Asthma: More than a Tight Chest

– Dr EV Rapiti

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Curriculum vitae

Dr Rapiti studied in India (Bombay) where he obtained a BSc(Hons) in 1972 and a MBBS, Gwalior in 1977. He came to the RSA where he has obtained the MFGP (1987) and DCH (1990). After internship in McCords Hospital and 3 years in Livingstone Hospital (PE) he has been in General Practice in Mitchells Plain since 1983. Dr Rapiti is ex-Chairman of NAMDA (Western Cape Branch), Chairman and founding member of the Dispensing Family Practitioners Association and serves on the executive board of NGPG. His interests have always been in community work, stimulated by working in rural health care clinics in India. He is interested in expanding the role of the GP and has written many articles, mainly championing the rights of doctors to dispense.

Summary

There is a challenge to every GP to actively detect the many underdiagnosed and undertreated asthmatics in our country, to destroy the many harmful myths which still exist in the community and to make use of the tremendous scientific advancement in the understanding and management of asthma. This will help their asthmatic patients to enjoy a lifestyle both at work and at play, which is no different from the non-asthmatic.

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Introduction

The word *Asthma* from its very early description till today conjures up images in the minds of the afflicted of being physically crippled. In the minds of the lay public asthmatics were and still are branded as people with a severe debilitating disease who at all times need sympathy.

In the minds of many doctors, asthma means an audible wheeze heard with a stethescope.

In spite of tremendous scientific advancement in the understanding and management of asthma, the old and outdated concepts still persist. If these old concepts are not rooted out, asthma would continue to remain a grossly under-diagnosed condition.

Other less recognised symptoms of asthma

Cough must be one of the most common presenting symptom of asthma. Unfortunately the diagnosis of asthma is missed because cough is often unaccompanied by a wheeze. The cough of asthma usually comes on at night, at dawn, after mild physical exertion, during a change in season or weather, after contact with an allergen like dust or after a Viral bronchitis.

Wheezing is not a common accompanying feature because the airways are not narrowed down sufficiently to produce the wheezing sound of asthma.

Mucosal oedema would be the most plausable explanation for the irritating cough of asthma.

Cough should also be regarded as the lungs' cry for air, to treat the cough and not the cause is like switching off the warning signals instead of repairing the fault that triggered off the warning signal in the first place.

Unwanted side-effects/money wasted

Failure to recognise cough as an important symptom of asthma has resulted in many asthmatics receiving countless number of antibiotics, sedating antihistamines, cough mixtures, apart from the numerous fruitless investigations like FBC's, ESRS', Chest X-rays, Sputa Analysis etc.

Hoarse Voice

Many patients with undiagnosed asthma awake, particularly on winter mornings, with a hoarse voice which

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clears as the morning temperature rises.

There are two explanations for this hoarse voice. One is the fall in the early morning peak flow caused by the cold air, and the other is the swelling of the laryngeal mucosa in response to the cold air.

This important symptom is often missed by the unsuspecting doctor because the patients regard this as

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Wheezing is not a common accompanying feature

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normal for them and never mention it when consulting a doctor. Further, by the time most patients consult their doctors, their voices would have returned to normal.

In normal consulting hours the first change that may be noticed in a patient with a hoarse voice, who is given a puff of a bronchodilator, would be an increase in the tonal quality of the patient's voice, that is if the patient does not suffer from laryngitis or has a laryngeal polyp. When this is noted, asthma should be strongly suspected and investigated for.

Shortness of breath

This alarmingly common symptom of asthma is often ascribed to causes like old age, overwork, work stress, depression, lack of exercise, lack of vitamins or iron. While many of these conditions can explain a patient's easy fatigability, it is imperative that the attending doctor includes asthma in the differential diagnosis.

Exercised induced asthmatics must be the single large pool of asthmatics that are missed by primary care physicians because they rarely present to the doctor with the now outdated "classical" symptoms like audible wheeze, bronchospasms and intercostal recession.

Inadvertently many of these patients are given tonics and appetite stimulants when many of them should really be on a diet.

Student grades drop in Winter/Spring

When asked about it, many parents would give a history that their child's grades fell considerably during the winter term and that the teacher complained that the child lacked in concentration or had become very fidgety. The child on the other hand might state he/she felt very sleepy in class in spite of having gone to bed quite early at night.

An unsuspecting doctor might label the child as having a psychological problem and refer the child to a psychologist for an opinion.

Failure to recognise cough as an important symptom of asthma, has resulted in numerous fruitless investigations and antibiotics

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The problem could easily be explained on the basis of nocturnal asthma. At night the peak flow would dip to quite low levels, unbeknown to the child who is asleep at the time. Other members of the family might mention hearing the child cough at night.

These two factors (low night peak flow and cough) are responsible for a highly disturbed sleep pattern. An active search for asthma and its

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A hoarse voice, especially in the morning, should be investigated for asthma

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appropriate treatment would be a most rewarding exercise to both doctor and his patient.

Underuse of the peak flow meter

In terms of screening the peak flow meter must be one of the simplest tests available to yield such useful results, yet sadly, is seldom used by the primary care-physician when examinations of the chest are carried out. The moderate and mild asthmatics would almost never be diagnosed using a stethescope because, as was mentioned earlier, the airways in these patients are not narrowed down sufficiently to produce a wheezy sound.

