prior to the patient leaving the PICU, and paediatric CCPs perform discharge medication reviews. By involving the PICU team in the medication discharge process, we aim to improve the quality and safety of step-down prescribing.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

Section 6: Education and research

6ER-024 WHAT OUR PATIENTS KNOW ABOUT ANTIBIOTICS AND ANTIMICROBIAL RESISTANCE. ARE THEY AWARE OF HOW TO MAKE GOOD USE OF THEM?

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Background and importance Antimicrobial resistance is the ability of microorganisms to evade the effect of antibiotics. The use and abuse of these drugs has increased, as well as the number of resistant microorganisms capable of continuing their life cycle despite the effect of the drug. Rational use of antibiotics with health education are fundamental tools to avoid resistance problems.

Aim and objectives To assess the degree of knowledge of the population about the correct use of antibiotics, antimicrobial resistance and to detect irrational uses.

Material and methods A descriptive, observational, cross sectional study was conducted by patient surveys carried out on the European Day of the Prudent Use of Antibiotics (18 November 2019). 12 questions with yes/no answers and multiresponses were used. Leaflets from the World Health Organization on the prudent use of antibiotics were distributed and key concepts in antibiotic related health education were explained.

Results 39 patients, 24 women (61.5%), 12 of whom were <30 years old (30.76%), 21 were between 31 and 59 (53.84%) years and 6 were >60 (15.38%) years were studied. 23 (58.97%) had taken antibiotics in the last year; 33 (84.62%) had been recommended by healthcare professionals, 3 (7.7%) started on their own initiative and another 3 (7.7%) did not remember who recommended it. 19 (48.72%) acknowledged having antibiotics at home and 10 (25.64%) had bought them without a medical prescription. 28 (71.79%) stated that they knew the consequences of taking antibiotics incorrectly and 35 (89.74%) were aware that not all antibiotics have the same indication. However, 14 (35.90%) admitted to abandoning the treatment before finishing it if they experienced improvement. 25 (64.10%) claimed to have heard about antimicrobial resistance and when specifically asked about it, 1 (2.56%) answered that it was the ability of antibiotics to fight infection, 24 (61.54%) that it was the ability of microorganisms to resist the action of antibiotics and 14 (35.90%) were unaware of what it was. After a brief explanation about them, patients were asked if they believed that more general information about the appropriate use of antibiotics was necessary and 27 (69.23%) answered affirmatively.

Conclusion and relevance Many patients claim to know the indications and consequences of antibiotic misuse but they make reckless use of them. It is a priority to spend time doing interventions to achieve better results in the future, and thus reduce resistance rates and the possible associated problems that these entail.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-025 IMPORTANCE OF APPROPRIATE BEFORE-AND-AFTER QUASI-EXPERIMENTAL DESIGN TO EVALUATE THE IMPACT OF ANTIMICROBIAL STEWARDSHIP PROGRAMMES: COMPARATIVE RESULTS USING STATISTICAL HYPOTHESIS TESTING OR INTERRUPTED TIME SERIES ANALYSIS

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Background and importance Most antimicrobial stewardship programmes (ASP) use a before-and-after research design, which has a high risk of bias. Efforts to enhance the conduct of these quasi-experimental studies are urgently needed to more rigorously evaluate interventions.

Aim and objectives The aim was to compare the results of an interrupted time series analysis (ITS) versus statistical hypothesis testing in a before-and-after study to evaluate the impact of ASP on cephalosporin consumption in a tertiary university hospital.

Material and methods A quasi-experimental study was designed before (January 2013–January 2014) and during the intervention (February 2014–February 2016). We recorded the impact of ASP on cephalosporin consumption in defined daily dose (DDD)/1000 hospital stays according to the anatomical therapeutic chemical classification system. For this task, all patients prescribed cephalosporins were identified daily through the prescription system (Farmatools). Statistical hypothesis testing was conducted using the Mann–Whitney U test, evaluating means (SD). The null hypothesis assumed both periods had the same averages ($p>0.05$). In contrast, ITS regression analysis was carried out to compare time trends before and after the intervention. It was performed using a longitudinal segmented regression with a generalised least squares approach to estimate changes in level and/or trend after the intervention. Autocorrelation was considered using moving average autoregressive models. Normality of residuals was verified, and the autocorrelation structures were validated. We also calculated, for a time point equivalent to 2 years after ASP, relative differences between observed changes and estimated values expected in the absence of the intervention. Data analyses were performed with R software, V.3.6.1. A p value <0.05 (two tailed) was considered significant.

Results Results of statistical hypothesis testing showed a significant increase in cephalosporin consumption (83.12 (SD 12.35) vs 104.87 (SD 10.48); $p<0.001$) in the intervention period. However, ITS regression analysis showed that the intervention led to a significant change in trend of −1.90 DDD/1000E, moving from a pre-intervention upward slope of 2.17 DDD/1000E to an almost horizontal slope of 0.27 DDD/1000E. Therefore, 2 years after the intervention, there was a