiliations

1. University of Hertfordshire: Watford, Herefordshire, GB

References

English surveillance programme for antimicrobial utilisation and resistance (ESPAUR) report: . https://www.gov.uk/government/publications/english-surveillance-programme-antimicrobial-utilisation-and-resistance-espaur-report

Start smart then focus: antimicrobial stewardship toolkit for inpatient care settings: . https://www.gov.uk/government/publications/antimicrobial-stewardship-start-smart-then-focus-antimicrobial-stewardship-toolkit-for-inpatient-care-settings

The WHO AWaRe (Access, Watch, Reserve) antibiotic book: https://www.who.int/publications/i/item/WHO-MHP-HPS-EML-2022.02

Antimicrobial stewardship implementation before and during the COVID-19 pandemic in the acute care settings: a systematic review: .

https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-023-15072-5

Antibiotic prescribing in an English secondary care setting before and during the COVID-19 pandemic: .

https://www.isrctn.com/ISRCTN14825813

Parent publications

How did the COVID-19 pandemic impact antibiotic prescribing and antimicrobial stewardship in acute care settings?

Funders

No sources of funding have been specified for this publication.

Conflict of interest

DOI: <u>10.57874/nv07-6×75</u>

This publication does not have any specified conflicts of interest.