

ASTHMA: AN APPROACH TO SOME BARRIERS TO PRACTICE IN PRIMARY AND RURAL CARE

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ABSTRACT

Asthma is a common disease in primary rural practice, and poor adherence is often a serious problem. Examples of factors from rural primary care are described, that cause poor outcomes in chronically ill patients, including asthmatics. These include different cultural models between health practitioners and patients, language differences and communication difficulties, poor clinical rigor, denial by patients of the seriousness of their condition and its consequences, lack of finances to attend regular consultations, and lack of the appropriate drugs, equipment or knowledge at facilities.

Hugo and Couper's model of the consultation as three balls being juggled at the same time is used to illustrate the patient-centred approach. The three balls are facilitation, clinical reasoning and collaboration. It is suggested that this approach may help to alleviate some of the factors causing poor outcomes for chronic diseases in primary rural care.

INTRODUCTION

Asthma is a common chronic condition at primary care level. In the southern district of the North-West Province, asthma is consistently among the top four most commonly diagnosed chronic illnesses (Table I).¹ The prevention, early diagnosis and effective management of asthma is one of the stated goals of the Department of Health.² Added to the overall burden of these diseases 'patient non-adherence to medical treatment regimens is a widespread problem in the South African primary health care system. In the con-

text of meagre financial resources, inadequate public funds directed at health care and a low ratio of medical personnel to patients... the question of treatment adherence is likely to have far reaching health, economic and social implications.³

One needs to explore the underlying reasons that contribute towards this apparent poor performance from patients. Often patients are blamed for not complying with instructions. The word 'comply' according to the Oxford dictionary⁴ suggests, among others, some measure of pressure being used: 'yielding under applied force'. This is probably one of the reasons why there has been a shift towards the word 'adherence'.

In rural practice primary care we have experienced the following factors leading to poor outcomes in chronically ill patients, including asthmatics:

- Different cultural models between health practitioners and patients
- Language differences and communication difficulties. This includes the debate about the role of interpreters
- Poor clinical rigor
- Denial by patients of the seriousness of their condition and its consequences
- Lack of money to attend regular consultations
- Lack of the appropriate drugs/equipment/knowledge at facilities
- Failure of the attending health practitioner to employ a patient-centred approach in order to address more than simply the patient's disease to encompass the patient's context and barriers to adherence.

DIFFERENT CULTURAL MODELS BETWEEN HEALTH-CARE PRACTITIONER AND PATIENT

Research done by family physicians^{5,6} has found that where there are unexplored and unacknowledged differences between the models held by health-care practitioners and patients, there is more patient dissatisfaction and poorer outcomes.

Part of the consultation is understanding the 'illness' as opposed to the 'disease'.⁵ This component has a strong cultural influence. It depends on a patient's world view, the folk medicine s/he grew up with. Why is an asthma spray called a 'paipi' in Venda and in Tswana? The 'boereraat' of the copper bangle, used by Afrikaners for arthritis, the garlic around the neck used by older Afrikaans-speaking patients and some Coloured communities for 'flu', the 'wit dulsies' used by a previous generation for almost any complaint, are all examples of lay models of methods of healing. If the explanations regarding illness and its treatment are not understood, there will be little headway in understanding patients' agendas and

Table I. Diagnoses of chronic illnesses in southern district of North-West Province (average for 2005/2006)¹

District	Hypertension	Diabetes	Epilepsy	Asthma
Maquassie Hills	37 077	3 319	3 764	4 078
Klerksdorp	136 407	18 239	15 543	13 962
Potchefstroom	4 961	318	619	363
Ventersdorp	2 231	215	220	252
KTP (Klerksdorp, Tshepong, Potchefstroom hospital complex)	10 467	3 803	1 293	1 537
Total	191 143	25 894	21 439	20 192

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adherence patterns, particularly in a society where cultural diversity plays such an important role.

Health professionals also acquire a medical culture – a new system of shared ideas and concepts – which makes it difficult sometimes to understand the culture of our lay patients, but even more so if they are different from the culture we were brought up in.

Ellis⁷ claims that 'the cross-cultural consultation should be no different from any other consultation in family medicine and the principles of family medicine are followed in the same manner. Nevertheless when there is a wide cultural gap between the doctor and the patient there will be special difficulties to overcome.' Although a common example of cultural (and language) differences could involve a doctor from a so-called Western culture and a patient from an indigenous African culture, cultural differences are not only ethnic. Even where doctor and patient are from the same ethnic and linguistic group, there are important differences between health-care practitioners and lay people. The doctor may have a higher level of formal education and have more resources. The doctor is automatically in a position of power by virtue of treating the patient. In addition there may be a difference in their ages. A generation, even a decade, has a culture or acquires a culture; thus there is a cultural gap between an old doctor and a young patient and vice versa.

