



Title: Pharmacological Management of Upper Respiratory Tract Infections in Children: An Assessment of a Tertiary Institution Practice.

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Background

Therapy addressing symptoms is recommended for the management of URTI. Antibacterial treatment of URTIs, in the absence of culture & sensitivity test is a risk factor for antimicrobial resistance.

Aim

To assess the medications used in the management of URTIs in children under-five years of age.

Methods

A retrospective review of prescription for URTI 's in under- fives, for a period of 12 months in a tertiary hospital in Abakaliki, Ebonyi State was conducted.

Systematic sampling technique was used to select prescriptions with interval of five working days in each month. Data was entered into SPSS version 28.0 .

Descriptive analysis was done.

Results

Gender & age distribution of patients

275 case notes were assessed. 90 patients (32.7%) were between 1 & 11 months & 17 (6.2%) were 60 months of age. **Mean age was 23.29 ± 17.287 (months).** 157 (57.1%) of the cases were males & 118 (42.9%) females.

Table 1: Tests done & patient diagnosis

| Variables | Characteristics | Frequency (%) | |
|------------------------|---|-------------------|------------|
| Tests | Nil | 265 (96.4) | |
| | Full blood count | 1 (0.4) | |
| | Malaria Rapid Diagnostic Test, Microscopic Culture and Sensitivity, throat swab | 1 (0.4) | |
| | Full blood count, Malaria parasite, blood film | 1 (0.4) | |
| | Ear Swab | 1 (0.4) | |
| | Malaria Rapid Diagnostic Test | 1 (0.4) | |
| | Full blood count, blood film | 1 (0.4) | |
| | Xray, blood film, nasal fixture | 1 (0.4) | |
| | Malaria parasite, blood group | 1 (0.4) | |
| | Fasting blood sugar, stool test | 1 (0.4) | |
| | Full blood count, blood film, Microscopic Culture and Sensitivity, throat swab | 1 (0.4) | |
| | Total | 275 (100) | |
| | Diagnosis | Non-specific URTI | 207 (75.3) |
| | | Tonsillitis | 46 (16.7) |
| Otitis media | | 8 (2.9) | |
| Rhinitis | | 6 (2.2) | |
| Cough | | 5 (1.8) | |
| Common cold | | 1 (0.4) | |
| Cough/common cold/URTI | | 1 (0.4) | |
| Rhinosinusitis | | 1 (0.4) | |
| Total | | 275 (100) | |

