The expanding role of the clinical pharmacist

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The Clinical Pharmacy Congress held in London in May focused on the ever-growing importance of pharmacists in a variety of healthcare settings. The presentations covered a diverse range of subject areas, from tackling issues of antimicrobial resistance in urinary tract infections to the management of long-term conditions.

Managing adult asthma

“We shouldn’t have any of our asthma patients dying,” stated Anna Murphy, consultant respiratory pharmacist at University Hospitals of Leicester NHS Trust, in a presentation that provided a comprehensive overview of current treatment of asthma in the UK.

In a National Review of Asthma Deaths, published in May 2014 by the Royal College of Physicians, it was accepted that nearly 90% of asthma deaths were preventable. Key findings showed many of the deaths resulted from poor control of severe asthma, a widespread over-reliance on reliever inhalers, smoking, being on the wrong treatment, a lack of patient understanding of their asthma triggers, and a lack of awareness on when to call for help during an attack.

Anna Murphy urged prescribers to use a patient’s medical history and a pulmonary function test to identify asthma as early as possible and rule out other causes of symptoms such as bronchiectasis, dysfunctional breathlessness, COPD and vocal-cord dysfunction. However, she was emphatic that “if you think its asthma, just start them on an inhaled corticosteroid (ICS).” This is because the trial course is six weeks, so “treat from the start as though it is asthma and then change diagnosis if that fails to have a positive effect.”

In addition to improving overall mortality, the correct asthma treatment “should enable 85% of the asthma population to lead ‘normal’ lives, with little to no reliever medication and the ability to have productive, physically active lives,” according to Ms Murphy. However, among the obstacles to attaining this is an over-reliance on short-acting beta₂-agonist (SABA) inhalers, and poor inhaler technique.

“Reliever inhalers treat symptoms, not asthma. We need to urge our colleagues to stop repeat prescriptions of this sort of asthma inhaler,” Anna Murphy told the audience. The results of the National Review of Asthma Deaths showed some patients were prescribed >50 reliever inhalers in the 12 months prior to their death, which was far in excess of what should be required. When asthma is under control, a reliever inhaler should be used less than twice a week – with the salbutamol metered dose inhaler (MDI) and...
Managing UTIs – resistance issues and treatment options

To prevent the rising global threat of antimicrobial resistance (AMR), pharmacists need to be “antibiotic guardians” in their treatment of urinary tract infections (UTIs), said Tejal Vaghela, pharmacy team leader in antimicrobials at West Hertfordshire Hospitals NHS Trust.

In sobering statistics, AMR is predicted to cost the global economy $100 trillion by 2050 and put 10 million lives a year at risk. In response, the UK government drafted a report in September 2016 outlining its aim to become a world leader in antibiotic prescribing by reducing Gram-negative bloodstream infections in England by 50%, and cutting inappropriate antibiotic prescribing by 50% by 2020.

Tejal Vaghela was clear that “if bacterial resistance continues to rise we will soon have issues in the treatment of urological infections.” Currently, UTIs are the most common infection in urology practice, with 150–250 million cases globally per year. Gram-negative uropathogens such as Escherichia coli and Klebsiella pneumoniae, which are common causes of UTIs, are also of global concern as they show resistance to some key antibiotic treatments.

According to a 2016 report by Public Health England, from 2014–2015 E. coli bacteraemia had increased by 4.6%, while K. pneumoniae bacteraemia rose by 9%. In response to these results, Tejal Vaghela informed the audience “we are not treating UTIs effectively, so that they are develop
ing into E. coli bacteraemia. We can help prevent the growing bacterial resistance by treating urological infections better." To achieve this, in primary care there needs to be a reduction in inappropriate antibiotic prescribing. The ESPAUR report\(^1\) showed that resistance to antibiotics in UTI treatment can vary widely between CCGs throughout England, for example from 16.3% to 66.7% for trimethoprim and 0.3% to 12.8% for nitrofurantoin. As a result, the Quality Premium Guidance Report offers incentives for primary care settings that reduce trimethoprim and nitrofurantoin prescriptions by at least 10%.

Even in the treatment of uncomplicated UTIs “there are few options”, said Tejal Vaghela. First-line treatment with nitrofurantoin is preferable as resistance against it is currently low – though this will change over time. Complicated UTIs require more extensive consideration of possible pathogens to ensure any unnecessary antibiotic courses are avoided. Fosfomycin, nitrofurantoin, and pivmecillinam have poor renal penetration, and so treatment options for complicated UTI should begin with either ciprofloxacin or co-amoxiclav. In the case of recurrent UTI “there is no real evidence out there to tell you what to do,” concluded Tejal Vaghela.

If there are no obvious risk factors then the patient should be referred to an urologist and antibiotic prophylaxis should only be prescribed for a maximum of six months. Regular fluid intake should be maintained in all patients, especially the elderly.

**Long-term conditions: the role of a GP-based pharmacist**

In a presentation on managing long-term conditions in primary care, Rena Amin, assistant director in medicine management at NHS Greenwich CCG, predicted how the role of the pharmacist was going to expand as the system strained to cope with limited funds and Brexit.

“We don’t currently have enough money to bridge the demands of what patients need and the service we provide,” she said, adding that the situation was unlikely to change due to the fall of the pound after Brexit, which would place further limits on future government spending alongside the economic burden of an increasingly older population.

In England, more than 15 million people currently have at least one long-term condition, the treatment for which accounts for approximately 70% of the health and social care budget.\(^6\) This figure is expected to rise as the projection for 2025 shows that the number of patients with at least one long-term condition will reach 18 million. In 2015, £15 billion was spent on medicines in England, and approximately 30–50% of the drugs prescribed for long-term conditions do not end up being taken correctly by patients. This is money “that could be saved or put back into the system,” Rena Amin noted, “we just have to be proactive and find more efficient models to reduce waste and better manage long-term conditions.”

To ensure long-term conditions are treated effectively, the primary care model needs to change, and pharmacists are the key to ensure the transition is successful. Currently, 50% of all GP appointments are accounted for by long-term conditions, and £500 million of extra value could be generated if the medication for just asthma, diabetes, hypertension, vascular disease and schizophrenia was used in a more optimal manner.\(^7\) To improve this, GPs would require longer than the designated 10 minute consultation time to accurately analyse drug use in patients. This is not a realistic possibility for GPs, but it is an area “where the pharmacist can step in, as patients want to see a healthcare professional that can actually help them,” said Ms Amin.

To improve efficiency, GP surgeries also need to be a ‘one-stop’ clinic. Patients should not be required to visit a clinic four times for four separate conditions, for example, but receive one extended consultation with a healthcare professional. To achieve this, the role of the pharmacist in GP surgeries is growing, explained Rena Amin. Evidently, there needs to be more education to compensate for this increased responsibility, but the objective is to “make an end-to-end service, as care should not be piecemeal.”

Outside the surgery, the expanded role of the pharmacist should also be used to strengthen community integration, which helps to harmonise the running of appointments and check-ups. A key priority would be to use the Eclipse database to find which patients are dropping off the radar before their situation becomes so severe they need prolonged, and expensive, hospital treatment. Currently, long-term conditions account for 68% of accident and emergency and outpatient appointments, and 77% of inpatient bed days.\(^8\) To help prevent such cases, Rena Amin told pharmacists “not to be afraid to challenge something that is not in your comfort zone” when dealing with difficult patients that refuse treatment or think that they know better.

**References**