A peak flow meter would immediately pick up these categories of asthmatics. It would often be found that many of these patients with a clear chest would blow 25% to 50% less than the expected for their heights.

One or two puffs of a bronchodilator would conclude the diagnosis of asthma if the deficit in peak flow is corrected.

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I must hasten to add that not infrequently clinical improvement does not correlate well with the peak flows. *The message therefore is not to treat peak flows but to treat the patient.* The peak flow should merely be used as a guide.

Medical Students/Peak Flow Meters

The only way to increase the pickup rate of asthma would be to give as much importance to the peak flow meter as is given to the stethescope

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The peak flow meter totally underused by GPs

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where examination of the chest is concerned. No examination of the chest should be considered complete without a peak flow reading.

Myths that need to be destroyed

1. *Asthmatics are sick people who can die at any time*

This is absolutely untrue. Asthmatics are merely people with a breathing problem that can easily be controlled with medications. It is only a very small minority that need intensive therapy. The majority require intermittent spasmodic treatment.

Most importantly, virtually all asthmatics can enjoy the same active lifestyle as non-asthmatics provided that their asthma is properly controlled.

2. *The pump is dangerous*

The moment patients are told that they have asthma and that they need to go on a pump, the news is received with utter shock. They would do their utmost to refuse the pump because of an unfounded side-effect namely, "weakens the heart".

This myth about the pump still persists in the minds of patients in spite of the well-known fact that no side-effects have been reported from the use of bronchodilators in their proper dosage.

Patients would request tablets and suffer their side effects rather than use the relatively harmless pump because of the unfounded stigma attached to it.

The pump is the quickest, cheapest and safest bronchodilator that no asthmatic should be without.

This message has to be firmly driven into the minds of patients, the lay public and the primary care physician.

3. *Touch of asthma*

Here, responsibility for this illconceived concept lies squarely on the shoulders of the patient's general practitioner. Doctors seem to believe

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No examination of the chest should be considered complete without a peak flow reading

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that they are reassuring their patients when they use the phrase "touch of asthma." All this merely does is to prevent patients accepting the fact that they have asthma. Patients feel much happier to be told that they have bronchitis and consume bottles of "red medicine" (Theophylline) and all the alcohol that goes with it.

Patients should be told the type of asthma they have. Any one of the following types (intermittent, nocturnal, seasonal, exertional, perennial) should cover the wide spectrum of asthmatics.

4. *Outgrow asthma in later life*

Doctors tend to please parents by making such a statement. The danger of such a statement is only realised

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GPs should tell their patients which type of asthma they have and help them to accept the fact

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when a patient in his twenties is told that he has mild or moderate asthma. The patient would refuse to accept that he has asthma because he was told that he would outgrow his asthma.

5. *Patients use the pump only when necessary*

This is dangerous advice because patients would only use the pump when their wheeze is audible. By the time the wheezing is heard, the bronchospasm is quite far advanced requiring more than just a puff. Sometimes it could mean hospitalisation.

Patients should be taught to recognise early warning symptoms like shortness of breath after mild physical exertion and use their pumps immediately.

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Treating more than a tight chest

The common error made by most family doctors is to end treatment when the bronchospasm is relieved. The other aspects like the patient's quality of life and that of the asthmatics family for some strange reason are seldom addressed by the attending physician.

Quality of life will depend on the age of the asthmatic.

In a child it could mean reduced physical activity or missing out on exciting sporting activities

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The pump is the quickest and safest bronchodilator: no asthmatic should be without it!

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like athletics, condemning the child to the inactive role of the spectator or bystander. Many of these children tend to become heavy eaters out of sheer boredom, which in turn entrenches them to the unenviable group of social misfits. They grow up with the line "I was never a great one for sports."

On an academic level the lack of proper sleep especially in winter due to undiagnosed nocturnal asthma, leads to a drop in academic achievement. This would mean a great deal to any student intent on good grades.

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Proper control of such a child's asthma would make a tremendous difference to the child's sporting and academic achievements and that child's future prospects in life.

Adults in the prime of their working life need to be fit and energetic to perform well in their working environment. People involved in heavy physical work who suffer from undiagnosed exertional asthma would not be able to perform as well as their fellow workers. These patients are often criticised as being lazy and of shirking, consequently affecting their work references for future jobs.

"A touch of Asthma" is the wrong message

For the mentally strained executive or office worker, having undiagnosed exertional asthma means missing out on the much needed social contacts with colleagues who play the regular game of squash or tennis.

Sex life in many of these patients is almost non-existent. The usual excuse is "I am too tired". The damage this can do to many couple's married life is well known to all family practitioners.

Conclusion

The challenge to every primary care physician for the nineties should be to actively detect the "under-diagnosed and undertreated asthmatic" and to institute

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appropriate treatment that would not only alleviate the wheeze but enable these patients to enjoy a lifestyle both at work and at play that is no different from the non-asthmatics.

With the current advances in the management of asthma, I strongly believe that most asthmatics could be easily managed by the primary-care physician. Too much time and money is wasted by these patients attending tertiary referral centres.

The challenge is there. It's up to us to take it.

Cough is the lungs' cry for air – to stop it does not really touch the basic problem