

# Common asthma myths and misconceptions that form barriers to effective symptom control – and how to counter them



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## Introduction

Asthma is a common long-term respiratory condition that is thought to affect 5.4 million people in the UK;<sup>1</sup> it can affect people of all ages and prevalence tends to be highest in the most deprived locations.<sup>2</sup> Asthma attacks in the UK have increased by a third over the last decade and the number of people affected by asthma in the UK is amongst the highest in the world.<sup>3</sup>

In nearly two-thirds (65%) of cases, the National Review of Asthma Deaths (NRAD) identified one or more avoidable factors.<sup>4</sup>

As clinicians, are we taking the symptoms of an asthma attack or worsening asthma control as seriously as somebody presenting with a rash or a high, unexplained temperature for example? For most clinicians, missing a diagnosis of meningococcal septicaemia can fill them with a sense of dread. Fortunately, due to high profile media and NHS campaigns, death rates continue to fall and between 2019-20, 30 deaths from meningococcal septicaemia were reported compared with 1400 deaths from asthma in the same time-period.<sup>5</sup>

This article will emphasise the role clinicians and other MDT members can play in countering and not perpetuating myths around asthma not being a serious disease (Myth & Truth sub-headings will be used throughout). Many patients have a poor perception of their asthma and mistakenly believe that symptoms such as cough, breathlessness, chest tightness, wheeze, night-time awakening are a normal part of life and should just be accepted. Patients in the REALISE study displayed a large gap between their perception of asthma control and their actual GINA-defined asthma control.<sup>6</sup>

Another indicator that asthma isn't taken seriously, and there may be a gap in knowledge, is that adherence to preventive medicine is only around 22-63%.<sup>7</sup> It is certainly possible to improve this; Finland is a good example of how guided self-management and running a national co-ordinated programme can reduce the burden of asthma.<sup>8</sup>

Asthma Right Care resources<sup>9</sup> can be used to aid conversations with patients and clinicians and will be signposted throughout this article.

## Myth:

It's normal for people with asthma to 'have symptoms'.

## Truth:

Most people with asthma can 'live well and in complete control'.

**Pathology** - Adopt a 'keep it simple' approach for people living with asthma so they can better manage their condition.

### Myth:

Asthma is a disease of bronchoconstriction (tightened airways/muscles) alone and can be treated with a blue inhaler.

### Truth:

Asthma is predominantly a disease of inflammation which is the main cause of the narrowed airways; a blue inhaler will not treat the inflammation. It will help with the bronchospasm/bronchoconstriction on the outside of the airways, and this might be why people perceive the blue inhaler to work best. This is a risky perception; blue inhalers should be considered "Emergency" inhalers just like the blue light of an ambulance.

Reputable videos<sup>10</sup> or airway models<sup>11</sup> can be helpful in explaining the pathology in patient friendly terms.

Asthma can affect a person's 'lung openness' (airway walls swell) and make it harder to breathe. This is usually caused by an over-reaction to certain triggers, e.g. house dust mites, smoke, chest infections, weather changes, anxiety/stress, laughter. Most people with asthma have an allergic/atopic type. All our bodies **naturally**<sup>12</sup> release defences, however, in asthma there's an over-reaction (lungs **react too strongly**) to triggers other people may not react to. These can cause swelling with the release of inflammatory mediators (a little like a volcano that remains dormant and is ready to erupt at certain times).

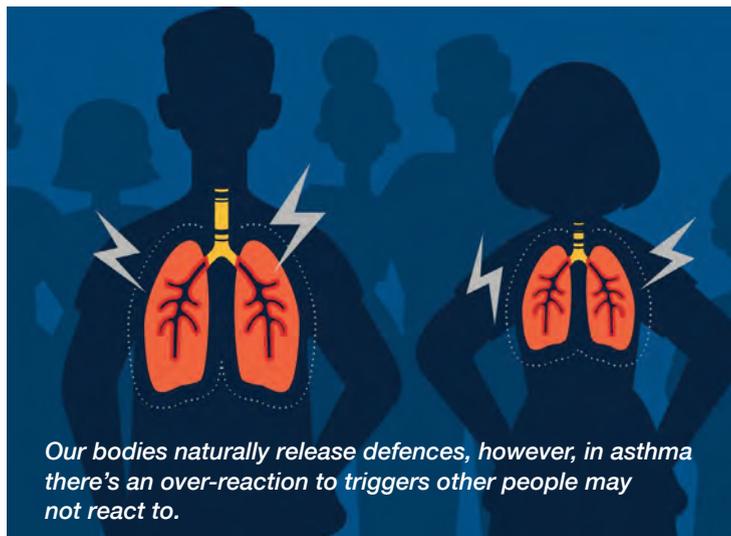
### Myth:

People with asthma have **weak lungs**

### Truth:

There's an over-reaction in asthma where the lungs react **too strongly**

In some ways, the lungs look like trees. The bronchi (left and right large tubes/branches lead to the smaller airways/branches (bronchioles)) which can become inflamed, narrowed and more sensitive than normal. If a person has poorly managed asthma it can feel like trying to **breathe through a straw** with mucous in it rather than trying to breathe through a more open and **wider hose pipe**.<sup>13</sup>



Symptoms resulting from poor control of underlying inflammation are common and vary in frequency and severity. It can have a significant impact on both physical and emotional health and wellbeing for the person and other family members.

With good inhaler technique, an everyday low dose 'anti-inflammatory medicine' (inhaled corticosteroid (ICS)) can help maintain that **natural balance**<sup>14</sup> and keep the volcano dormant with minimal side effects.

Over-reliance on short acting B2 agonist (SABA) (sometimes referred to as the 'blue', 'reliever', 'rescue', 'emergency' medicine) and underuse of Inhaled Corticosteroids (ICS) does have an impact on the quality of people's lives. Some people may try and avoid triggers, not undertake exercise. A reduction in activity can increase deconditioning.

Regular use of SABA can cause tremors, headache, increased heart rate, palpitations, and muscle cramps for example.<sup>15</sup> Rebound hyperresponsiveness and downregulation of the receptors can become problematic.<sup>16</sup>

≥3 (200 puff) SABA canisters is associated with increased hospitalisations.<sup>17</sup>

The SABA slide rule, Reliever Reliance Test, Posters & Question & Challenge cards can help clinicians start the sometimes-awkward conversation.<sup>18</sup>

### Myth:

People with mild asthma can't die of it.

### Truth:

People with all severities of asthma can have an 'asthma attack' and inflammation exists in mild, moderate, and severe disease and needs to be treated with an anti-inflammatory medicine.

## Myth:

One SABA canister a month on repeat prescription isn't too much.

## Truth:

For a person with good asthma control, one canister (200 puffs) in theory should be **sufficient to last 6 months**.<sup>19</sup>

If a person needs every puff of the 6 SABA canisters, according to the SABA slide rule the person has potentially experienced 600-1200 breathless moments in the year, 23 puffs a week, more than 3 puffs per day.

An extra SABA canister can be justified in certain circumstances e.g. school but still means less than three per year should be sufficient in most circumstances.

## Myth:

Using the blue inhaler is less costly to the NHS than using ICS and won't have a significant environmental impact.

## Truth:

Good asthma control = good for the person (less symptoms & risk) and the planet.



22.5 million blue inhalers are dispensed to asthma patients each year (an average of 5 per diagnosed asthma patient;  $\geq 3$  blue (reliever) canisters per year is associated with a two-fold increased risk of severe asthma attack.<sup>21</sup>

The SABINA observational study demonstrated that healthcare resource utilisation (HCRU) costs were higher among patients prescribed high-SABA ( $\geq 3$  canisters).<sup>22</sup>

### *Eliminating SABA over-reliance could support the NHS to address their sustainability goal*

In asthma 83% of SABAs prescribed go to patients using  $\geq 3$  inhalers/year.<sup>23</sup>

70% of the **total carbon footprint** of inhaler devices in the UK is represented by SABAs.

Innovative approaches have also been demonstrated on the ground in order to achieve SABA reduction. A 2018 study commissioned by *The Lancet* suggested that in some patients, where clinically appropriate, a MART strategy involving use of a combination steroid and long acting beta agonist would allow a SABA-free regimen and therefore be an effective way to reduce SABA overuse.<sup>24</sup>

The three elements of basic asthma care are needed more than ever<sup>25</sup>:

- 1) Co-creating a personalised asthma action plan, or MART plan, is important to help consolidate what's been discussed during the asthma reviews including recognising when symptoms deteriorate, adherence to everyday treatment, when to use SABA 'emergency medicine', trigger avoidance and what to do when symptoms escalate.
- 2) Inhaler and spacer technique coaching  
Utilising the whole multidisciplinary workforce including community pharmacy
- 3) Annual asthma reviews as a basic minimum and including face to face for the more high-risk patients.

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## Summary

Clinicians can do a lot in practice to help people live better with asthma. The time we invest and the words we use really do matter to promote 'self-care' as myths still exist that can be countered with the right clinical skills and resources to aid.