The plight of the 'asthmatic patient' in South Africa – a subgroup analysis of the SABINA III study

Asthma is one of the most common chronic respiratory conditions, and its prevalence is increasing worldwide.[1] It is estimated that approximately 300 million people in the world currently have asthma.[2] The prevalence rate of asthma is increasing as communities are adopting a more Western lifestyle and become urbanised. With the projected increase in the proportion of the world's urban population, that is, from 45% to 59% in 2025, a marked increase in the number of asthmatics worldwide over the next two decades is likely. It is further estimated that there may be an additional 100 million people living with asthma by 2025.[3,4] Epidemiological data from Southern African Development Community (SADC) and South Africa (SA) are lacking. The only robust data from SA is from the ISAAC study published in 2007.[4] SA has the fourth-highest asthma mortality in the general population (1.5 per 100 000) and the fifth-highest asthma mortality among 5 - 35-year-old asthmatics (18.5 per 100 000).[5] Despite progressive reductions over the past few decades, asthma mortality remains high within the southern African region. For example, in SA, among 5 - 34-year-olds, the asthma mortality rate has decreased by 0.13 deaths per 100 000 per year over recent decades. However, at 1.5, it still represents a relatively high rate internationally, and is associated with the fifth-highest case fatality rate in the world.[3]

With the updated asthma definition by the Global Asthma for Initiative (GINA) and the paradigm change in our approach to the management of chronic asthma, new data are mandatory. Asthma is now understood to be a heterogeneous condition that is characterised by frequent acute episodic exacerbations. These frequent exacerbations against the background of chronic persistent inflammation have led to a major revision in the management of the neglected asthma population – the 'mild intermittent and mild persistent asthmatic'. One of the major drivers for this change has been the documentation of progressive decline in measurements of lung spirometry in uncontrolled asthmatics, irrespective of the severity of the illness.[6] This is supported by data from landmark clinical trials published in leading journals indicating that continuous inhaled corticosteroid steroid (ICS) treatment leads to improved symptom control and a significant reduction in the risk of exacerbations with a reduction in airway inflammation.[7-9]

In this edition of the journal, Smith *et al.*[x] present the findings of the SA cohort of patients from the multicentred SABA use In Asthma (SABINA) III study. These data confirm previous data published on asthmatic patients, and this is not unique to our region. Within the SA population, there is a significant over-reliance on short-acting β2-agonists (SABA) usage. Smith *et al*. report that 74.9% of the patients interviewed were prescribed ≥3 SABA canisters in the previous 12 months, and 56.5% were prescribed ≥10 SABA canisters. Additionally, 27.1% of patients reported purchasing SABA canisters over the counter. Among patients with both SABA purchase and prescriptions, 75.4% and 51.5% had already received prescriptions for ≥3 and ≥10 SABA canisters, respectively, in the preceding 12 months. These data are extremely concerning, as there is mounting evidence that SABA overuse, and in particular >3 canisters per year, is associated with an increased risk of exacerbations, hospitalisations and mortality.[10,11]

This study further highlights the plight of the mild asthmatic, and the mismanagement of these patients locally. In this population of patients with mild asthma, symptoms remain uncontrolled in >50% of patients.[12] One of the major reasons postulated for the poor control documented in this group of patients is the lack of patient compliance with maintenance treatment.[13] Of the 501 patients analysed in the SABINA subpopulation, asthma was partly controlled/uncontrolled in 60.3% of patients, with 46.1% experiencing ≥1 severe exacerbations in the 12 months before the study visit. These data reinforce the need for the use of ICS at all opportunities in the management algorithm for step-up therapy in patients with asthma. The adoption of the new GINA guidelines, which have been endorsed by our local SA asthma guidelines, advocate for the use of the maintenance and reliver therapy approach.[14] We as the advocates and custodians of respiratory healthcare in SA need use this data to engage with clinicians and policy-makers to make sustainable changes that will impact asthma outcomes. We now have the data to support the implementation of our local asthma guidelines and to prioritise the incorporation of ICS/long-acting β2-agonists into the essential drug list as a therapeutic option that should be available to all citizens of the country.

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