

Practices and challenges related to antibiotic use in paediatrics in Niger and Uganda

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Background

Antibiotic resistance (ABR) in children is responsible for high mortality, especially in low-income countries. Strengthening the rational use of antibiotics (ATBs) and improving access to quality ATB are important factors in the fight against ABR. This study described ATB use in pediatric medical settings and in select communities in Niger and Uganda in order to identify constraints and possible opportunities for improvement.

Methods

Descriptive study with mixed qualitative and quantitative methods in 4 different public health facilities in Niger and Uganda. Quantitative data were collected retrospectively from the consultation and inpatient records of all patients who consulted or were hospitalized in the study facilities on the 1st or 15th day of the month, between January and December 2019. Semi-structured interviews and focus groups were conducted among healthcare personnel and caregivers.

Results

In Niger, ceftriaxone, alone or in combination with gentamicin, accounted for approximately 60% of first-line prescriptions in referral hospitals. amoxicillin accounted for approximately 70% in peripheral structures. In Uganda, the most common ATB prescribed for in-patients was injectable ampicillin+gentamycin (26.6%), and oral amoxicillin-clavulanate (46.8%) for out-patients.

In both countries according to those interviewed, practitioners faced numerous constraints. These were principally the lack of nursing staff, unavailability of ATBs, and limited financial means of families. Self-medication was reported as a widespread practice for economic reasons. In Uganda, health care providers reported facing multiple pressures to prescribe ATBs, from caregivers as well as from drug company representatives. Caregivers interviewed reported struggling to give ATBs at home to their children and the need for adapted pediatric formulations.

Conclusions

In Niger and Uganda, the lack of health care personnel, the unstable availability of essential ATBs, limited financial means and self-medication lead health care professionals to adapt ATB prescriptions. Limiting the spread of ABR will necessitate multiple different interventions and development of laboratory capacities.

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