AUDIT OF ANTIMICROBIAL PRESCRIBING AND ADHERENCE TO THE ABUHB ANTIMICROBIAL POLICY ON WARD 4-1 (ELDERLY CARE) AT NEVILL HALL HOSPITAL

Abstract

AIMS AND OBJECTIVES
To ensure that antimicrobial prescribing on ward 4/1 (elderly care) at Nevill Hall Hospital is consistent with Aneurin Bevan University Health Board (ABUHB) Antimicrobial Prescribing in Secondary Care guidelines.

METHODOLOGY
The data collection form was constructed on a breakdown of the antimicrobial policy. Data collection took place on ward 4/1 (elderly care) over a three week period by the ward pharmacist and included all antimicrobials prescribed for treatment purposes. Data collection looked at whether a clear indication for prescribing was indicated in the notes and whether prescribing was appropriate. It also looked at if prescribing was as a result of advice of microbiology or culture results and sensitivities. Review dates and durations were also investigated as to whether they were documented and if so were they appropriate.

RESULTS
There is not 100% compliance with the procedure. Antimicrobials were prescribed in 33 cases for 14 different indications. A total of 14 different agents were prescribed. 88% of antimicrobials had the indication documented in the notes and of these 66% were prescribed within the guidelines. Two (6%) of antimicrobials were prescribed following an unclear diagnosis and two (6%) were prescribed for indications for which there were no guidelines. The review date was not specified for 55% (eighteen) antimicrobials and was specified for 45% (fifteen) antimicrobials. Three durations for antimicrobials were deemed as unclear due to there being an unclear diagnosis. For three antimicrobials prescribed there were durations specified on the chart however there was no guidance on durations for the indications specified on the policy. On one occasion an antimicrobial had a review date specified even though there was no indication for prescribing documented in the notes. No restricted antimicrobials were prescribed. For all patients treated for C. difficile associated diarrhoea none had been prescribed antibiotics previously during that stay as an inpatient.

CONCLUSIONS
There is not 100% compliance with the Antimicrobial policy. On the whole it can be seen that documentation of indications in the medical notes results in appropriate prescribing. As well as this where required prescribing has followed advice from microbiology and the results of sensitivities and cultures. However the major issue highlighted throughout this process is that poor and unclear documentation in the majority of cases leads to inappropriate prescribing and duration of treatment. It can also be said that in a minority of cases there may be a small scope for expansion of indications within the guidelines.

RECOMMENDATIONS
- Feedback results to infection control committee and antimicrobial working group
- Work with infection control committee and antimicrobial working group to formulate an action plan
- Feedback to medical directorates on ward 4/1 and discuss implications of potential action plan.
- Feedback to pharmacy team and highlight the importance of educating medical team on using the guidelines as a prescribing resource
- Re-audit at a later date.
An audit to determine adherence of acute antibiotic prescribing in accordance with Aneurin Bevan University Health Board Antibiotic guidelines on surgical wards at the Royal Gwent Hospital.

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Introduction
Inappropriate use of certain antibiotics can lead to future complications including increase risk of resistance, reduced efficacy of current treatments and a potential to increase levels of disease and death within the population (1, 2). In addition, there is a nationwide concern that prescribing certain antibiotic agents can increase the risk to serious outbreaks of infectious diseases, such as Clostridium difficile. (3) The Aneurin Bevan University Health Board Antibiotic guidelines have recently been updated in 2013, with Pharmacy contributing to the roll out. (4) This is the first audit focusing on adherence to the updated guidelines on surgical wards.

Objective
The main objective of the audit is to determine the adherence of antibiotic prescribing on surgical wards in the Royal Gwent in accordance with the recently updated ABUHB Antibiotic guidelines.

Method
A data collection period took place in August 2013 on four surgical wards at the Royal Gwent Hospital until 50 patients within the inclusion population were identified. The auditor filled in a data collection sheet for each patient and the results analysed. Ethics approval was not required.

Results
Out of the 28 patients with relevant indications, only 17 had antibiotics prescribed according to guidelines (61%). Only 7 out of the 50 patients had a duration specified on the in-patient charts (14%). Only 2 out of the 3 patients who required alteration to antibiotics based on sensitivity results were amended accordingly (66%).

Discussion
The results show that antibiotic prescribing on surgical wards does not fully comply with ABUHB Antibiotic guidelines. In terms of antibiotic choice, the discrepancies were mainly intra-abdominal infection prescribing. The data shows a low level of compliance with regards to duration prescribed on in-patient charts. These points will be feedback to the appropriate personnel to initiate and action plan for the future.

References
A re-audit to determine the extent to which the prescribing of antibiotics upon the medical admission wards within the Royal Gwent Hospital, complies with the ABUHB Adult Antibiotic Guidelines.

Bolton A, Forey L and Pugh M. Aneurin Bevan Health Board, Newport, South Wales

Introduction
Patients admitted to hospital will often be started on antibiotics. The overuse and misuse of antibiotics can lead to the development of resistant strains, and Healthcare Associated Infections (HCAI’s). It is the prescriber's responsibility to comply with local guidelines i.e. Aneurin Bevan University Health board Adult Antimicrobial Policy. An audit of 2012 upon medical admissions within the Royal Gwent highlighted a non-compliance rate of 53%.

Objectives
- To establish the number of patients whose antibiotic therapy complies with ABUHB Adult Antibiotic Guidelines.
- To review patients prescribed restricted antibiotics and calculate the number of patients prescribed these on the advice of the microbiologists.
- Determine the percentage of patients who have cultures requested upon the commencement of antibiotics.
- Calculate the percentage of patients who have a 48 hour review date stated in their medical notes or their prescription chart.
- Assess whether the prescribers have implemented a 48 hour review for all patients on antibiotics; calculate the number that has been reviewed within the 48 hours, as agreed in 2012.

Method
The Adult Antibiotic Policy was used to generate standards, which were audited using a data collection tool. Data was collected across a two week period in July, upon all medical admissions within the Royal Gwent Hospital. No ethics approval was needed for this audit.

Results
Data was collected from 52 patients. Only 73% (n=48) of prescriptions complied. Furthermore 33% (n=3) of restricted antibiotics prescribed has microbiology approval. Cultures were obtained for 73% (n=48) of patients. All patients received a 48 hour review, the quality of this review varied and documentation of indication was poor.

Discussion
Results depict improvement in compliance, but standards are still poor. Documentation needs vast improvement and microbiology input is needed to drive compliance.

References:
3) Blackburn-Smith J, Aneurin Bevan Health Board. An audit to determine the extent to which antibiotic prescribing on the medical admission wards at the Royal Gwent Hospital comply with Aneurin Bevan Health Board’s Adult Antibiotic Guidelines, November 2012.