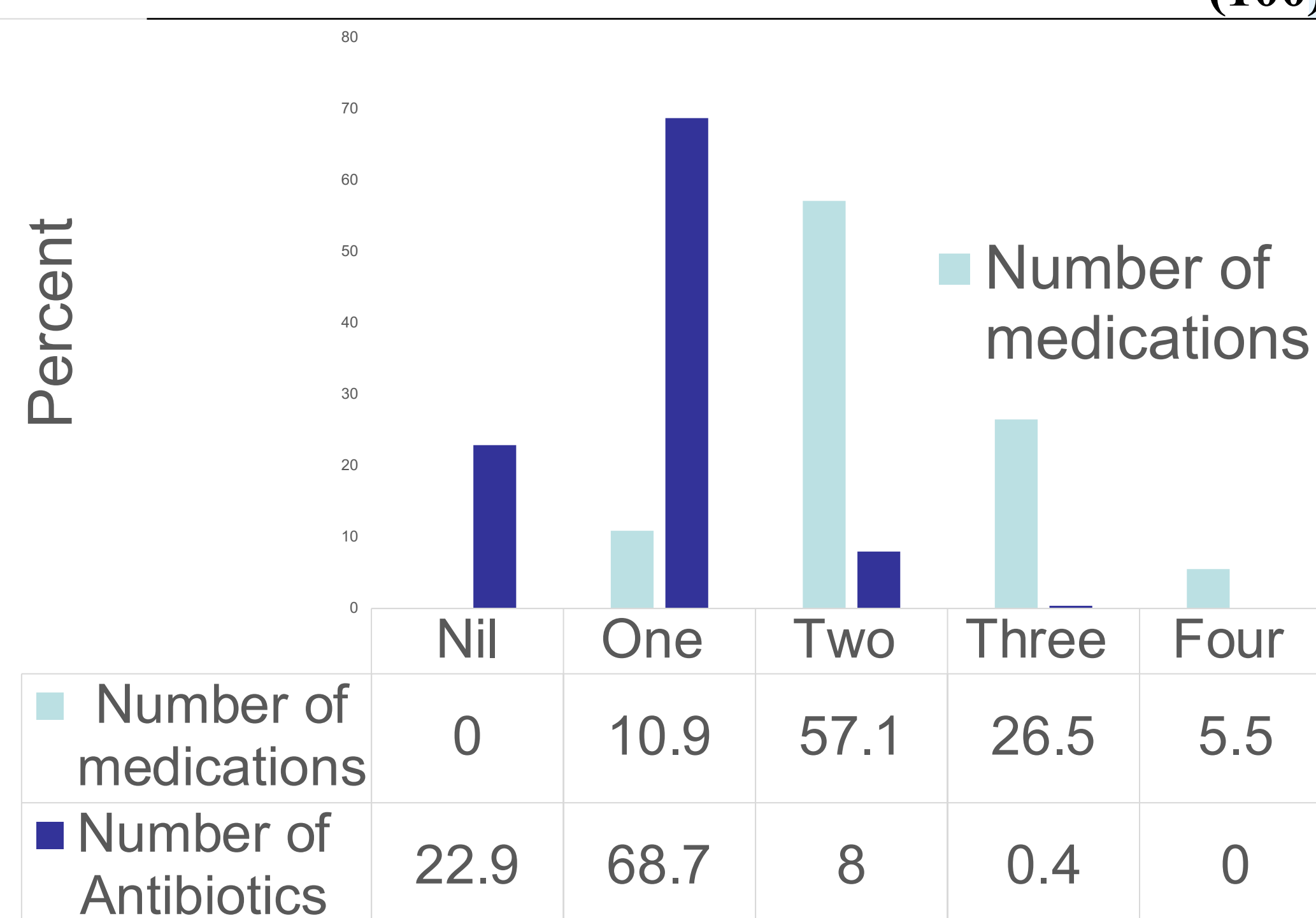


Fig 1: Number of medications & antibiotics prescribed

More Results

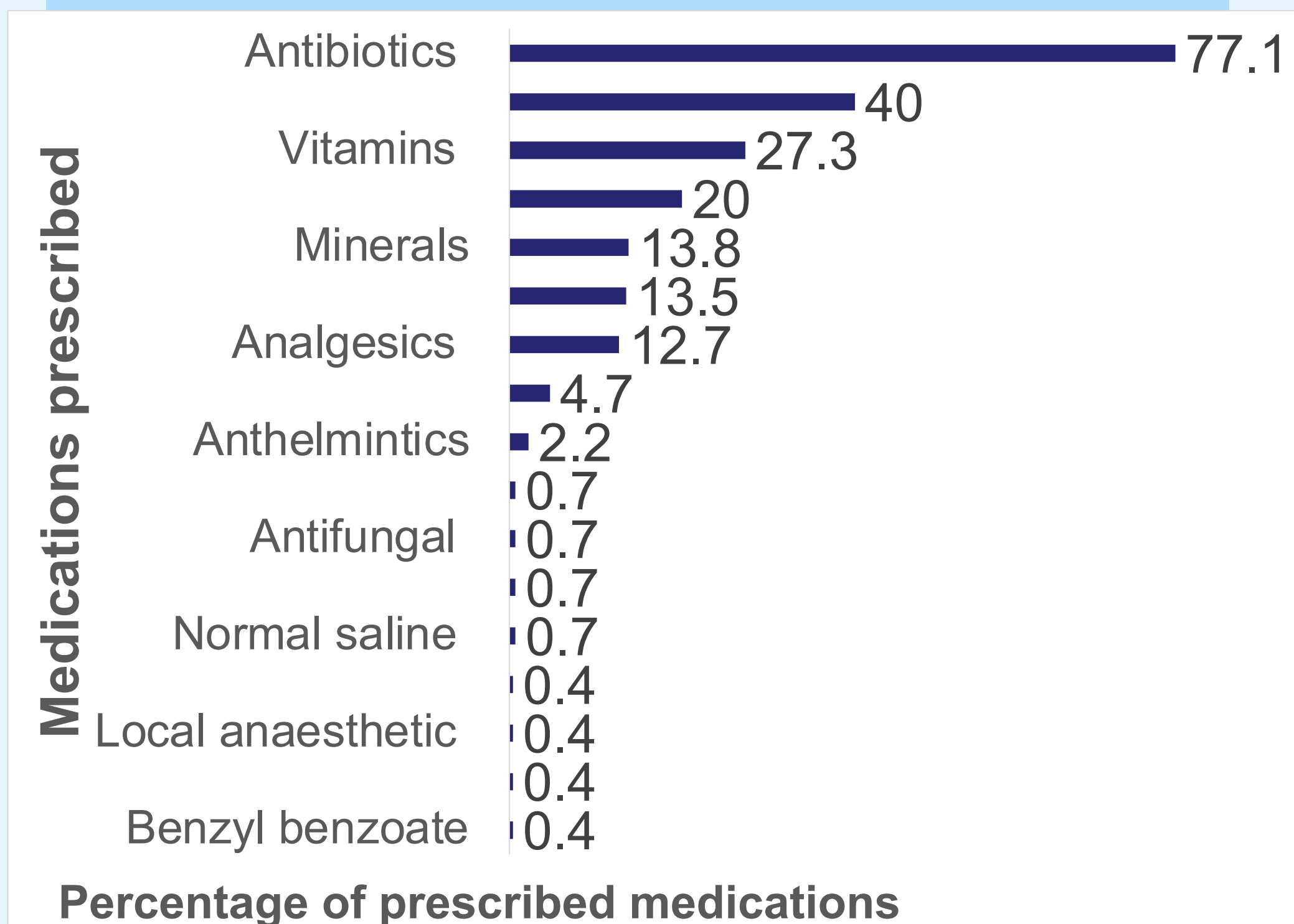


Figure 2: Medications prescribed for URTI

Table 2: Antibiotics prescribed

| Antibiotic | Frequency (%) |
|----------------------------------|---------------|
| Total | n= 212 |
| Augmentin | 79 (37.2) |
| Azithromycin | 38 (17.9) |
| Cefuroxime (zinnat) | 27 (12.7) |
| Cefixime | 14 (6.6) |
| Amoxil | 13 (6.1) |
| Cefpodoxime (orelox) | 6 (2.8) |
| Seprin | 4 (1.9) |
| Ciprofloxacin | 3 (1.4) |
| Erythromycin | 3 (1.4) |
| Ofloxacin | 1 (0.5) |
| Cefuroxime, Erythromycin | 4 (1.9) |
| Augmentin, Azithromycin | 4 (1.9) |
| Cefuroxime, Azithromycin | 3 (1.4) |
| Augmentin, Cefpodoxime | 1 (0.5) |
| Augmentin, Erythromycin | 1 (0.5) |
| Cefuroxime, Clarithromycin | 1 (0.5) |
| Cefpodoxime(orelox), Flagyl | 2 (0.9) |
| Cefpodoxime, Azithromycin | 2 (0.9) |
| Azithromycin, Seprin | 1 (0.5) |
| Cefixime, Azithromycin | 2 (0.9) |
| Cefuroxime, Azithromycin, Seprin | 1 (0.5) |

Conclusion

The study revealed that Antibiotics is the mainstay for the pharmacological management of URTI. Most cases received unnecessary prescription as culture and sensitivity tests were not done before antibiotic therapy initiation.

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