

From Point Prevalence Surveys to Continuous Quality Improvement in a Teaching Hospital In Belgium

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BACKGROUND. Resistance to antimicrobials as the result of unnecessary and inappropriate use of antibiotics has become a global health problem. In Belgium and in the other European countries, the emergence of antimicrobial stewardship team ensures a controlled use of antibiotics, which is the key strategy against development of resistance to antimicrobials. In our hospital, the results of our previous point prevalence studies have identified a number of areas of good practice and some areas for improvement. One of them is the surveillance of records in the computerized medical note. **OBJECTIVES.** Using an adapted point prevalence survey, we investigated whether the clinical indication, the antibiotics and the duration or review date are specified in the medical notes. **METHODS.** The Teaching Hospital in Liège is a 625-bed tertiary hospital in Belgium with all the major specialties present and without electronic prescription system. Between May 2012 and November 2012, we identified one day per month all the patients that used one or more antibiotics in every ward. The patients excluded were patients undergoing surgery same day, patients seen at outpatient department, patients in the emergency room and dialysis patients. **RESULTS.** Between May 2012 and November 2012, seven surveys were performed, and a total of 3597 inpatients' prescription charts were reviewed. Of those 3597 hospitalized patients, 1006 (28%) were receiving one or more antibiotics, most of them (80%) for the treatment of infection. The prevalence of using one or more antibiotics was consistent over time, and no significant trend was observed. We reviewed the computerized medical notes for 801 patients receiving antibiotics for an infection. Overall, 80% of the patients had a documented indication for the antibiotic in the medical note. 85% had the recording of the antibiotic prescription and only 26% had a duration or a review date recorded. **CONCLUSION.** Point prevalence survey is an easy and practical method to monitor the antimicrobial prescribing patterns and to identify areas for improvement. To support prudent antibiotic prescribing, the indication for the antibiotic should be documented as well as the duration or the review date. In our hospital, antibiotic prescribing without documentation of an indication and a duration or review date is common and should be improved in the future with specific actions.