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## **Background**

Antibiotics are among the most commonly prescribed drugs in paediatrics. Due to an overall rise in healthcare costs, lack of uniformity in drug prescribing despite standard treatment guidelines and the emergence of antibiotic resistance, monitoring and control of antibiotic use is of growing concern and strict antibiotic policies are warranted.

## **Purpose**

To access the prescribing pattern of antibiotic use in the treatment of prevalent paediatric diseases at Federal Medical Centre Owerri, to compare this pattern to the standard treatment guidelines and to estimate the cost implications of this pattern on the hospital drug budget.

## **Materials and Methods**

A retrospective study covering January 2002 to December 2006 was done. Medical records of paediatric in-patients of age 0-12 years were reviewed. Total number of cases was 5968.

## **Results**

The average number of medicines per patient ranged from 5.17 in 2002 to 7.9 in 2006 and percentage of antibiotics per prescription also ranged from 63.3 in 2002 to 86.6 in 2006. The most common disease in this hospital was malaria followed by bronchopneumonia. Out of the 5968 children clinically diagnosed with these diseases and treated with antibiotics, specimens were taken for culture in only 1648 cases (33%) to identify pathogenic organisms. Children 1-5 years received antibiotics more frequently than all the other groups. 80-86% of total antibiotics were administered parenterally and 80-85.5% of drugs were prescribed from the hospital formulary. Cephalosporins were the most frequently prescribed antibiotic followed by penicillin and then aminoglycosides. 21-26% of the hospital budget was spent on antibiotics. High-cost broad-spectrum antibiotics were commonly used.

## **Conclusions**

This study revealed significant flaws in the prescribing pattern of antibiotics in the paediatric department of this hospital. It is pertinent to note that because children are at greater risk of receiving multiple courses of antibiotics and in view of the risk of antibiotic resistance, strategies to control antibiotic resistance should focus on this patient population.

No conflict of interest

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