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ABSTRACT BOOK

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PEOPLE MAKE GLASGOW

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Impact of the national intervention programme on parental knowledge, attitudes and practice of antibiotic use for respiratory infections

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Background

Children are prone to high rates of antibiotic use due to greater frequency of respiratory tract infections, and concerns about possible complications. Recent studies raised awareness of high resistance levels and inappropriate antibiotic use, including OTC sales of antibiotics across South-Eastern Europe. Nation-wide multifaceted interventions to improve antibiotic use were undertaken in FYR Macedonia in September 2014. This study aimed to assess the parental knowledge and attitudes about antibiotics, and self-medication practices in children, and evaluate the impact of interventions on these parameters.

Methods

Pre-post intervention surveys were conducted in May 2014, May 2015 and May 2016 in three administrative regions in the country. Data were collected by interviewing parents of children younger than 15 years of age through a questionnaire. The analysis of knowledge, attitudes and antibiotic use involved descriptive quantitative statistics. The effects of interventions were assessed by a logistic and linear regression analysis.

Results

Data from 1203 interviewees showed that 80% of parents knew that antibiotics could kill bacteria, while 40% believed antibiotics could kill viruses. One third of parents expressed potential dissatisfaction with doctors who would not agree with them on antibiotic use. More parents received information about not taking antibiotics unnecessary after the interventions, but the rates decreased one year later. At baseline, 20% of the parents and 10% of the children who received antibiotics in previous year, took them without prescriptions. Parental self-medication rates did not change over time, while children rates decreased only in 2015.

Conclusion

The insignificant and short-term effects of the interventions demonstrate that interventions need to be implemented for a longer period, at a large scale, with active health providers' engagement, and accompanied by inspections to promote appropriate antibiotic use and discourage self-medication. Future research should combine other methods (observations and pharmacy sales data studies) to validate self-reported data.