

An audit on the management of sore throat by a pharmacist prescriber in general practice

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1. Background

- 20% of all antibiotic prescriptions in UK are considered inappropriate¹
- 700,000 deaths each year worldwide from antibiotic-resistant infections²
- 59% of all UK acute sore throat consultations result in an antibiotic prescription³
- 13% is considered the optimum antibiotic prescribing rate for sore throat⁴
- 0-5 are the scores on the feverPAIN scale for sore throat, a higher score is associated with increased likelihood of bacterial infection.⁵ Patients are assigned 1 point for each of the following conditions:
 - Fever
 - Purulence
 - Attending within 3 days or less
 - Severely Inflamed tonsils
 - No cough or coryza
- "0" audits currently on pharmacist prescribing for sore throat
- 1500+ pharmacists to work in English GP surgeries by 2020–21⁶

Therefore, the purpose of this audit is to see if there is any need to reduce overprescribing, and to see how appropriate a pharmacist's prescribing can be

2. Aim

To perform a clinical audit on the management of sore throat by a pharmacist prescriber in a general practice in Walsall according to the following standards (derived from NICE CKS acute sore throat⁷):

1. 100% of patients are assigned a feverPAIN score for their symptoms
2. 100% of patients are given advice by the prescriber
3. A) 100% of patients with a feverPAIN score of 0 or 1 are NOT prescribed an antibiotic
B) 80% of patients with a feverPAIN score of 2 or 3 are NOT prescribed an antibiotic
C) 100% of patients with a feverPAIN score of 4 or 5 are prescribed an antibiotic
4. Of those patients prescribed an antibiotic, 100% receive the appropriate choice, dose, frequency and course length as outlined in guidance
5. 80% of patients do not return for re-consultation

3. Method

Participants

- 124 patients recruited through EMIS
- All presenting with sore throat between 29/03/2018 and 03/10/2018



Data was transferred onto an Excel spreadsheet with columns based on the standards over 3 visits to the medical centre. Data was then analyzed descriptively using tables and graphs. The end stage of the analysis involved concluding how well the standards were met and, if applicable, identifying reasons why they were not met in all cases.

Patient Identifier (EMIS)	Patient age	Patient gender (M/F)	Date of consultation	Diagnosis	Feverpain used? (Y/N)	Feverpain score	Antibiotics used? (Y/N)	If used, which antibiotic?	What dose were they prescribed for?	Was advice given? (Y/N)	Did a reconsultation take place? (Y/N)	If so, on what date?	Additional info
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4. Key findings

Adherence to the guidelines was high, 30% of all sore throat patients received antibiotics overall, lower than the national average of 59%, but higher than the recommended 13%.

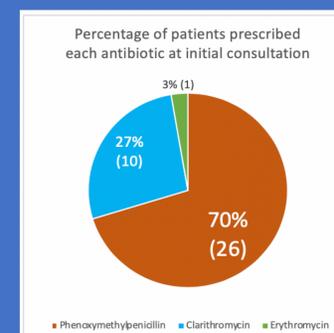


Figure 1: Pie chart showing proportion of patients prescribed each antibiotic

Standard 1: 97% of patients had a feverPAIN score calculated based on their symptoms (*Standard met*)

Standard 2: Advice was given to 100% of patients (*Standard met*)

Standard 3:

- a) 100% of patients with a feverPAIN score of 0 or 1 were not prescribed antibiotics (*Standard met*)
- b) 85% of patients with a feverPAIN score of 2 or 3 were not prescribed antibiotics (*Standard met*)
- c) 97% of patients with a feverPAIN score of 4-5 were diagnosed with tonsillitis and hence were given an antibiotic (*Standard met*)

Standard 4: Antibiotic choice, dose and frequency were appropriate in 97% of cases and duration of treatment in 78%. (*Standard almost met*)

Standard 5: 86% of patients did not return for re-consultation (*Standard met*)

5. Discussion

Although there is no need to drastically change current practice, there is potential to reach ideal prescribing rate (13%). It is recommended to implement 10 action points:

1. Promote use of NICE guidelines by all prescribers
2. Make use of FeverPAIN algorithm in all cases as it can diagnose bacterial infection with good accuracy
3. Encourage more specific recording of the form of advice given to patients as this wasn't always recorded
4. Encourage use of TARGET TYI-RTI⁸ leaflet and share it on EMIS
5. Encourage consistent message from different staff and when patients re-attend
6. Record actions required (if any), particularly where adherence to guidance is below 80%
7. Use TARGET toolkit⁸
8. Consider developing smaller targets for antibiotic prescribing rate to check regularly
9. Re-audit in 4 months
10. Encourage other staff members to audit their prescribing

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