Scholars Journal of Applied Medical Sciences
Abbreviated Key Title: Sch J App Med Sci
ISSN 2347-954X (Print) | ISSN 2320-6691 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Family Medicine

Audit of Antimicrobial Prescribing for Sore Throat

Dr. Asma Ahmad[1*], Dr. Salma Bashir[2]

[1]Consultant Family Medicine, Primary Health Care Corporation (PHCC), Bu Hasa St, Doha, Qatar
[2]Consultant Ophthalmologist, Primary Health Care Corporation (PHCC), Bu Hasa St, Doha, Qatar

DOI: https://doi.org/10.36347/sjams.2025.v13i05.012 | **Received:** 29.03.2025 | **Accepted:** 05.05.2025 | **Published:** 10.05.2025

***Corresponding author:** Dr. Asma Ahmad
Consultant Family Medicine, Primary Health Care Corporation (PHCC), Bu Hasa St, Doha, Qatar

Abstract **Original Research Article**

This review outlines a quality improvement project which evaluates patterns of prescribing in patients that request antibiotics for sore throat in Primary Care, UK. The aim of the audit was to assess whether Practice X is conforming to Public Health England (PHE) guidance by adopting the FeverPain scoring symptom in order to use delayed or no prescription strategy. A second audit cycle followed targeted feedback and action plans. Results showed significant improvements in the use of FeverPain score and improvement in appropriate antimicrobial prescribing. Re-audit cycles are recommended based on accuracy scores to ensure continuous improvement. This review highlights the importance of clinical audits in maintaining high standards of clinical care.

Keywords: Clinical Audit, General Practice, Fever Pain.

INTRODUCTION

Primary care is responsible for around 80% of all antibiotic prescribing in the UK's National Health Service, with rates likely to be similar worldwide [1].

Acute sore throat is often caused by a virus, which lasts for about a week. In majority of cases, it is self limiting and most people get better without antibiotics; withholding antibiotics rarely leads to complications [2].

This audit facilitates evaluation of patterns of prescribing in patients that request antibiotics for sore throat in primary care.

AIM

In acute sore throat, current guidance advise to avoid antibiotics as 90% resolve in 7 days and pain is only reduced by 16 hours [2].

People with a sore throat caused by streptococcal bacteria are more likely to benefit from antibiotics. FeverPAIN is a clinical scoring that can help to identify the people in whom this is more likely [2].

1. To establish whether Practice X is conforming to PHE guidance by adopting the FeverPAIN scoring system in order to use delayed or no prescription strategy.
2. Review of antibiotic prescription according to UK antimicrobial guidance.

FeverPAIN is a 5 item score based on the following:

- Fever in last 24 hours,
- Purulence,
- Attend rapidly under 3 days,
- Severely Inflamed tonsils,
- No cough or coryza

The score was derived from a cohort study including 1760 adults and children aged 3 and over, which found that use of the score resulted in more rapid symptom resolution and reduced prescribing of antibiotics (both reduced by one third) [2].

FeverPAIN score	Score 0-1	use no antibiotic strategy
	Score 2-3	consider 3 day delay before antibiotic initiated
	Score >4	use immediate antibiotic if severe, if not 48 hour delayed prescription

Review of antibiotic prescription (PHE antimicrobial guidance adults)

1. Phenoxymethylpenicillin 500mg qds 10 days
2. If penicillin allergy: use clarithromycin 500mg bd for 5 days [2].

METHODOLOGY

A retrospective audit of patients with a sore throat prescribed antibiotics was conducted. For this audit sore throat includes acute pharyngitis and tonsillitis. Patients that had received antibiotics from other providers were excluded from the audit. 20 patients were identified who had been diagnosed with sore throat/acute pharyngitis/tonsilitis on the IT system used in the health centre.

RESULTS

	CKS/NICE Guidance		
	No of patients that met criteria	No. of patients that did not meet criteria	Total
Immediate prescribing	9	7	16
Delayed prescribing	0	0	0
No prescribing	4	0	4
Total	13	7	20

Part 2: Review of Antibiotic

PARAMETER	TOTAL
Total number of patients prescribed an antibiotic	16
Antibiotic choice correct	16
Dose correct	16
Frequency correct	16
Course length correct	14
All parameters of antibiotic prescribing correct	14
FeverPAIN scoring system used	9

Part 3: Calculations

Overall compliance with NICE guidance (whether to prescribe)	65%
Overall compliance to PHE Primary Care guidance = all parameters of antibiotic prescribing correct	87.5%

DISCUSSION

9 patients were prescribed appropriately according to FeverPAIN score. 7 patients were prescribed immediate antibiotics with a FeverPAIN score of 2-3 and should have been given a delayed prescription.

The primary problem identified was not complying with FeverPAIN score thus prescribing inappropriate antibiotics.

Practice Actions

1. Clinicians to be familiar with FeverPAIN score and use it in consultations for sore throat/pharyngitis/tonsillitis – integrate template in consultation
2. Use of delayed antibiotic strategy rather than immediate
3. Webinars on antibiotic prescribing
4. Upload self help leaflets on to system one/ be able to download from website

http://www.rcgp.org.uk/clinical-and-research/toolkits/target-antibiotic-toolkit.aspx

Sorethroat Re- Audit Results

	CKS/NICE Guidance		
	No of patients that met criteria	No. of patients that did not meet criteria	Total
Immediate prescribing	11	5	16
Delayed prescribing	0	0	0
No prescribing	4	0	4
Total	15	5	20

Part 2: Review of Antibiotic

PARAMETER	TOTAL
Total number of patients prescribed an antibiotic	16
Antibiotic choice correct	15
Dose correct	16
Frequency correct	16
Course length correct	15
All parameters of antibiotic prescribing correct	14
FeverPAIN scoring system used	15

Part 3: Calculations

Overall compliance with NICE guidance (whether to prescribe)	75%
Overall compliance to PHE Primary Care guidance = all parameters of antibiotic prescribing correct	87.5%

DISCUSSION

11 patients were prescribed immediate antibiotics appropriately according to FeverPAIN score. 5 patients were prescribed immediate antibiotics with a FeverPAIN score of 2-3 and should have been given a delayed prescription.

Results show an improvement in the overall compliance with NICE guidance from 65% to 75% and increased use of FeverPain score.

CONCLUSION

The quality improvement project demonstrates that the interventions did result in improved compliance with the antibiotic policy following the interventions put in place. Inappropriate antibiotic prescribing did occur in some cases. It is important to continue with the interventions with both patient and clinician education of FeverPain score.

Acknowledgements

The authors would like to acknowledge the support of the clinicians and staff at Practice X for their contributions to this project. This audit was conducted without any external funding.

REFERENCES

1. Antibiotic prescribing in primary care *BMJ 2019;364:l780*
2. **Sore throat (acute): antimicrobial prescribing,** NICE guideline Reference number: NG84, Published: 26 January 2018.