In our setting a number of patients have refused to use asthma pumps when they have been prescribed. In a small district hospital servicing a mining and farming community, common reasons given are that it 'kills one' and 'removes one's spirit'. When the patient is urged to take the treatment, it becomes obvious to the doctor, from the patient's mannerisms, that the pump will not be used.

'Patient's beliefs rather than their knowledge, determine their actions. The challenge... is to move beyond just giving information to an interaction in which the patient can develop a deeper sense of knowing. This requires that they (family physicians) first understand and respect how the patient sees the illness. Only then will family physicians and patients be able to work towards a shared understanding.'⁵

At an asthma consultation in a rural clinic, the professional nurse had difficulty in making any progress, in spite of religiously following the essential drug list (EDL)⁸ guidelines. When the patient was referred to the doctor, he was requested to demonstrate his use of the spray. Everything was done correctly except that the cap was never removed from the mouthpiece. When confronted about this, the patient explained that he was doing exactly what had been demonstrated to him. This illustrates a clear lack of understanding that the medication needs to reach the lungs whereas the assumption made by health workers was that this medical concept would be understood (or could be taken for granted). Much of the time, the reason for a patient's failure to understand lies in the manner in which something is explained or demonstrated. It is always helpful to ask patients to demonstrate or repeat what they understand before they leave.

LANGUAGE

Language may be an important barrier to understanding and therefore to negotiated outcomes, and much has been written about the errors made due to language difficulties as well as the role of interpreters. Ellis,⁷ in his book *Communicating with the African Patient*, suggests that key words in a language should be learnt initially and more detailed language gradually added.

An obvious first phrase would be the local greeting, e.g. *Sawubona* in Zulu or *Nda* (for a male) in Venda.

Suggestions by Ellis after the greeting, would be to learn to say 'What is your name?' and then 'What is the matter?' The physical symptoms would follow from this.

A useful Venda word for using an asthma spray is the word *usura* (suck) rather than *ufhema* (breathe) as this action produces a far better outcome, i.e. the action of drawing the medication into the lungs.

CLINICAL RIGOR

While the patient's understanding of the chronic illness is a core element in the consultation, clinical skills should not be underestimated.

An 8-year-old child was a 'problem patient' brought frequently by a very anxious mother, after an acute new onset of wheezing. The EDL⁸ and National Asthma Guidelines⁹ in children were followed, advice regarding dust control given, home aspects discussed, but there was still no improvement. A referral was arranged to a paediatrician in a nearby town. A week before the appointment the mother came into the outpatient department with a folded tissue in her hand. Inside was a very small plastic soldier. The child had a severe bout of coughing early in the morning and coughed up the toy! This may be considered to be a failed consultation, as the lack of clinical rigor and attention to detail in the history of acute onset of wheeze led to the failed opportunity to perform a bronchoscopy, with resultant mismanagement as asthma.

Poor diagnostic practices may influence outcomes. Poor therapeutic decisions may do the same. In cases where the patient can apparently not cope with inhalers, theophyllin tablets (and even worse, syrups or combination products) may be prescribed – in complete contradiction to rational drug use. This is either because doctors feel pressurised by patients or they have seen patients fail on more complex treatment, without realising that this may be because of inadequate explanations.

DENIAL

All clinicians have been faced with so-called resistant patients: cardiac patients taking furosemide only when their feet swell or when they have not planned a shopping trip, diabetics who keep on binge eating, asthmatics who fail to stop smoking in spite of ongoing pressure from their doctors to act differently. This may be a form of denial or even an act of rebellion and a plea from the patient to take control of his/her own life. It is this problem which needs a great deal of negotiation, as will be discussed under the collaborative aspect of the patient-centred consultation.

LACK OF RESOURCES

Patients may wish to adhere to treatment, but face insurmountable economic or structural barriers. On the patients' side lack of money for transport to the facility may hamper their return, and from the facility's side poor drug availability is a factor preventing effective treatment. In the poor, rural provinces the problem of access to treatment is most marked.

An example: In a rural area a doctor has been struggling to control an asthmatic's symptoms. At 3-monthly visits her peak flow measurement remains at less than 60% of expected. The doctor has a new interpreter at the clinic and for the first time understands that the patient has been using her salbutamol spray (with the correct technique) until it is finished, and thereafter has continued with the beclomethasone spray until it is finished, in order to conserve the medication. On her income she is unable to afford transport for monthly clinic visits.

THE PATIENT-CENTRED CONSULTATION

When one considers the list above, it seems as if the barriers are insurmountable! However, there is an approach which would minimise remediable factors contributing towards poor outcomes. This is the patient-centred consultation.

