



## STRENGTHENING ANTIBIOTIC STEWARDSHIP IN THE NEONATAL UNIT OF MOWBRARY MATERNITY HOSPITAL.

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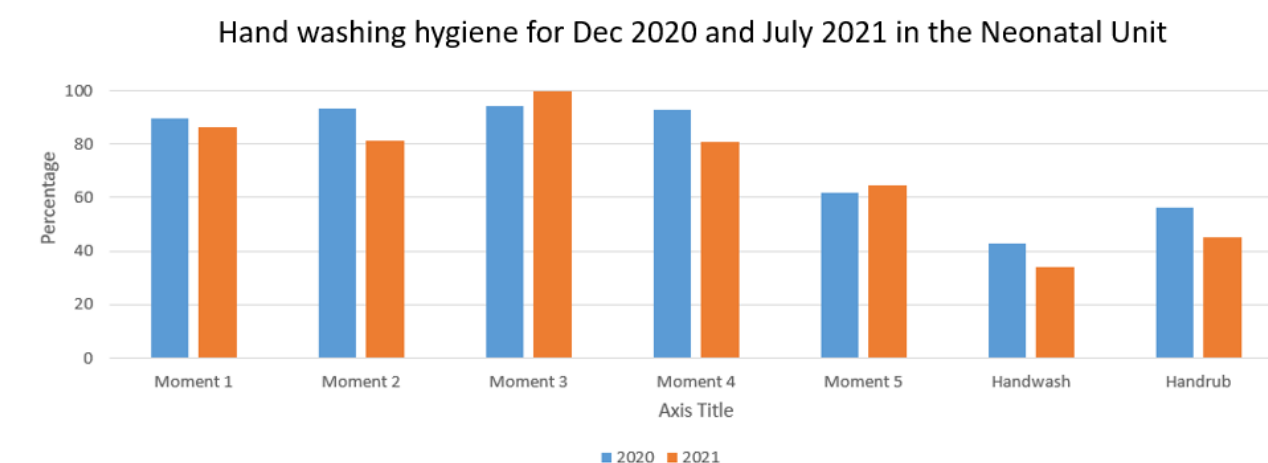
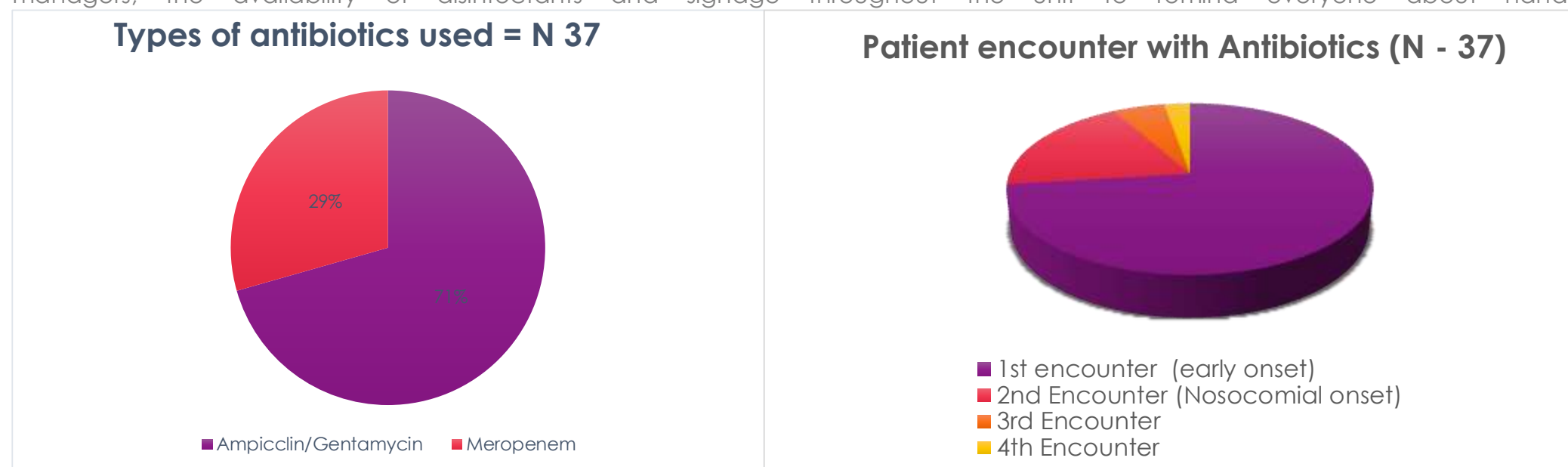
**Background:** Antibiotics are the most prescribed medication in Neonatal Intensive Care Units (NICUs) especially for treatment of early onset sepsis. Strict measures to minimize infections such as handwashing hygiene (HH)<sup>1</sup> and an Antibiotic stewardship program (ASP) have been shown to be effective in reducing antibiotic exposure. An ASP can be done by either restricting use of reserved<sup>2</sup> antibiotics or a prospective audit feedback. Because of different protocols across the globe, there are very few studies on antibiotics stewardship done in neonatal units in the lower middle Income countries.

**Objective:** To assess antimicrobial usage, prescription practices, sensitivity patterns, adherence to antibiotic stewardship and handwashing hygiene practices in the neonatal unit at Mowbray Maternity Hospital.

**Methods:** A descriptive, cross-sectional study was performed to assess antibiotic stewardship and HH in two periods between November 2020 and July 2021. We reviewed patients' folders and hand washing using a validated WHO tools. In-depth interviews were conducted with staff members to better understand their views on antibiotics stewardship and handwashing hygiene. After the first audit, feedback was provided to the team. This was followed by training on handwashing hygiene which was conducted by the infection prevention nurse.

**Results:** A total of 246 patients' folders were reviewed during the study period. Of the folders reviewed 37 (14.6%) babies were on antibiotics, of which 97% were adherent to the guidelines. A positive culture is communicated and babies with resistant organisms are nursed in a cohort. There is a treatment guideline which is accessible to all doctors and consultation with a senior doctor is encouraged before prescribing antibiotics. Overall HH for the unit was 81.4% however moment five of HH, which is handwashing after touching a patients' surrounding area, had the worst compliance at only 62%.

From in-depth interviews, the factors that contributed to high percentages of HH include a strong support from the senior staff and nursing managers, the availability of disinfectants and signage throughout the unit to remind everyone about handwashing.



"...There are ID rounds but most of the antibiotics stewardship I have learned is from an online platform I attended, I really think there is a need for a formal training,"

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**Conclusion:** MMH does follow strong antibiotics stewardship principles, however the staff feels there is still a need to have regular training on hand washing hygiene and formal antibiotics stewardship training.

*This project was funded by a Research Award from the Department of Paediatrics and Child Health, University of Cape Town*

1. Hand wash and hand rub  
2. Second line antibiotics : Meropenem, Cephalosporin