

A Prospective Audit to Look into Antimicrobial Prescribing in the Clinical Setting: In a Teaching Hospital in the UK

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Abstract : Introduction: Good antimicrobial prescribing reduces length of stay in hospital, risk of adverse events, antimicrobial resistance, and unnecessary hospital expenditure. The aim of this prospective audit was to identify any problems with antimicrobial prescribing including documentation of the relevant aspects as well as appropriateness of antibiotics use. The audit was conducted on the surgical wards in a teaching hospital in the UK. Methods: Standards included the indication, duration, choice, and prescription of antibiotic should be in line with current Regional Guidelines and should be clearly documented on the prescription chart. There should be an entry in each patients' medical record of the diagnosis and indication for each acute antibiotic prescription issued. All prescriptions should clearly document the route, frequency and dose of antibiotic. Data collection was done for 2 weeks in the month of March 2014. A proforma including all the questions above was completed for all the patients. The results were analysed using Excel. Results: 35 patients in total were selected for the audit. 85.7% of patients had indication of antibiotic documented on the prescription chart and 68.5% of patients had indication documented in the notes. The antibiotic used was in line with hospital guidelines in 45.7% of patients, however, in a further 28.5% of patients the reason for the antibiotic prescription was microbiology approved. Therefore, in total 74.2% of patients had been prescribed appropriate antibiotics. The duration of antibiotic was documented in 68.6% of patients and the antibiotic was reviewed in 37.1% of patients. The dose, frequency and route was documented clearly in 100% of patients. Conclusion: Overall, prescribing can be improved on the surgical wards in this hospital. Only 37.1% of patients had clear documentation of a review of antibiotics. It may be that antibiotics have been reviewed but this should be clearly highlighted on the prescription chart or the notes. Failure to review antibiotics can lead to poor patient care and antimicrobial resistance and therefore it is important to address this. It is also important to address the appropriateness of antibiotics as inappropriate antibiotic prescription can lead to failure of treatment as well as antimicrobial resistance. The good points from the audit was that all patients had clear documentation of dose, route and frequency which is extremely important in the administration of antibiotics. Recommendations from this audit included to emphasize good antimicrobial prescribing at induction (twice yearly), an antimicrobial handbook for junior doctors, and re-audit in 6 months time.

Keywords : prescribing, antimicrobial, indication, duration

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