The patient enters the consulting room with an agenda and this will only be understood when a patient-centred approach is used. This can be described as follows: 'the physician tries to enter the patient's world, to see the illness through the patient's eyes. He does this by behavior which invites and facilitates openness by the patient. The central objective in every interaction is to allow the patient to express all the reasons for his attendance. The doctor's aim is to understand each patient's expectations, feelings and fears.'¹⁰

In order to understand how the patient-centred approach can be facilitated, it is useful to employ the 'juggling' model of the consultation, proposed by Hugo and Couper.¹¹ According to this, the consultation may be thought of as juggling with three balls, representing important elements that all need to be 'kept up in the air' during a consultation. The three balls are facilitation, clinical reasoning and collaboration. Facilitation entails the establishment of rapport and active listening techniques, clinical reasoning involves the data gathering and interpretation of findings and collaboration is the explanation and participative planning and negotiation of treatment.

Facilitation

Wherever patients are being consulted, in particular where a problem of adherence is identified, or where there seems to be incongruence between the two cultural belief systems, the patient-centred nature of the consultation is essential. Rogers¹² proposed this concept in 1980 where the shift is from the interviewer's preconceived line of questioning to the understanding a patient has of the illness. The understanding in an African culture is often associated with *ubuntu* and the interactions of the patient with other modalities, e.g. ancestors, immediate family and the environment. These factors may not be considered at all from a western-trained doctor's point of view. Even African nurses and doctors with so-called western training dissociate themselves from this insight and the derogatory word 'superstition' is not infrequently heard when folk explanations are given. This is true too of the widely accepted use of the word 'witchdoctor' for traditional healers.

Clinical reasoning

This encompasses the processes leading to a clinical hypothesis which is confirmed or not by further history and examination. It makes use of the three-stage assessment¹³ to gain a comprehensive understanding of the clinical or physical state, the individual or person-related issues (fears, expectations, feelings) and the contextual (social) situation.

The clinical or physical assessment may be made easier by modifying international (or national) protocols or tools for local use at primary level. In a primary care clinic, the peak flow measurement is an important diagnostic tool, yet peak flow charts may not be easily interpreted by primary care nurses. Together with a large drug company, a rural hospital in Limpopo province designed a user-friendly chart so that all health workers could not only do a peak flow test, but interpret it as well, and in so doing adjust medication or intensify counselling. The chart is a combination of the

road-to-health chart and a traffic light and has been found to be easily understood and implemented. It has been used primarily as a screening tool and not an absolutely accurate diagnostic measure. There are separate charts for men, women (Fig. 1) and children.

In a patient whose asthma is difficult to control, the individual and contextual parts of the assessment are important areas to explore. A patient in a rural area returned on an almost daily basis to the clinic, with poor peak flow readings. She was nebulised, treatment was increased and information was given. It was only at the third consultation that the individual and home situations were explored. The patient was going through a very bitter divorce, she was unable to go to work because of the severity of the asthma and was being threatened with dismissal by the furniture store where she was employed. Once links had been made for her between the different stressors and the symptoms, and her employer approached and conciliated, she improved dramatically.

Sometimes the contextual situation may be related to culture-specific models of illness. A question which may be useful to identify the real agenda the patient is bringing to the consultation is 'What did the traditional healer say was the matter with you?' The four major ways that illness or misfortune are explained in traditional African mythology are: bewitchment/sorcery/poisoning, spirit possession, crossing pollution/taboo and callings. These are most often social metaphors for conflict at work or with supervisors, arguments over women or possessions, e.g. cattle, or rivalries within or between families.⁷

Collaboration

The third component of the patient-centred approach concentrates on explanations and participative, negotiated management options for each patient.

Control measures for asthma may be difficult in primary rural care. The doctor may be in a small clinic in an arid village where rain has not fallen for a year. The patient lives in a traditional hut. The temperature falls to 5° at night. The only heating device is an open fire. How does one speak of allergen avoidance, dust control and avoiding smoke? When one shows patients a picture of a house-dust mite, they reply 'we don't have those insects here' because the concept of seeing an essentially invisible organism under a microscope is foreign to the patient. The controversy of whether vacuum cleaners which filter out house-dust mites are effective or not does not even reach this neck of the woods! Not to mention storing soft teddy bears in the freezer!

Where the outcome is not negotiated, the results will be disappointing. Shared care is one of the oldest concepts in medicine. Hippocrates is recorded as saying 'It is not enough for the physician to do what is necessary but the patient and the attendants must do their part as well, and circumstances must be favourable.'¹⁴ Thus a negotiated management option must be sought. It is important to remember that doctors and patients may have different goals in the consultation. The doctor wants to explain *what* is going on, whereas the patient might want to understand *why*, in a metaphysical sense – if this difference is not dealt with, there may be no common ground.

