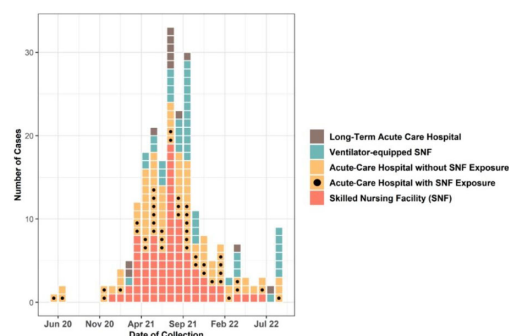


Figure 1: Confirmed and Probable NDM-CRAB Cases by Collection Facility Type, May 2020–September 2022 (N=230)



through colonization screening. Among 176 NDM-CRAB isolates, the most common specimen sources were respiratory ($n = 29$), wound ($n = 28$), and urine ($n = 24$), and 87 (49%) of 176 isolates were nonsusceptible to all antimicrobials tested. Among patients, median age was 65 years (range, 24–97), 127 (55%) were male, 37 (15%) were Hispanic or Latino, and 100 (43%) were White. We identified 37 outbreak facilities across 13 counties, including 25 acute-care hospitals (ACHs), 6 skilled nursing facilities (SNFs), 5 ventilator-equipped SNFs (vSNFs), and 1 long-term ACH. We identified 125 cases (54%) in SNFs and vSNFs and 93 cases (40%) in ACHs; among ACH patients, 43 (46%) had been SNF or vSNF residents within the prior year. No patients reported international exposure. **Conclusions:** The first known case of NDM-CRAB in California was detected by sentinel surveillance. In this extensive regional outbreak, most cases were identified by screening at public health and clinical laboratories. Transmission occurred across healthcare settings connected by patient sharing, underscoring the importance of communication, active surveillance, and implementation of infection prevention and control practices to mitigate spread within and between facilities. Expanding these efforts, with support and resources from public health departments, is key to detecting, characterizing, and containing future outbreaks of antimicrobial-resistant pathogens.

Disclosure: None

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Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Antibiotic Stewardship

Three-day antibiotic duration in patients with pneumonia: A sixty-eight-hospital cohort

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Background: Since 2019, community-acquired pneumonia (CAP) guidelines have recommended hospitalized patients be treated until clinical

“stability and for no less than 5 days.” However, randomized trials have reported that, in patients who stabilize by hospital day 3, very short antibiotic durations (eg, 3 days) are noninferior to longer durations. How these trial results relate to real-world practice is unknown. **Methods:** Using a 68-hospital cohort study of hospitalized, general-care adults with CAP, we aimed to (1) quantify the percentage of patients who—according to trial criteria—qualify for a 3-day antibiotic duration, (2) quantify the percentage who actually received a 3-day duration, and (3) assess 30-day outcomes. Patients were considered to have CAP if they had a pneumonia discharge diagnosis and met clinical criteria for CAP. Patients with concomitant infections (including COVID-19), admission to intensive care, or severe immunocompromise were not included. **Results:** Between February 23, 2017, and August 3, 2022, 36,064 patients with CAP were included. Of those, 48.2% (9,826 of 36,064) were excluded due to a condition or organism ineligible for the 3-day treatment (Fig. 1). Of the 18,690 patients remaining, 52.6% (9,826) were unstable on day 3 and thus were ineligible for the 3-day treatment. Therefore, of all 36,064 patients, only 8,864 (24.6%) would be eligible under trial criteria for a 3-day treatment. Notably, 5,493 (55.9%) of 9,826 patients unstable on day 3 would be eligible for 5 days of treatment under national guidelines. In practice, use of 3–4-day treatment was rare, occurring in 599 (6.8%) of 8,864 patients eligible for a 3-day treatment versus 660 (6.7%) of 9,826 patients unstable on day 3 ($P = .945$). Use of 3–4-day treatment increased over time and comorbidities that could mimic CAP or a negative procalcitonin were more common in patients who received a 3–4-day treatment whereas specific symptoms of CAP were less common (Fig. 2). After adjustments, patients eligible for a 3-day duration who received a 3–4 day treatment versus a ≥ 5 -day treatment had higher 30-day mortality (aOR, 1.87; 95% CI, 1.32–2.64) and readmission (aOR, 1.35; 95% CI, 1.17–1.56). **Conclusions:** Across 68 hospitals, <25% of patients hospitalized with CAP would be eligible for a 3-day antibiotic treatment. Though increasing over time, there was little use of 3–4-day treatments and, when prescribed, outcomes were worse, potentially due to CAP misdiagnosis. Given the small number of patients eligible for 3-day treatment, and the potential harm with too-short durations, it may be prudent to focus on increasing the use of 5-day treatments.

