Optimising Asthma Care

The dawn of the new millennium held much promise for medicine especially for chronic disorders such as hypertension, diabetes mellitus and asthma. Major clinical trials had been published, new therapies developed and the unraveling of pathogenetic mechanisms had opened our minds to a molecular network tantamount to a medical revolution. The next quantum leap that doctors had to make was to embrace this knowledge and transform medical practice: instead of having patients managed sub-optimally such that they remained ***diseased*** but rather to optimise treatment to render them "normal" - through near complete cessation of the pathological processes such that patients are completely asymptomatic and occult target organ damage nullified. This quantum step was not taken.

Why? The chronic disorders mentioned above have one thing in common- they're largely invisible. When, you observe a patient, you can't "see" these diseases. Because of this, they're treated inadequately and patients remain symptomatic with impairment of lifestyle and on-going disease progression.

This is certainly true of asthma. Recent major surveys have revealed that the vast majority of asthmatics are uncontrolled. This is manifest by regular symptoms, impaired quality of life and absence from work or school. Health services continued to record high frequencies of emergency room visits, unscheduled doctor visits and hospitalization for acute severe asthma. With many chronic conditions, there is the recommendation that we treat to target; e.g. blood pressure or HbA1c for diabetes. With asthma, there appeared to be no definite targets and both patient and doctor accepted that asthma would elicit symptoms and limitations. This realisation prompted both the Global Initiative for Asthma (GINA) and the SA Thoracic Society (SATS) to commission updated guidelines the latter in this issue.[1]

The principal theme of these guidelines is to aim to totally control the disease process. Whereas previous guidelines had concentrated on severity grading and escalating therapy, the new directive is to strive for control. When achieved, patients are symptom free, sleep undisturbed, have normal lung function, no vocational disturbance and are at minimal risk of exacerbations.

The landmark trial to explore this feasibility was the GOAL study: Gaining Optimal Asthma Control. Treatment was increased until asthma was totally controlled- manifest by complete cessation of symptoms and normalization of lung capacity. The number achieving total control was 40% and another 40% achieved very good control.

The new guidelines also put medications in perspective; the hallmark of asthma is airway inflammation and inhaled corticosteroids (ICS) remain the gold standard. This is best combined with a LABA (long acting â agonist) for sustained bronchodilatation. If patients remain symptomatic then it is likely that inflammation persists and the ICS dose needs to be increased. One can also capitalize on the synergy between LABA & ICS as their combined effect is equivalent to doubling the dose of the ICS component. We've also gained more experience with medication. Leukotriene modifiers and LABA are eschewed as monotherapy and both are recommended as add on therapy to ICS.

There are also some simple issues that deserve attention. One of the most frequently neglected aspects is inhaler technique; one could have the most expensive or effective medication but if it is not delivered to the lung adequately there will be a poor therapeutic outcome. The technique must be checked regularly and reinforced as required. Information on the need for ICS strengthens adherence. Combination ICS & LABA inhalers aid compliance tremendously as they simplify the therapeutic regimen.

One could have the best guidelines in the world but if there's no knowledge thereof, acceptance or influence on practice then their utility becomes questionable. Professor Bob Mash discusses the concept of "Outcome Mapping" in this context in this issue. The SATS, Allergy Society and the National Asthma Education Programme (NAEP) have funded an initiative called the Asthma Guideline Implementation Programme that will disseminate and evaluate the new guide. It will start in the Western Cape and is envisioned to become a national project.[2]

If successful, this project will revolutionise asthma care. Both doctors and patients need to shift expectations; doctors need to know that they can bring asthma completely under control and patients need to expect their care-givers to offer more; the most cost-effective treatment so that they are largely free of symptoms and lifestyle impairment. Other stakeholders need to be incorporated as well; therapeutic decision makers and funders in both the private and public sectors. Lessons learned will help us improve strategies and possibly translate them to other chronic disorders to impact positively on the health of the nation.

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