Infection and Drug Resistance

Dovepress
open access to scientific and medical research

Open Access Full Text Article

LETTER

Prevalence and Antimicrobial Sensitivity Patterns of Uropathogens in Wad Medani, Sudan: A Three Year, Cross-Sectional Study [Letter]

Isak Roberth Akollo

Department of Nursing, Universitas Kristen Indonesia Maluku, Ambon, Maluku, Indonesia

Correspondence: Isak Roberth Akollo, Department of Nursing, Universitas Kristen Indonesia Maluku, Ambon, Maluku, Indonesia, Email robijurnal@gmail.com

Infection and Drug Resistance downloaded from https://www.dovepress.com/
For personal use only.

Dear editor

I have read a research article entitled "Prevalence and Antimicrobial Sensitivity Patterns of Uropathogens in Wad Medani, Sudan: A Three Years, Cross-Sectional Study" by Yousif B Hamadalneel, Hifa O Ahmed, Marwa F Alamin, Walaa M Almahy, Zainab M Almustafa, Yousif M Yousif, Mohammed A Taha.[1] I would like to congratulate the author on this successful article, and make a contribution. This research provides valuable insight into the prevalence of uropathogens in Wad Medani, Sudan, and their antimicrobial sensitivity patterns. By identifying the common bacterial uropathogens associated with urinary tract infections in this region and determining their susceptibility to antibiotics, the study contributes to understanding the local epidemiology of UTIs and guiding appropriate empirical antibacterial therapy. The findings highlight the importance of monitoring antimicrobial resistance patterns, especially in developing countries like Sudan, to combat the global challenge of antimicrobial resistance.

Although this research has advantages, this research also has several limitations that need to be considered in future research other than those presented by researchers in this journal. 1) this study did not consider confounding variables, such as patient comorbidities, history of previous antibiotic use, health service related factors, and patient socioeconomic status. These variables may influence the relationship between uropathogen prevalence and antimicrobial sensitivity patterns, thereby influencing study results.[2] Failure to control for confounders can lead to biased results. Researchers need to account for and control for these confounding variables to ensure the validity and reliability of their findings. 2) The study data collection period from 2021 to 2023 may not capture seasonal variations or temporal trends in patterns of uropathogen prevalence and antimicrobial sensitivity, so the analysis in this study may not take into account temporal trends in antimicrobial resistance patterns among uropathogens. Failure to consider changes over time may limit understanding of the development of antibiotic resistance profiles and effectiveness. 3) The research's reliance on urine samples collected from patients in certain locations such as Wad Medani influences the generalization of the research results. These samples may not be representative of the diversity of uropathogens and antimicrobial resistance patterns in other regions or health care settings.[3,4] Uropathogen prevalence and antimicrobial resistance patterns may vary geographically due to differences in health care practices, demographics, and environmental factors. In context epidemiology, including population density, sanitation practices and access to health services, may not be representative of other areas. These factors may influence the dynamics of uropathogen transmission and the development of antimicrobial resistance.

Disclosure

The author reports no conflicts of interest in this communication. The author alone is responsible for the content and writing of the paper.

Received: 17 June 2024
Accepted: 21 June 2024
Published: 25 June 2024

© 2024 Akollo. This work is published and licensed by Dove Medical Press Limited. The full terms of this license are available at https://www.dovepress.com/terms.php and incorporate the Creative Commons Attribution – Non Commercial (unported, v3.0) License (http://creativecommons.org/licenses/by-nc/3.0/). By accessing the work you hereby accept the Terms. Non-commercial uses of the work are permitted without any further permission from Dove Medical Press Limited, provided the work is properly attributed. For permission for commercial use of this work, please see paragraphs 4.2 and 5 of our Terms (https://www.dovepress.com/terms.php).

References

1. Hamadalneel YB, Ahmed HO, Alamin MF, et al. Prevalence and antimicrobial sensitivity patterns of uropathogens in wad medani, Sudan: a three years, cross-sectional study. *Infect Drug Resist*. 2024;17:2131–2140. doi:10.2147/IDR.S464501
2. Kebede T, Ashenafi H. The burden and risk factors of helicobacter pylori infection among government employees who clinically complain of indigestion but allergic diseases in Southeastern Ethiopia: a multi-institution cross-sectional study. *Res Rep Trop Med*. 2024;15:25–49. doi:10.2147/RRTM.S447203
3. Akollo IR. Knowledge, attitude, and practices of mothers working as nurses toward multidrug-resistant: impact of an educational program in Neonatal Intensive Care Unit (Letter). *Infect Drug Resist*. 2024;17:1937–1950. doi:10.2147/IDR.S480707
4. Salenussa PB, Akollo IR. Attitude and understanding of artificial intelligence among Saudi medical students: an online cross-sectional study [Letter]. *J Multidiscip Healthc*. 2024;17:2441–2442. doi:10.2147/JMDH.S477582

Dove Medical Press encourages responsible, free and frank academic debate. The contentTxt of the Infection and Drug Resistance 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Infection and Drug Resistance editors. While all reasonable steps have been taken to confirm the contentTxt of each letter, Dove Medical Press accepts no liability in respect of the contentTxt of any letter, nor is it responsible for the contentTxt and accuracy of any letter to the editor.

Infection and Drug Resistance Dovepress

Publish your work in this journal

Infection and Drug Resistance is an international, peer-reviewed open-access journal that focuses on the optimal treatment of infection (bacterial, fungal and viral) and the development and institution of preventive strategies to minimize the development and spread of resistance. The journal is specifically concerned with the epidemiology of antibiotic resistance and the mechanisms of resistance development and diffusion in both hospitals and the community. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/infection-and-drug-resistance-journal

https://doi.org/10.2147/IDR.S483116