

Why nurse prescribers are crucial in the fight against antibiotic resistance

July 8 2021, by Valerie Ness, Jacqui Reilly, Kareena McAloney-Kocaman, Kay Currie and Lesley Price



Credit: AI-generated image ([disclaimer](#))

In October 2020, the World Health Organization [declared](#) antimicrobial (or antibiotic) resistance (AMR) as one of the greatest threats to global health. While that is unlikely to change in the foreseeable future, the organization's [latest report](#) reveals significant reductions in the

consumption of antibiotics in eight European countries including the UK. Which is good news in the ongoing fight against [antibiotic resistance](#).

There are many contributing factors to this resistance, one being the overuse of antibiotics in humans, which makes them less effective. With an increase in the numbers of nurses who are now able to prescribe medicines, understanding how they work with their patients is essential.

Bacteria are extremely clever and can naturally become resistant to antibiotics over time. Resistance occurs when a bacterium mutates or acquires [genetic information](#) from another bacterium, making it resistant to antibiotics. "[Superbugs](#)" are strains of bacteria that have developed resistance to many different types of antibiotics.

This means that common infectious diseases such as pneumonia, tuberculosis and gonorrhoea become challenging, or sometimes impossible to treat, as antibiotics become less effective. Worryingly, new strains of bacteria may emerge that cannot be treated by any existing antibiotics.

Researching the prescribing problem

The more antibiotics we use, the more bacteria will become resistant and so inappropriate or [overuse of antibiotics](#) is one of the main drivers of AMR. This is why improving antibiotic prescribing is crucial. For example, [evidence](#) suggests that antibiotics are often prescribed for [upper respiratory tract infections](#) (URTIs) which affect the parts of the body involved in breathing, such as the sinuses, throat or airways.

However, URTIs are usually self-limiting and resolve without antibiotics due to the body's ability to fight infection. They are often also caused by a virus—and antibiotics do not work on viruses. So targeting URTIs has

become a priority in the fight against AMR.

Registered nurses who have completed an additional prescribing course after qualifying are able to prescribe any medicine provided it is within their capability to do so. They are known as [nurse independent prescribers](#), (NIPs) a type of non-medical prescriber.

In our [research](#) we wanted to explore the practice of NIPs faced with someone presenting with an URTI for the first time. After interviewing 27 NIPs, the information was used to develop a questionnaire which was sent to all 2,400 [nurse](#) prescribers in Scotland asking them about their intention to manage patients with an URTI without prescribing an antibiotic, and about the factors that influenced them.

Patient expectations

Antibiotics only work on bacteria, but sometimes it can be difficult to differentiate between [viral](#) and [bacterial](#) infections. In most healthy people, even if it's bacterial, they should be able to fight the infection themselves, but for those with other health conditions this can be more difficult.

So sometimes doctors and nurses will prescribe antibiotics as they are worried about complications or patients returning if their symptoms worsen. Another reason is that antibiotics are a relatively safe medication with few side effects and prescribing them might have a positive psychological effect on the patient. Which means in an effort to help their patient feel better, nurses might overlook the bigger public health concern regarding antibiotics. Also, if time with each patient is short and they demand an antibiotic (because that's what they always get) this can be challenging for prescribers.

Our study found that, when faced with a patient presenting with an

URTI for the first time, these nurses did not intend to prescribe an antibiotic. The key reasons given were the positive influence of peers, meaning they believed that other nurses did not prescribe antibiotics to such patients and they wanted to behave in the same way. They understood the decision to prescribe medication—and the moral responsibility—was theirs alone.

On the other hand, [pressure from patients/carers expecting antibiotics](#) was also a significant influence on their behavior. Two-thirds of respondents said they felt under pressure from patients to prescribe antibiotics, and a third said that they might change their prescribing behavior because of this pressure.

However, in our interviews NIPs explained that they use many strategies to manage patient expectation which avoids prescribing antibiotics. These include educating people about infections and antibiotics and symptom management and empowering patients to self-manage. Safety netting is also important—monitoring signs and symptoms, arranging return appointments for patients should their symptoms worsen or delayed prescribing where the antibiotic is only to be used if symptoms worsen or do not improve. Some NIPs highlighted that they can use these strategies more easily because they may have more time with the patient than a doctor, and/or know the patient better.

Fighting the resistance

In future, any new guidance needs to take account of the fact that prescribers are often put under pressure by the patient's expectation of antibiotics. Nurses need strategies to manage these expectations and proper time to deliver them. Guidance should focus on the positive influences found in this study, such as the importance of peer support, experience and confidence. The use of role modeling, peer support, mentoring, education and feedback in the continued development of

these NIPs should also be considered.

The [Keep Antibiotics Working campaign](#) runs annually to provide advice, support and further information to both prescribers and the public. Public messages should focus on educating people about antibiotics, visiting the NHS website for advice, and trusting healthcare professionals to make the right decision regarding their treatment.

Nurse prescribing is expanding globally and these findings provide reassurance that NIPs intend to prescribe appropriately in the patient's interest. Data published by Health Protection Scotland in the [2020 SONAAR Report](#) shows significant reductions in community-prescribed antibiotics, but there is still more work to do to ensure that both prescribers and the public recognize that [antibiotics](#) are not always needed.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Why nurse prescribers are crucial in the fight against antibiotic resistance (2021, July 8) retrieved 26 April 2024 from <https://medicalxpress.com/news/2021-07-nurse-crucial-antibiotic-resistance.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--