

Why asthma is killing and patient care is falling short

John Tingle

John Tingle discusses the findings and recommendations of the National Review of Asthma Deaths (NRAD).

Patient safety failings will be found in all areas of care and treatment, and error is an inevitable aspect of healthcare practice. Medicine can be fairly said to be an inexact science often dependent on fallible human beings to deliver care using complex equipment and drugs. The best that we can hope for is to manage risk and minimise the chances of errors occurring through reflective and evidence-based practice. Reviewing practice and knowing why errors are occurring is an essential step to providing safe care in an NHS that is trying to develop a patient-centric culture.

The National Review of Asthma Deaths (Royal College of Physicians (RCP), 2014) Report provides a detailed and informative analysis of why deaths occur from asthma. The findings are concerning as they reveal a number of major asthma care deficiencies and extreme complacency on behalf of healthcare workers in this area.

Asthma deaths in the UK

The number of people affected by asthma in the UK is among the highest in the world. A number of data sources are used in the report to conclude that 5.4 million people in the UK are currently receiving treatment for asthma and there were over 65 000 asthma-related hospital admissions in the UK in 2011–2012. Asthma care uses substantial healthcare resources in both primary and secondary care.

Demographics

Three quarters of the people reviewed who died from asthma were over 40 years of age. Ethnicity data was available for 188 (96%) of the total 195 people who died from asthma:

- White individuals: 158 (84%)
- Mixed race: 9 (5%)
- Asian: 14 (7%)
- Black: 1 (0.5%)
- Origin unknown: 6 (3%)

Regarding where the patients died:

- Nearly half (41%) died at home
- Close to one quarter (23%) on the way to hospital
- Almost one third (30%) in hospital.

During their final asthma attack, 87 people (45%) died before medical care could be provided or sought. Of the 28 minors who died, 80% (8/10) under 10 years of age and 72% (13/18) of those aged 10–19 died before reaching hospital.

Obesity and exposure to cigarette smoke are both identified within the report as known factors that

increase the risk of people having asthma attacks. Body mass index (BMI) data was available for 121 of the 195 people who died; 25% were overweight (BMI 25–29.9) and 31% were obese or very obese (BMI 30+). Of the total 195 who died, 20% were active smokers and of the patients who did not record an active smoking status, 10% were known to be exposed to secondhand smoke.

Inhaler technique

The importance of patients using their inhaler correctly so as to properly control their asthma is emphasised and good use of inhaler technique was recorded in 65 (68%) of the 96 cases checked in primary care. The importance of asthma review is also stressed and a key finding was that 31% of the patients who died had no record of an asthma review in primary care over the previous year and of the 83 patients who died and were under the care of a specialist in secondary care, 65% had no record of an asthma review. Inhaler technique was only known to have been checked in 8% of these patients.

Diagnosis

A basic tenant of good and safe care is that a record should always be made in the medical notes of the doctor or nurse's rationale for thinking that a patient has got a particular medical condition such as asthma. However, the basis for diagnosing asthma was not detailed in 33% of cases.

This failure to record the rationale for diagnosis is unacceptable and unsafe, particularly in a post mid-Staffordshire crisis NHS, which is always supposed to put the interests and care of the patient first.

Asthma triggers

Further unsafe clinical practice is highlighted with regard to asthma triggers. Any factors that can exacerbate or trigger asthma should be noted so that action to reduce their impact can be taken. However, worryingly, in nearly half of the patients who died (49%), no triggers were documented. There is also evidence of overuse or over-reliance on short-acting beta agonist (SABA) (reliever) inhalers. More than half (56%) of the 165 patients with prescribing data were prescribed more than six SABA inhalers in the year before they died, 39% were prescribed more than 12, and 4% were prescribed in excess of 50.

