

NMA/AGSM/2022/BCS/006 - Point Prevalence Survey of Hospital-Acquired Infections in a Tertiary Institution, in Southern Nigeria

*Bob-Manuel M¹, Oboro I. L¹, Okafor AC¹, Briggs DC², Amadi SC³, Enyinnaya SO¹, Uzosike TC⁴, Lawson SD¹, Dan-Jumbo AI⁵, Aaron FE⁶.

¹Department of Medical Microbiology and Parasitology, Rivers State University Teaching Hospital.

²Department of Paediatrics, Rivers State University Teaching Hospital, Port Harcourt, Nigeria. ³Department of Obstetrics and Gynaecology, Rivers State University Teaching Hospital, Port Harcourt, Nigeria.

⁴Department of Community Medicine, Rivers State University, Port Harcourt, Nigeria. ⁵Department of Family Medicine, Rivers State University Teaching Hospital, Port Harcourt, Nigeria. ⁶Department of Orthopaedic Surgery, Rivers State University Teaching Hospital, Port Harcourt, Nigeria.

Abstract

Background: Hospital-acquired infections (HAIs) contribute significantly to morbidity, mortality, and economic burden to patients. This study aimed to identify HAIs and their antimicrobial management in Rivers State University Teaching Hospital (RSUTH), Port Harcourt, Nigeria.

Methodology: A point prevalence survey was conducted in November 2021 at RSUTH. Data was collected and analyzed using the protocol and web-based data management system recommended by the Global Point Prevalence Survey of Antimicrobial Consumption and Resistance of the University of Antwerp.

Results: A total of 100 patients from adult and paediatric medical and surgical wards, and neonatal intensive care unit (NICU) were surveyed, among whom 10 (10%) had HAIs. Forty percent of these were over 50 years old. Five (50%), three (30.0%), and two (20%) were admitted to male medical, female medical, and NICU respectively. Clinical HAI types were sepsis (30.0%), skin and soft tissue (30.0%), intra-abdominal (10.0%) and urinary tract infections (10.0%), pneumonia (10.0%), and malaria (10.0%). They were prescribed 17 antimicrobials: 1 targeted and 16 empirics: the majority of which were third generation Cephalosporins (43.8%), and Imidazoles (18.8%). Ten (62.5%) of these belong to the World Health Organization's Watch group of antibiotics.

Conclusion: The prevalence of HAIs is high with sepsis, and skin and soft tissue infections predominating. A high rate of use of Watch antibiotics for empirical treatment was observed. We recommend that healthcare providers optimize infection prevention and control practices including the use of care bundles. Management of HAIs should be targeted, based on laboratory evidence, to optimize antimicrobial stewardship.

Keywords: Hospital Acquired Infections; Nigeria; Point Prevalence Survey.

Corresponding Author: *Bob-Manuel Mienye, Department of Medical Microbiology and Parasitology, Rivers State University, Port Harcourt, Nigeria. mienye.bob-manuel@ust.edu.ng

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