CONCLUSION

Health-care providers need to be efficient in their approach to patients. Many chronic-care protocols, including the EDL, give guidelines for clinical manage-

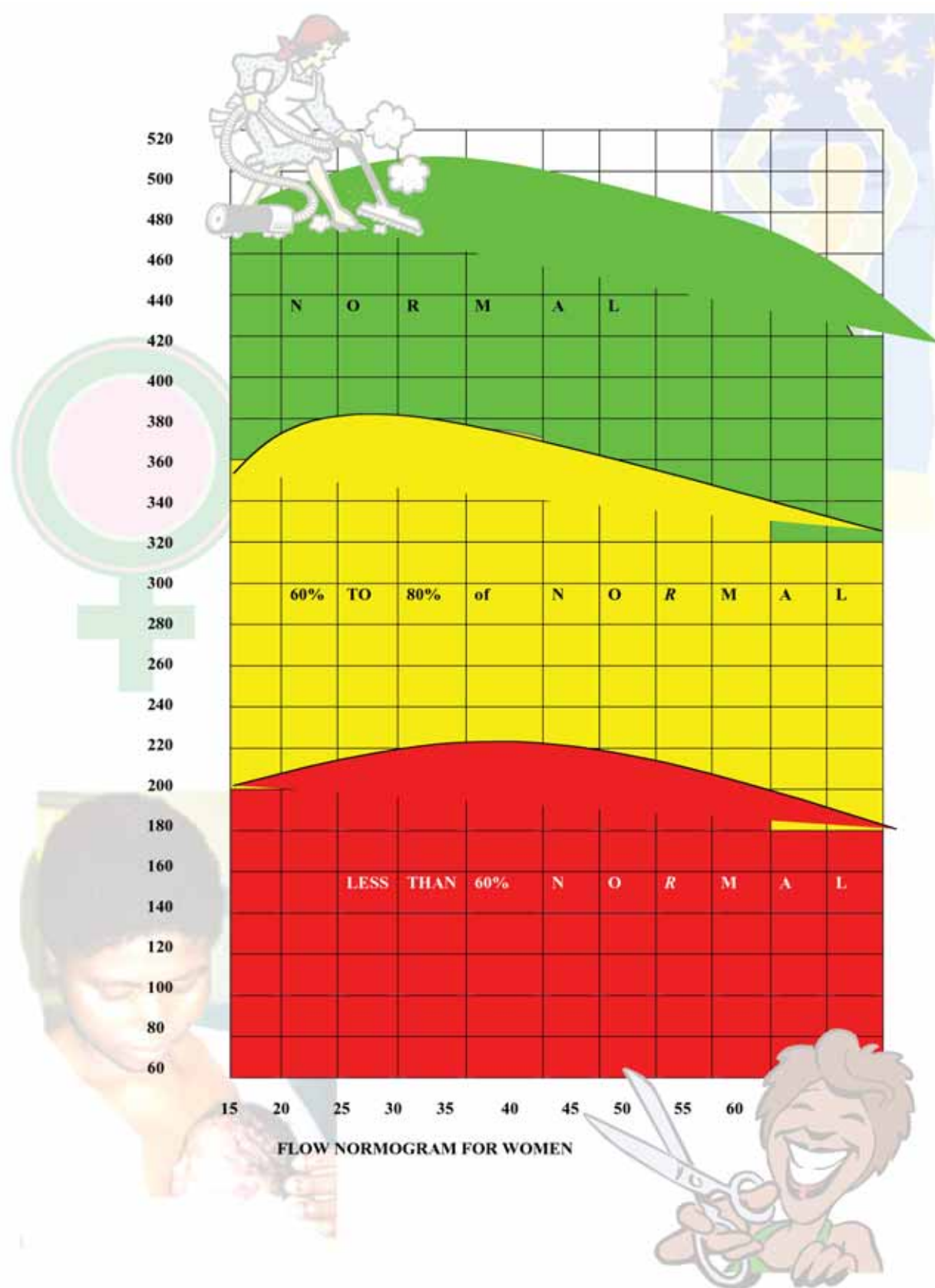


Fig. 1. Draft normogram for women.

ment. However, cognisance has to be taken of other factors influencing outcomes in chronic care. Understanding patients' social and environmental context, including their explanatory modes for illness, cannot be over-emphasised. A patient-centred approach combining holistic history taking, clinical rigor, and

negotiation of treatment goals may improve outcomes in such patients.

Declaration of conflict of interest

The author declares no conflict of interest.

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