Disclosures: None

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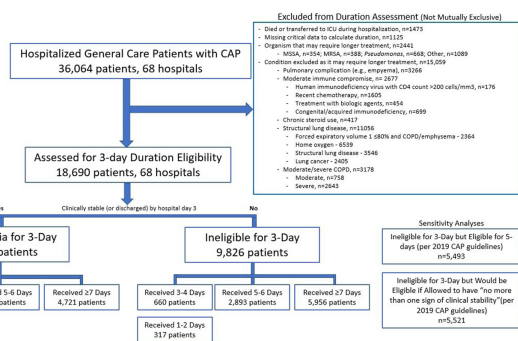
Poster Presentation - Poster Presentation

Subject Category: Antibiotic Stewardship

High prevalence of antibiotic use in a tertiary-care hospital in Sierra Leone: We need to handle antibiotics with care

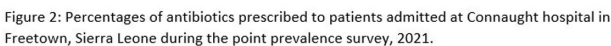
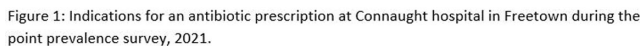
Ibrahim Franklyn Kamara; Bobson Fofanah; Bockarie Pharaj Sheriff; Victoria Katawera; Robert Musoke; Sulaiman Lakoh; Kadijatu Nabie Kamara and Joseph Sam Kanu

Background: Antimicrobial resistance (AMR) is a global public health concern that has the potential to reverse decades of progress aimed at decreasing morbidity and mortality attributed to infectious diseases. In 2019, ~5 million deaths were associated with AMR, of which 1.2 million were attributed to antibacterial-resistant infections. Healthcare facilities where antimicrobials are frequently used are high-risk settings for the selection and spread of resistant bacteria, and they further contribute to the increase in the burden of AMR. We have documented the prevalence and indication of antibiotic use in a tertiary-care referral hospital in Freetown, Sierra Leone. **Methods:** This point-prevalence survey was conducted at Connaught hospital, a tertiary-care hospital in Sierra Leone, in November 2021. The hospital offers a range of medical and surgical services through 25 units and has 16 wards with >300 beds. Data on patient-level antibiotic use, including indications for use, were extracted from medical records using WHO point-prevalence survey (PPS) forms that had been pretested and validated. Data collection was conducted in all the wards over a 10-day period by trained healthcare personnel. On the day of the survey, only the medical records of patients on admission



| Variable | Selected all days n=3644 | Selected all days n=3644 | P-value |
|---------------------------------------|-----------------------------|-----------------------------|---------|
| Age (mean, standard deviation, range) | 53.6 (4.1, 18-89) | 53.6 (4.1, 18-89) | <0.001 |
| Gender | | | |
| Male | 1517 (41.6%) | 1517 (41.6%) | 0.999 |
| Female | 2127 (58.4%) | 2127 (58.4%) | 0.999 |
| Marital status | | | |
| Married | 1711 (46.9%) | 1711 (46.9%) | 0.999 |
| Unmarried | 1933 (53.1%) | 1933 (53.1%) | 0.999 |
| Education | | | |
| High school or below | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| College | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| Postgraduate | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| Occupation | | | |
| Government employee | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| Private employee | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| Self-employed | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| Retired | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| Unemployed | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| Religion | | | |
| Hindu | 1517 (41.6%) | 1517 (41.6%) | 0.999 |
| Muslim | 2127 (58.4%) | 2127 (58.4%) | 0.999 |
| Others | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| Smoking status | | | |
| Smoker | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| Non-smoker | 2633 (72.3%) | 2633 (72.3%) | 0.999 |
| Alcohol consumption | | | |
| Alcohol consumption | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| No alcohol consumption | 2633 (72.3%) | 2633 (72.3%) | 0.999 |
| Family size | | | |
| 1-2 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 3-4 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 5-6 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 7-8 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 9-10 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 11-12 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 13-14 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 15-16 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 17-18 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 19-20 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 21-22 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 23-24 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 25-26 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 27-28 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 29-30 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 31-32 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 33-34 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 35-36 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 37-38 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 39-40 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 41-42 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 43-44 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 45-46 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 47-48 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 49-50 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 51-52 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 53-54 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 55-56 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 57-58 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 59-60 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 61-62 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 63-64 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 65-66 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 67-68 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 69-70 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 71-72 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 73-74 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 75-76 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 77-78 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 79-80 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 81-82 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 83-84 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 85-86 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 87-88 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 89-90 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 91-92 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 93-94 | 1111 (30.5%) | 1111 (30.5%) | 0.999 |
| 95-96 | 1522 (41.8%) | 1522 (41.8%) | 0.999 |
| 97-98 | 1011 (27.7%) | 1011 (27.7%) | 0.999 |
| 99-100 | 11 | | |

Abbreviations: TQ, time-to-quit stage; DP, decessitating facility; CB, cigarette-based blood; CPT, chronic obstructive pulmonary disease; Lys, lisdexamfetamine; dCB, adjusted cigarette; GDI, cigarette day count.



2023;3 Suppl 2 S23