

An Audit on Trust Guidelines Compliance on Management of Urinary tract Infections in over 65s

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INTRODUCTION

Urinary tract infections (UTIs) are the second most common community-acquired infection and the leading cause of hospital infections in individuals over 65 years. UTI treatment is a major driver of antibiotic resistance (AMR), with E. coli being the primary pathogen causing this in the UK.

Asymptomatic bacteremia is common in over 65s and does not lead to increased morbidity. However, unnecessary antibiotic exposure increases the risk of harm, including AMR and C.difficile infection, contributing to the rising AMR-related mortality.

OBJECTIVES & METHODOLOGY

This study aimed to assess compliance with UTI management guidelines in the Geriatrics wards at Royal Stoke Hospital, comparing practice with University Hospitals of North Midlands (UHNM) guidelines.

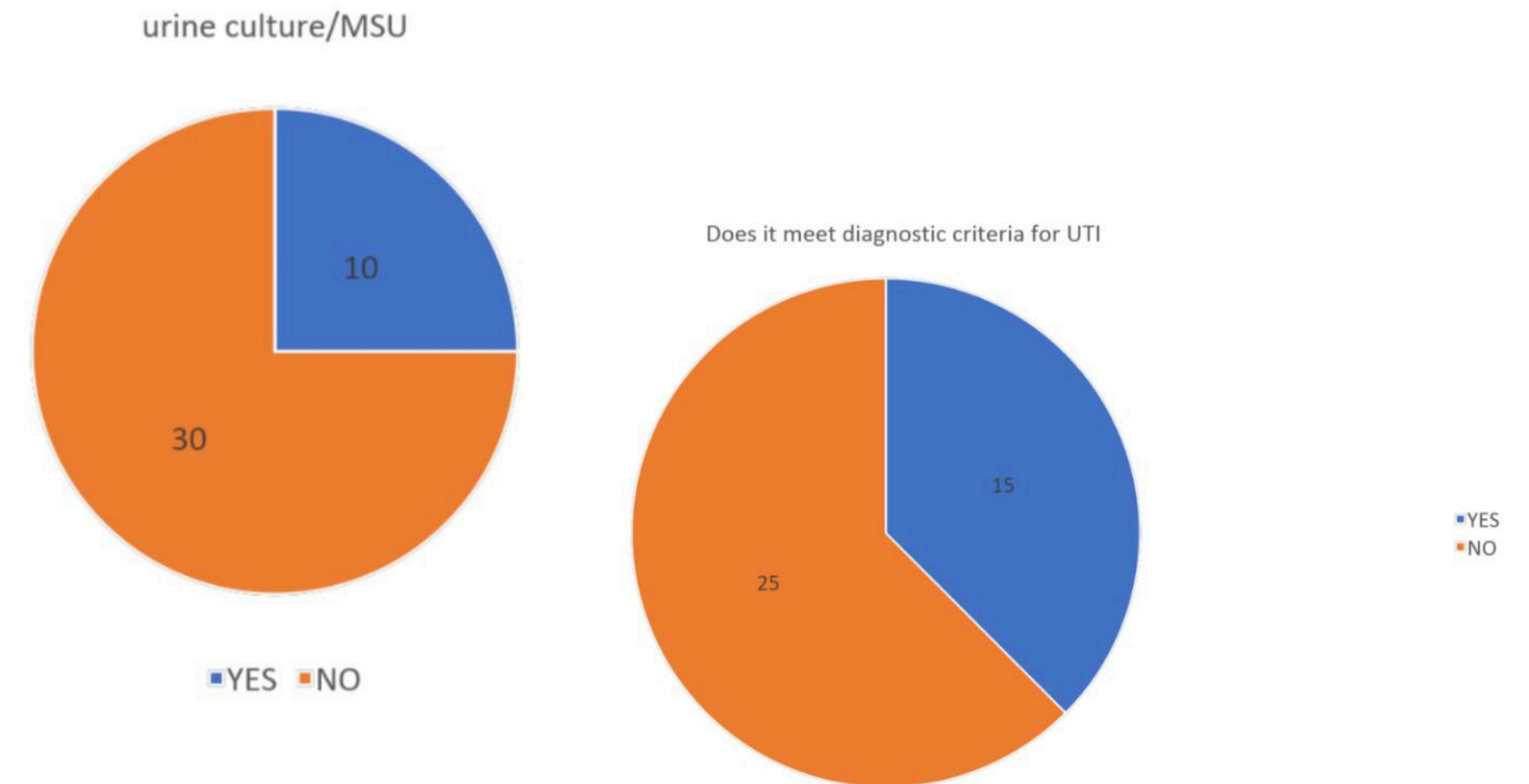
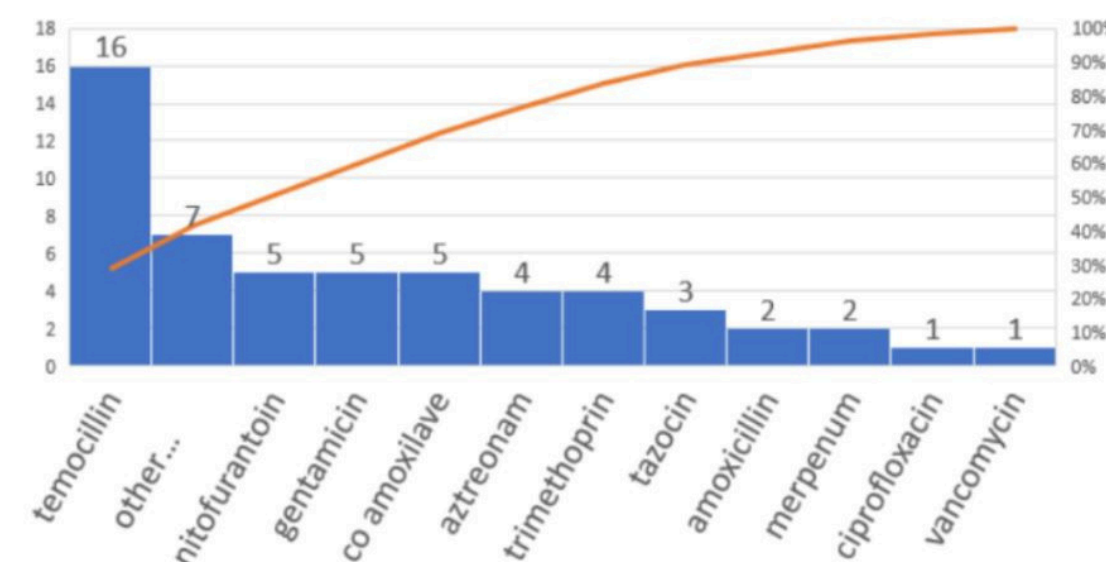
- 40 patients
- Population: ≥65 years
- Setting: UHNM Wards (FEAU, AMU)
- Inclusion: Patients diagnosed and treated as UTI.

