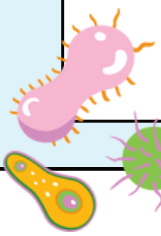
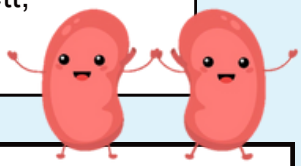
DEVELOPMENT OF A DECISION-MAKING FLOWCHART TO IMPROVE THE ONGOING MANAGEMENT AND FOLLOW-UP OF CHILDREN WITH URINARY TRACT INFECTIONS (UTIS)

Dr Sarah Mills, Dr Rhiannon Hoggins, Dr Fiona Hignett,
Dr Steve Wadams (University Hospitals Dorset)





Introduction

- In children < 2 years with a febrile illness, the prevalence of UTIs is 5% (1)
- There is associated risk of meningitis (in neonates), renal injury and scarring
- Interpretation of urine microscopy & culture (MC&S) is an important task for paediatricians
- Management may also include organising appropriate follow-up and imaging

Methods

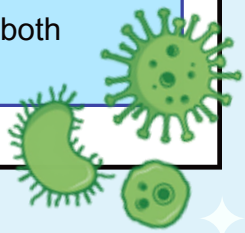
- Surveys sent to clinicians
- Assessment made of previous knowledge/ confidence in this area
- Decision-making flowchart developed based on NICE guidelines (2)
- Teaching session delivered
- Flowchart introduced & efficacy assessed with clinical scenarios
- Post-intervention questionnaires were distributed and feedback received

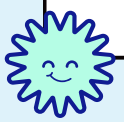
Results

- 15 respondents completed the initial questionnaire
- Clinicians' self-rated median confidence for interpreting urine samples was 7/10 & for arranging follow-up was 3/10
- 93% had not received formal post-graduate teaching surrounding the management of UTIs in children, interpretation of results & follow-up
- Following delivery of the teaching session and introduction of the flow chart, the median confidence score had increased to 8/10 in both categories

Conclusions

- Urine MC&S interpretation & organising appropriate follow-up is a common task for clinicians
- Formal teaching is often not received leading to a lack of confidence & knowledge
- The flowchart was perceived as simple to follow, summarising the appropriate information required
- Clinicians felt that this would save time & ensure investigations are not missed, leading to improved patient care
- Future work includes incorporating the teaching session into the paediatric medical induction & ongoing assessment of the efficacy of the flowchart in clinical practice





References:
1) Urinary tract infections in children. BMJ Best Practice. 2018.
2) Urinary tract infection in under 16s: diagnosis and management. NICE. 2022.