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# General practitioners' understanding of severe and difficult asthma: A qualitative study

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## Abstract

**Aims:** To explore how severe asthma and difficult asthma are perceived by general practitioners

**Methods:** Qualitative grounded theory method was used. 13 GPs were interviewed and the interviews recorded, transcribed and analysed for themes

**Results:** There were different perceptions of 'severe' asthma and 'difficult' asthma from most GPs. The main difference was that 'severe' asthma was understood in more medical terms whereas 'difficult' asthma tended to be asthma that was difficult to get under

control due to a variety of reasons including social and psychological patient variables. Two GPs refused to use the term 'difficult' asthma one because of the excessive numbers of terms being used in asthma and the other because of its pejorative nature

**Conclusions:** These different perceptions confirm that there is no one agreed definition for severe asthma nor difficult asthma. However, difficult asthma in most cases had a broader definition including psychological and social implications and factors, than severe asthma

## Introduction

The asthma costs for both individuals and society have escalated in the last decade. Research has indicated that a large proportion of these costs is from a small percentage of those who suffer from more severe asthma.<sup>1-3</sup>

But what is 'severe' asthma? One definition is provided by the British Thoracic Society (BTS)<sup>4</sup> which categorises severity, in the main part, by the treatment step (i.e. level of medication) the individual is on. For example, Step 1 is the occasional use of bronchodilators (mild asthma) and Step 5 involves high levels of anti-asthma medication (severe asthma). The Global Initiative for Asthma (GINA) take a slightly different view<sup>5</sup> and determine severity by the level of symptoms and/or level of impaired lung function and/or frequency of exacerbation before any therapy. It is of note, however, that most classifications of 'severe' asthma have not been validated with regard to reproducibility or measurement reliability.<sup>6</sup> It has been suggested that clinical assessments regarding severity should be based on the patient's current symptoms and history of prior treatment<sup>7</sup> and in addition airflow impairment.<sup>8</sup>

What about those patients who are on medication but who still suffer high levels of morbidity?<sup>9</sup> Should these patients be defined as having 'difficult' asthma? The European Respiratory Society (ERS) taskforce defines difficult/therapy resistant asthma as 'that which is poorly controlled in terms of chronic symptoms, episodic exacerbations, persistent and variable airways obstruction and a continuing requirement for short-acting beta-2-agonists despite delivery of a reasonable dose of inhaled corticosteroids'.<sup>10</sup> Children with difficult asthma have been defined as those 'on 80 µg per day or more of beclomethasone or an equivalent dose of ICS [and] who remain symptomatic on 3 or more days a week'.<sup>11</sup> Others define difficult asthma as 'failure to achieve control when maximally recommended dose of inhaled therapy are prescribed'.<sup>2</sup> It is clear that different agencies and authors may use the term

severe and difficult asthma in different ways.<sup>10</sup> This further implies that different healthcare professionals (e.g. GPs versus hospital consultants) and, indeed different individuals, may have different perspectives on severe and difficult asthma. Thus, when communicating with GPs regarding severe and difficult asthma, it is essential to explore their understanding of these concepts. What do these health professionals on the front end of delivering asthma services in primary care understand as severe asthma and difficult asthma?

## Aim

- To determine the definitions of 'severe' and 'difficult' asthma expressed by general practitioners
- To explore how these definitions relate to their experience

## Method

For this study we employed a qualitative approach that used in-depth interviews with GPs to collect the data.<sup>3</sup> Data collection and initial analysis were performed according to the grounded theory methodology.<sup>14</sup> This methodology allows the investigation to be exploratory and inductive as opposed to other methods and can be applied to both qualitative and quantitative data. It can also be used to provide fresh insight into a familiar situation.<sup>3</sup> The semi-structured individual face-to-face interview lasted from 30 to 45 minutes. The opening question requested the GPs' understanding of severe asthma and difficult asthma and then subsequent questions were asked around the areas of management, in order to help understanding. Purposive sampling was used. Thirteen GPs in total were interviewed, seven from Norwich and six from Grampian. Size of practice, gender, number of years in practice and special interests were stratified in order to obtain a wide range of views. Interviews took place in the GPs' surgeries/offices, were taped with permission and later transcribed. The transcripts were entered into the NUD\*ist Vivo (N-Vivo) software package, analysed for specific topics and broad themes identified

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## Result

There was a consistent difference in definitions given of 'severe' asthma and 'difficult' asthma. An unusual view was that there was no difference because "from a medical point of view severe asthma is asthma that is difficult to control" (Interviewee GP 1-1).

With regard to 'severe' asthma, some GPs referred to the BTS steps directly or referred to level of medication (mainly oral steroids) when defining their first views of severe asthma. Recurrent definition also mentioned a high level of hospital admission and being symptomatic.

With regard to 'difficult' asthma, lack of control over the disease was consistently referred to with patient variables given as a cause for the lack of control. Reference to more psychological and social factors was made when discussing 'difficult' asthma compared to 'severe' asthma. 'Severe' asthma was described in more medical terms while 'difficult' asthma tended to be described as asthma that was difficult to get under control for a variety of reasons including social and psychological patient factors. Although psychosocial factors were referred to with 'severe' asthma, the GPs highlighted these more when explaining 'difficult' asthma. Two GPs would not use the term 'difficult' asthma. One indicated that this was because of its "pejorative" nature and the other

because they are "too many different terms" already in use. A

additional GP admitted that he hadn't thought so much in terms of 'difficult' asthma, rather 'difficult-to-treat asthma'. Examples of the different descriptions can be seen in Box 1

