Community-acquired pneumonia (CAP) is a leading cause of death in children worldwide. Failure to choose correct antibiotic, dose or treatment duration worsens CAP outcomes and contributes to global antibiotic (AB) resistance.

**Aim**
To analyze and compare antimicrobial treatment among children with hospitalized CAP in year 2012 and 2017.

**Methods**
Retrospective analysis of previously healthy children with hospitalized CAP in 2012 (n=85) and 2017 (n=96). All cases were divided into CAP during flu and non-flu seasons and subdivided according to age (<2mo, 2–12mo, 1–5y, >5y). Statistical analysis was performed with Microsoft Excel and IBM SPSS Statistics software. P value <0.05 was considered significant.

**Results**
There was no difference in children age, gender and duration of hospitalization between all groups. Most of the cases were hospitalized during the flu season (68% vs 77% in 2012 and 2017 respectively). Significant change in first-line antibiotic therapy was found. The most frequent antibiotics to treat hospitalized CAP in children in 2012 were Penicillin (PEN) (59%), Cefuroxime (CXM) (28%) and Clarithromycin (CLR) (12%). Ampicillin-sulbactam (SAM) was started in 35% of children in 2017 and younger children were more likely to receive it (p=0.047). Decrease in first-line treatment with CXM and PEN was observed in 2017 (8% and 38% respectively). Only 12% of children received CLR in 2017. Initial dose of PEN was 0.117±0.026mioU/kg in 2012 with slight increase in dosage of 0.125±0.022mioU/kg in 2017 (p=0.07) with tendency of higher doses in flu season (p=0.0564). Significant elevation was observed in dosing CLR (11.49±3.62 mg/kg (2012), 17.47±5.24 mg/kg (2017), p=0.0344). It was significantly higher comparing between flu seasons (p=0.0128). AB were changed, dosage increased, or another antibiotic added in 27 cases in 2012, 85% of which were during flu season. CXM was the most frequently used as second-line antibiotic in 2012. Its dose was adjusted, or it was changed in 15 cases and 87% of changes were made during flu season. In 2017, 27 children received AB adjustment with 63% of changes during flu season. Primary antibiotic was shifted to SAM in 65% (n=17) of CAP in 2017 and 71% of the changes during flu season.

**Conclusion**
There was significant change in first-line antibiotic between 2012 and 2017. CAP treatment in 2017 was started with SAM in 35% of the cases and it was most frequently chosen as second-line antibiotic. Higher dosage of antibiotics and antibotical adjustment in 2012 and 2017 was associated with flu season.