Implementation of a Programme for Optimising the Use of Antibiotics (PROA) in the Paediatrics Emergency Care Unit of a third level hospital

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Background and importance
Programmes for Optimising the Use of Antibiotics (PROA) have demonstrated to be an useful tool to guarantee the rational use and adequacy of antibiotics, while decreasing the risk of developing treatment resistances.

Given the extensive use of antibiotics and, in order to expand the program, we decided to study the possibility of including the paediatrics emergency care unit as part of the PROA.

Aim and objectives
- To identify the need for a PROA in the paediatrics emergency care unit of a third level hospital by analysing the current situation.
- To analyse the adequacy of the antibiotics prescribed according to the local guide of the center.

Material and Methods
A cross sectional study was used as pilot test.
Demographic and clinical variables were registered:

- Age
- Weight
- Simptomatology
- Diagnosis
- Complementary tests
- Discharge treatment

Adequacy of the prescribed antibiotic, indication and dose adjustment to weight and age, were analyzed.

Results
The most common diagnosis were tonsillitis (25%), acute bronchitis (19%) and otitis media (19%).

114 assessed patients
14% treated with antibiotics
75% treatments susceptible of recommendation

Causes for Treatment Modification
- Excessive duration
- Inadequate dose (shortage)
- Inadequate dose (excess)
- Suboptimal antibiotic choice

Results showed a low adequacy of the antibiotic treatments, thus evidencing the need for a PROA that improves the prescription quality and guarantees patient safety.

PROA members must ensure education about antibiotics prescription, emphasising the features of children as a populational group and sharing the local antibiotic guide from the hospital.

Conclusion and Relevance