Overall quality of care: Inadequate

The overall quality of care provided against national clinical guidelines and NRAD was deemed inadequate:

'The panels concluded that the overall standard of asthma care was inadequate, with several



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aspects of care well below the expected standard, for 51 (26%) of those who died. The overall standard of care for children and young people was inadequate (with several aspects of care well below the expected standard) in 13/28 (46%). (RCP, 2014: 40)

Asthma guidelines

A key matter is whether there were any potentially avoidable factors before each patient's death. Report panels identified potential avoidable factors in the year before death for 89 (46%) of the 195 people who died, where alternative management could reasonably be expected to have affected outcomes. An apparent lack of specialist asthma expertise among attending clinicians (17%) and a failure to implement guidelines from the British Thoracic Society (BTS) and the Scottish Intercollegiate Guidelines Network (SIGN) in 25% of cases were among the major potentially avoidable factors identified in the report and listed below:

- Clinicians apparently did not recognise high-risk status
- Clinicians appeared to lack specific asthma expertise
- Adequate asthma review not performed
- Clinician did not refer to another appropriate team member when this seemed to have been indicated
- Patients apparently did not take prescribed medication in the month before death
- Patients apparently did not take prescribed medication in the year before death
- Patients overprescribed SABA (reliever) inhalers
- Poor or inadequate implementation of policy/pathway/protocol
- Lack of knowledge of guidelines
- Patient apparently did not adhere to medical advice.

Patients, their families and their environment

There were also a number of avoidable factors related to patients, their families and their environments during the 12 months before death:

- Poor adherence to medical advice
- Psychosocial issues such as substance abuse, psychological factors, social factors
- Smoking or exposure to second-hand smoke
- Allergies.

Clinical supervision or delegation of care

The report makes for uncomfortable reading as major care failings, such as poor clinical supervision, delegation and referral practices, are all too often revealed within both primary and secondary care. Avoidable factors related to referral to a specialist were identified in 38 (19%) patients, including delays or failure of referral for specialist opinion. Health professionals in primary care failed to refer 32 of these patients to colleagues in secondary care as was called for.

Potentially avoidable factors related to supervision or delegation of care were identified in 29 (15%) of those who died, including inappropriate delegation of care for 7 of them (4%). Another issue identified was the clinical assessment and recognition of patients' risk statuses in both primary and secondary care.

Assessment and management of final attack in primary and secondary care

Assessment

Important findings are revealed in asthma assessment within both primary and secondary care:

Primary care

- Of 38 (19%) patients treated during their final, fatal asthma attack, there were potentially avoidable factors in 13 (34%) of their deaths related to assessment of the attack and access to primary care health professionals.

Secondary care

- Of 59 patients treated, there were potentially avoidable factors in 20 (34%), related to assessment of the attack and access to care professionals.

Management

Significant care failings were identified in the management of the acute attack phase:

'Administration of reliever bronchodilator therapy is recognised as essential and potentially life-saving treatment in acute severe asthma. In the 49 people recorded as being treated with bronchodilator reliever therapy, timing was only noted in 25 (51%); in these 25 cases, emergency reliever treatment was not given to 8 (32%) within 30 minutes of being seen by a doctor. (RCP, 2014: 48).

Further avoidable factors related to the management of the final attack by professionals were found in 12 (32%) of those cases treated in primary care and 20 (34%) cases treated within secondary care. These potentially avoidable management factors included delays or failures in the implementation of appropriate monitoring, treatment initiation and following guidelines.

Conclusion

The NRAD report calls for an end to the complacency that currently surrounds asthma care. It makes a number of important recommendations that are designed to deal with the poor quality care failings identified. These include:

- Better monitoring of asthma control; where loss of control is identified
- All patients should be provided with a personal asthma action plan (PAAP)
- Doctors, nurses, patients and carers need to become more aware of the risks, warning signs of poor asthma control and what to do in the event of an attack
- A standard national asthma template should be developed to facilitate a structured, thorough asthma review.

The magnitude of poor, possibly negligent, care described in the NRAD report should not be underplayed and recommendations should be taken very seriously. I am left feeling uneasy at the prospect of the many patient deaths which could have been avoided with the proper and reflective care patients deserve.

BJN

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