Antimicrobials, Multiple Drug Resistance & Antibiotics Resistance

Antibiotic utilization review in a Nigerian Tertiary Hospital

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Inappropriate use of medicines is widespread in teaching hospitals. The study aims to assess antibiotic use pattern among hospitalized patients in University of Port Harcourt Teaching Hospital (UPTH), Nigeria. A cross-sectional survey was conducted in medical, surgical, paediatrics, and obstetrics and gynecology wards from October 2015 to March 2016 using seventeen (17) core antimicrobial drug use indicators developed under the Rational Pharmaceutical Management Plus (RPM-Plus) Program of Management Sciences for Health and revised under the Strengthening Pharmaceutical Systems (SPS) Program. A total of 2356 patients' folders were reviewed retrospectively, and data obtained statistically analyzed. Additionally, sixteen inpatient physicians were interviewed to understand the reason behind the antibiotic prescribing practice observed. Antibiotics were prescribed in 68.8 percent of hospitalizations. Only 84.2 percent appeared on the essential drug list, 60.4 percent were injections and 39.9 percent were prescribed in generics. Each patient was prescribed 2.74 antibiotics at ₦13,632.00 cost averagely per hospitalization. Cephalosporin antibiotics were most commonly prescribed. The percentage of prescribed antibiotics actually administered was 87.4 percent, while 88.5% were empirically prescribed. About 35.0 percent of antibiotics were prescribed for respiratory tract infections. Only 62.2 percent of key antibiotics were available and there were no systems regulating antibiotics use at UPTH. Physicians reported certain factors influenced the antibiotic use pattern observed. Antibiotics use in UPTH did not conform to acceptable standards. Establishment of local protocols and systems regulating antibiotics use including an antibiotic stewardship program could improve rational antibiotic use; curtail cost and result in substantial savings.

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