For suspected UTIs, antibiotics should ONLY be started if at least **2 new** symptoms are present = *dysuria, urgency, incontinence, delirium, suprapubic pain, or haematuria*. In cases with only one symptom, antibiotics are not indicated, and alternative diagnoses should be considered. At the same time, before antibiotics are started a urine culture should be sent, and we should not treat a UTI based only on urine microscopy results.

RESULTS

- Catheterised before diagnosis: **38%**
- Other diagnoses (mainly HAP): **18%**
- Urine culture before antibiotics: **25%**
- Temocillin use: **40%**
- Met diagnostic criteria for UTI: **38%**

The results show that **62%** of patients did **not** meet the UHNM UTI diagnostic criteria. Primarily as antibiotics were started for UTI when only one of the above symptoms was found, mainly delirium.



CONCLUSION

This study highlights the misdiagnosis and inappropriate treatment of UTIs in patients over 65s, which contributes to AMR and worsens patient outcomes. Adhering to guidelines is essential for improving care and reducing unnecessary antibiotic use. Further, this topic requires further teaching and interventions to improve patient care.

FURTHER INTERVENTIONS

- Teaching sessions will be done for geriatric doctors explaining the importance of utilizing antibiotics for the elderly wisely as well as when to treat at UTI or look for other causes of delirium.
- Posters on UTI Guidelines will be placed around A&E, AMU and Elderly Care Wards.
- Emphasis on undertaking MSU before starting antibiotics and not to diagnose UTIs from the urine dip only.

