

The Evolution of Asthma Care

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Although the mortality from asthma has improved over the last several decades the morbidity continues to rise. According to estimates, approximately 300 million people around the world suffer from asthma, nearly the entire population of the United States. This does not account for those who have respiratory symptoms but do not yet have a diagnosis, which would exponentially increase this number. In 2017, in the US alone, it was estimated that 7.7% of the population suffered with asthma. The total annual cost of asthma includes direct costs, including the costs of emergency visits, hospitalizations, physician's visits and medications and indirect costs, including work absenteeism and decreased productivity from ongoing symptoms. These costs, in the US alone, exceed a staggering 50 billion dollars. Clearly, there is more that needs to be done in the realm of asthma management.

The GINA guidelines, which are the current standard of care for varying severities of asthma, include the use of steroid inhalers and long-acting bronchodilators, depending on the severity of symptoms [1]. The introduction of the so-called biologic agents, in recent decades, has added to the armamentarium we have at our disposal to treat asthma, however, sadly, not all patients qualify for treatment with these newer medications [2]. Some of the patients, who do qualify, end up having to discontinue these medications due to side effects and, although many patients benefit from them, they are still a small percentage of the totality who have regular asthma symptoms.

I believe that the reason for the current state of affairs, when it comes to asthma treatment, has its roots in the one-dimensional approach to treating asthma. What do I mean by this? Current treatment is solely focused on pharmaceutical agents, whether they be steroid inhalers in or not in combination with beta-agonists which decrease inflammation and open up constricted airways or with the newer biologic agents which work at the level of cellular signaling. This limited approach does not address the myriad of factors and causes which have been implicated in the current prevalence and rise of asthma globally.

Although climate change and environmental pollution and toxins are major factors which have perpetuated asthma we, as individuals, have only some control over the local and international government policies which can address this issue. Even with what limited influence we have it will be many decades before we are able to reverse the damage that has been done to our environment. What we do have control over is our own individual selves and this seems to have been lost in the quagmire of pharmacologic asthma treatment.

Now, I am not, in any way, against pharmaceuticals. They are necessary for the effective treatment of asthma, especially in the initial stages, after the diagnosis is made. However, the causes and effects of asthma run far deeper than what medications can do. Let's examine this in more detail. The pathophysiology of asthma centers around airway inflammation and bronchospasm hence the use of steroid inhalers, to treat the inflammation, and bronchodilators to treat the bronchospasm. What pharmaceuticals do not address is the roots of inflammation and the ensuing bronchospasm.

There is more research in the emerging role of the nutrition in inflammation through the gut microbiome [3]. We now know that the gut microbiome consists of trillions of cells which outnumber our human cells 10 to 1. What this points to is that we are more microbial in nature than we are human. In the western world, the standard diet has led to the current obesity epidemic but also has instigated chronic inflammation which has been implicated in all chronic diseases included hypertension, diabetes mellitus, heart disease, cancer and asthma. Given the importance of the gut microbiome in obesity and chronic inflammation and its effect on asthma, you would think that there would be more emphasis in conventional healthcare in addressing these issues whose root lies in nutrition. Sadly, however, nutrition is not addressed in the GINA guidelines and scarcely discussed by asthma specialists despite its importance in cultivating a healthy gut microbiome. In fact, obesity and asthma is a recognized phenotype amongst asthma patients for whom pharmacologic treatment is less effective than other types of asthma.