As mentioned, in the 'severe'/'difficult' asthma definitions, patient factors were seen as important. These variables were often associated with issues of compliance and self-management. Examples of attributes seen as detrimental to optimum asthma management were categorised under five main initial categories. These were knowledge, identity, coping, health behaviours and other factors (see Box 2)

Interviewees gave examples of the types of approaches and tactics they saw as useful in combating negative attributes. These included, for example, changes to the medication regimen to combat factors such as forgetfulness and stigma. Education was mentioned universally as the main tactic used in order to overcome knowledge barriers. Reassurance, building confidence, discussion of emotions, building trust, a little coercion and motivating the patient were all mentioned as additional tactics that could be used. It was highlighted that each patient is an individual and this can affect which tactics will be used and how confrontational the approaches taken will be. (see Box 3)

When asked about future hopes, most of the GPs felt confident that in the future there will be new drugs that modify asthma more effectively than at present. An unusual attitude was that even if drugs are

### Box 1: Examples of definition

#### Severe asthma

"Going back to the basic medical thing, it is those people who have previously been proven to be in danger from their asthma...." Interviewee GP

#### Severe and Difficult difference

"I suppose severe is perhaps more of a straight clinical/medical asthma related thing whereas the difficult perhaps is multi-factorial isn't it. It's not just the asthma, it's the way they're, they're coping with their asthma and the rest of their problems in their life." Interviewee GP

#### Difficult asthma

Researcher: "What would you take to mean by difficult asthma?"

GP: "Probably difficult patients actually"

Researcher: "So it's more to do with the patient rather than the disease?"

GP: "Yeah, yeah." Interviewee GP

"Difficult asthma is not a term I would think of using, but I suppose that would be to do with, asthma where the control isn't easy to establish. It might be to do with factors of the person, to do with, capacity to understand, to do with effective drugs, to do with whatever, but it's not a term that I, I would particularly think of..." Interviewee GP 1-

"...difficult asthma isn't a term I would use. But one would recognise that there are those people for whom, or in whom, the asthma is difficult to control....either for their doctors or for them..."

"...I would be wary of the term difficult asthma because, in cases it is being used to mean difficult person with asthma."

Interviewee GP

### Box 2 - Categories of perceived patient barrier

Category	Example
Knowledge	Lack of understanding
	Complex therapies
	Lack of confidence in dealing with asthma
	Fear of steroid Inhaler technique
Identity	Denial of initial diagnosis
	Denial of severity
	Stigma of being 'asthmatic'
Coping	Irresponsibility
	Forgetfulness
	Chaos
	Lack of motivation
Health Behaviour	Smoking
	Alcohol problem
	Drug problem
Other factors outside of the disease	Lower class
	Employment problem
	Marital problem
	Family problem
	Age - i.e. Teens and middle age men
	Stress from other sources

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delivery systems were greatly improved in the future they may still not work with those with severe and difficult asthma

### Conclusion

The main results demonstrate that 'difficult' asthma and 'severe' asthma are perceived differently by the vast majority of the GPs interviewed. When referring to severe asthma, the GPs mentioned high levels of medication, hospital admissions and symptom level as the main factors. This has been suggested as the basis of the clinical assessment of severity<sup>7</sup> and, a psych. may be what one would expect from a primary care health professional. When referring to difficult asthma, the main factor described was lack of control over the disease. This control factor has also been highlighted in previous definitions given<sup>20,1</sup> However, lack of control was not necessarily related to the severity of the disease. Rather, GPs often referred to non-medical patient variables (e.g. psychological and social factors) when explaining what made the asthma difficult. This agrees with some articles that have appeared on how to manage difficult asthma<sup>0</sup> These patient non-medical factors were highlighted more with difficult asthma than with severe asthma.

It is not only general practitioners who provide asthma care in primary care. Practice nurses have had an increasing role in the last decade<sup>6</sup> Therefore an work on asthma definitions and experiences of asthma management in primary care must include practice nurses. Work is currently being carried out to see what practice nurses understand as severe and difficult asthma and whether this differs from GPs' understanding

Although the current study has a small sample size this is offset by the strengths of carrying out qualitative work of this nature<sup>7</sup> For example, this study has highlighted many factors that contribute to GP attitudes towards asthma management. These factors emerged from the doctors themselves through the semi-structured nature of the interviews. Using quantitative methods might have precluded the emergence of some of these factors. The use of qualitative methods is further supported by the finding that although patient characteristics were seen as an important aspect in the management of severe and especially difficult asthma, the doctors' hopes for the future tended to rely on medication. This paradox might not have been highlighted through conventional quantitative methods.

All the GPs reserved enough time for the interview and investigator despite the widely recognised pressure on GP time nowadays<sup>98,1</sup> The GP appeared to be reasonably relaxed, open in their discussion and not apprehensive, which can impact on the data collected<sup>0</sup>

In conclusion, this study has shown the different meaning given to severe asthma and difficult asthma from the GPs' perspectives and how they perceive patient attributes as an important variable when

aiming for optimum asthma management in this group of patients. However, GPs perceive their patients' attributes as well as the clinical aspects of the disease, are therefore important when looking at the management of severe and difficult asthma. ■

### Box 3: How GPs cope with compliance problem

Examples of the approaches and tactics used by the GP in the interview

- Patient education
- Making the medication regimen simple
- Reassuring the patient
- Building confidence and trust of the patient
- Discussion of emotions with patient

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### Previously Presented Material

- Initially presented at ERS conference 2001 as a Poster Reference: Moffat, M.A., Cleland, J., Price, D.B. GPs attitudes towards severe and difficult asthma *European Respiratory Journal* 2001 **16** (suppl **31**) s399
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