

Major areas of improvement included: Prescribing Linezolid without ID/Micro approval, concomitant Vancomycin usage, Interrupted therapy, monitoring for hematological side effects of Linezolid (Thrombocytopenia) and baseline + periodic CBC monitoring. The compliance rate is still maintained to more than 95% till date.

**Conclusion:** Antibiotic restriction was successfully implemented by involving various stakeholders and modalities as listed in methodology section. With the successful implementation of antibiotic restriction and prior approval, ABSC is also reviewing the possible addition of other broad spectrum antibiotics like Tigecycline and Caspofungin etc.

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#### Antibiotics use pattern and knowledge of antibiotics resistance among undergraduates in a Nigerian university

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**Background:** Misuse of antibiotics is one of the notable causes of antibiotic resistance, but there is very little data on the community practices in our environment. The study is aimed at describing the antibiotic use pattern, knowledge and perception of antibiotic resistance among undergraduates at Obafemi Awolowo University.

**Methods:** This cross-sectional study was carried out from May - July 2011. 400 respondents were selected using a multistage sampling technique across six faculties. A Pilot tested semi-structured self administered questionnaire was used to collect data after informed consent was obtained. Data was analysed using SPSS. Frequency distributions and percentages were determined as applicable.

**Results:** Majority (73.8%) of respondents were aged between 15-24 years. Most (81.9%) of them admitted taking antibiotics without completing the full course while only 16.0% completed the full course of antibiotics. 20.5% of the respondents admitted taking incomplete courses every time, while 43.6% admitted doing so sometimes. Major reasons for stopping the antibiotic were; improvement in condition (47.3%) and dislike of medicine (14.1%).

Most (48.1%) got the prescription for the last antibiotic from a doctor, while a significant 18.1% were self prescribers. Only (0.5%) got their prescription from drug hawkers. Ampliclox, Ampicillin and Tetracycline were the most frequently used antibiotic. Convenience was the major reason reported for choosing the sources of antibiotics however, majority (63.3%) usually procure their antibiotics from a commercial pharmacy.

Some inappropriate reasons for antibiotic use were; 'fever unresponsive to other drugs' (44.8%), 'eating food suspected to be contaminated' (19.7%), 'to wash blood' (18.4%), and 'after unprotected sex'(5.1%) among others. More than half of the respondents (55.5%) have heard of antibiotic resistance and had good knowledge of it causes and consequences. (37.8%) have never heard of antibiotic resistance.

**Conclusion:** The study concluded that the antibiotic use pattern of the students was sub-optimal as many of them engaged in taking

incomplete courses of antibiotics while others engaged in inappropriate use of antibiotics, despite the high awareness of the problem of antibiotic resistance among them. These findings emphasize the need to educate the students on the judicious use of antibiotics.

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#### Improving outcomes in the treatment of cellulitis

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**Background:** We sought to identify risk factors that placed patients with cellulitis at risk for relapse and develop treatment strategies to prevent it from occurring.

**Methods:** This study was a retrospective chart review. Initial collection of patient-specific data included antibiotics prescribed, microbiology results, length of stay, risk factors for cellulitis, and prescriber specialty. Treatment guidelines for cellulitis were developed based on the IDSA guidelines. Physician education consisted of inservice presentations; posters promoting treatment guidelines were displayed throughout the hospital; an infectious disease physician gave Medical Grand Rounds on the topic; and an article was published in the physician's newsletter. Charts of a repeat sample of 50 cellulitis patients were reviewed to assess the effectiveness of standardizing therapy. Outcome data for patients in the post-intervention phase was compared to the patients in the baseline group.

**Results:** Fifty consecutive admissions of adult patients with a diagnosis of cellulitis were included in each phase of the study. In the initial group the mean age was 56 years and 48% were female. The average length of stay was 3.6 days. The mean age in the post-intervention group was 58.8 years and 48% were female as well. The average length of stay was 5.2 days. The use of penicillin/nafticillin and first generation cephalosporins increased in the post-intervention group (28%) compared to the initial group (18%). Only 17% of the patients in the initial group were switched to narrower spectrum agents once culture and sensitivity results became available compared to 31% in the post-intervention group. The use of quinolones while hospitalized and at discharge was 14% and 16% in the initial group, but their use decreased to 8% and 8% in the post intervention group. With it there was decrease in the number of clinical relapses and readmissions to the hospital in the post intervention group, 2% versus 10% in the baseline group.

**Conclusion:** By educating physicians to use agents with better Gram positive activity, e.g. penicillins and first generation cephalosporins in the treatment of cellulitis and discouraging the use of fluoroquinolones, we decreased the number of relapses and readmissions to the hospital.

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