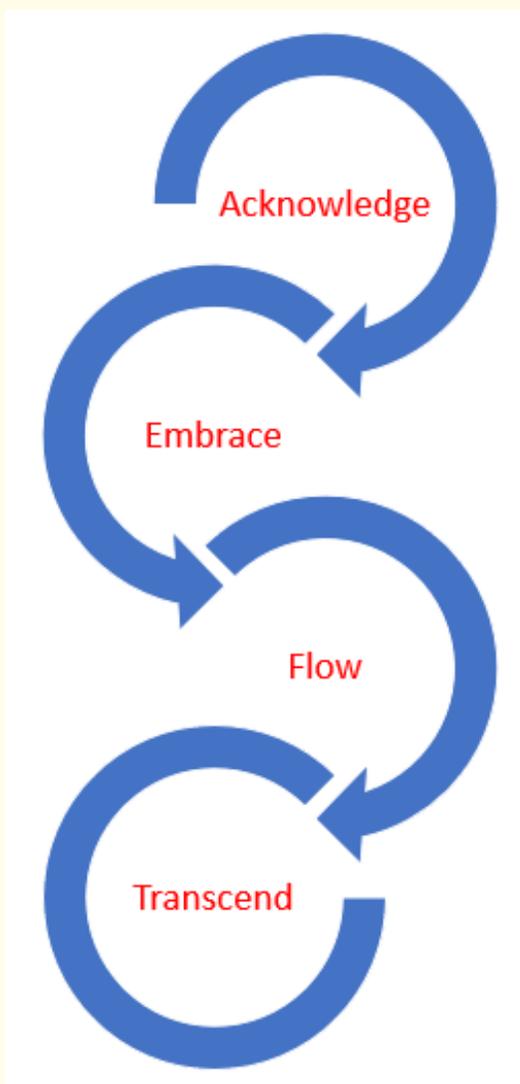
The other factor that leads to chronic inflammation and has been identified as a trigger for asthma attacks is chronic stress which has become a global epidemic [4]. Again, there is little that conventional medicine does to address this ever-present issue. Poorly managed stress can lead to chronic anxiety and, potentially, depression due to its emotional burden. The issue is not external factors which lead to stress, which are largely unavoidable in our modern society, but how we manage this stress.

Our personalities are largely formed by the age of 7 and this includes our beliefs about ourselves and the world we live in. Many of these beliefs are limiting beliefs, especially if we grew up in a challenging family environment where there was parental strife, separation, divorce, emotional and physical abuse or financial hardships. These experiences can condition our subconscious mind to impose limitations on who we can become and what we can achieve which can lead to dysfunctional responses to any stress in our lives.

Besides limiting beliefs, many of us suffer from a history of emotional trauma even if we did not experience emotional or physical abuse. There are countless challenges that we can all face, even before the age of 7, including parental pressures and expectations, bullying, perceiving that one is not loved and the infinite negative influences from the media, social media and the unending marketing we are all subjected to both on and offline. These can lead to us not feeling good enough and negative emotions which, if not dealt with, can become emotional blocks which affect our physiology not to mention how we react to stress in our lives. Modern medicine does little to address how to deal with these limiting beliefs and emotional blocks and their influence on how we respond to stress.

As a pulmonologist and intensivist, I have been in the trenches for two decades and have done my own personal research and introspection into how to facilitate healing in our patients. This, eventually, led to my writing and publishing my book, 'Healing from the Inside Out: How to Overcome Chronic Disease and Radically Change Your Life.' In my book, I address a lot of the issues I have been discussing here. My application of these principles to asthma has led to what I call the 'Overcome Asthma Success Path,' which I outline below in a visual form.

The overcome asthma success path



Figure

Each level in this success path has its own steps and milestones which must be addressed in order to progress in the mastery of one's asthma. Acknowledgement and acceptance are always the starting point where one recognizes that there is something wrong with one's breathing. Embracing involves taking the next steps to get diagnosed and treated with the appropriate medications and formulating an action plan for future exacerbations. It also involves identifying what triggers one's symptoms. In the flow stage one is starting to look at deeper factors which underlie their airway inflammation including nutrition and how it affects their microbiome and how they manage the stress in their lives. By the time one reaches the transcend stage their asthma is well under control with few if any exacerbations and they are starting to examine the deeper reasons for their asthma at the level of meaning and purpose and where they are not showing up in their lives.

I believe that this is the future of asthma care and will transform, not only how we see and manage asthma, but will set a new standard for the management of all chronic diseases. More research needs to be done to evaluate a more comprehensive, whole health approach to asthma treatment. If you would like to know more, please visit the following link to get a more detailed explanation of the Overcome Asthma Success Path: bit.ly/flowwithasthma.

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