



The rise of pharmacist prescribing of antibiotics and implications for antimicrobial stewardship in Scotland

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Introduction

The antimicrobial stewardship programme coordinated by the Scottish Antimicrobial Prescribing Group (SAPG) supports optimisation of antibiotic use through reducing inappropriate and unnecessary antibiotic use. Antibiotic use in primary care has been reducing since 2012. In 2016 the rate of antibiotic use was lower than at any point since 2004. Prescribing has mainly been undertaken by GPs but over the past 5 years the number of non-medical prescribers, particularly nurses, has increased year on year.

Pharmacy First, a Scottish Government scheme, aims to encourage patients with certain minor ailments to use their community pharmacy for treatment rather than making a GP appointment. All pharmacists involved undertake education and training to support their new role.

Following some pilot work the scheme was rolled out across Scotland in 2017 focused on management of uncomplicated urinary tract infection (UTI) in women aged 16 to 65 years and impetigo in any age group. Community pharmacists carry out a patient consultation in the pharmacy and provide advice and treatment if required under locally agreed patient group directions (PGD). If antibiotics are supplied they are prescribed on NHS pharmacist prescription forms which feed into the national datamart on medicines use in Scotland. The service is available both within GP opening hours and out of hours.

We investigated recent trends in antibiotic prescribing by pharmacists.

Methods

Data on dispensed antibiotic prescriptions written by pharmacists on NHS Community Pharmacy prescription forms (CPUS, CP1 and CP2) from 1st January 2013 to 31st December 2017 were obtained from the Prescribing Information System, a database of all NHS prescriptions dispensed in Scotland held by NHS National Services Scotland.

Results

In 2017 there were 16,031 antibiotic prescriptions written by community pharmacists dispensed in Scotland. Although this represents only 0.4% of antibiotic use in primary care, pharmacist prescribing of antibiotics has increased greatly since 2013 as shown in table 1.

Table 1: NHS Scotland: number of antibiotic prescriptions by pharmacists, 2013-2017

Year	2013	2014	2015	2016	2017
Number of prescriptions	1,476	1,867	3,000	8,070	16,031

In 2017, 82% of pharmacist antibiotic prescriptions were for trimethoprim. This mainly reflects the roll out across Scotland of the Pharmacy First UTI consultation service. Some NHS boards have also established local schemes where patients can consult community pharmacist for: skin infections; exacerbation of chronic obstructive pulmonary disease (COPD); and for Chlamydia testing and treatment.

The other frequently prescribed antibiotics included: flucloxacillin (3.2%), the antibiotic of choice for skin infections; amoxicillin (3.0%), first line for COPD; and azithromycin (2.8%), first line following a positive test for Chlamydia.

Discussion

The National Clinical Strategy for Scotland (<http://www.gov.scot/Publications/2016/02/8699>) has highlighted that primary care will be at the centre of transforming service delivery in NHS Scotland. As part of this transformation it is likely that community pharmacists using their clinical skills will increasingly work as part of multidisciplinary teams in primary care to optimise medicines use. The Pharmacy First scheme is a first step towards all pharmacists being trained as independent prescribers.

It is important that this new group of prescribers is adequately supported and included in a team approach to antimicrobial stewardship. SAPG is working with the Royal Pharmaceutical Society Scottish Branch to develop and deliver interactive education sessions to increase pharmacists' confidence around providing advice for patients about self-care of infections and ensuring appropriate use of antibiotics.

PHARMACY FIRST

Need healthcare advice without an appointment?
Go to your Pharmacy First

Pharmacy First allows patients to access FREE advice and / or treatment for uncomplicated Urinary Tract Infection in women and Impetigo.
 Your pharmacist will ask you about your symptoms in order to give you the right advice. **You should be aware there are some exclusions which can prevent your pharmacist from treating you and you may need to be referred to your GP.**

Urinary Tract Infection	Impetigo
<p>Are you a woman aged between 16 and 65 with any of the following:</p> <ul style="list-style-type: none"> • Burning or stinging sensation on passing urine? • Need to pass urine frequently? • Need to pass urine urgently? 	<p>Do you have any of the following:</p> <ul style="list-style-type: none"> • Minor skin infection on one area of the body? • Red sores that pop easily and leave a yellow crust? • Fluid-filled blisters? • Itchy rash?