

# DIABETES MELLITUS – A REVIEW OF THE TOPIC BY FAMILY PHYSICIANS

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Professor Mhlongo studied medicine at Charing Cross Hospital Medical School, University of London, and graduated MB BS in 1970. As a registrar in medicine at Mayday Hospital, Croydon, he developed an interest in cardiology. Between 1975 and 1976 he was a resident in cardiology at the hospital at the University of Pennsylvania, USA. In 1978 he returned to the UK where he did vocational training in

general practice and obtained his MRCGP in 1980. In 1991 he was awarded the MSc Med – his dissertation was on hypertension. From 1991 until his return to South Africa in 1998 he was a senior lecturer in general practice at St Mary's Hospital Medical School, University of London. His interests in cardiology, hypertension and diabetes continue.

Family physicians are committed to the person rather than to a particular body of knowledge, group of diseases, or special technique. This means that a family physician can never say 'I am sorry, but your illness is not in my field'.

Any health problem in one of our patients is in our field.<sup>1</sup> Among the many skills which generalist doctors have is their expertise in appropriate referrals whenever these are indicated. It is against this background that the systematic review in this month's CME has to be read.

In his review of diabetic chronic complications, Dr A J Mbokazi looked at a number of frequently quoted peer-reviewed studies such as:

- United Kingdom Prospective Diabetes Study (UKPDS)
- Diabetes Control & Complications Trial (DCCT)
- Society of Endocrine & Metabolic Disorders of South Africa (SEMDSA).

From these studies Mbokazi has been able to logically present a readable summary of chronic complications affecting diabetic patients.

As doctors, we expect our patients to occupy centre stage during our encounters with them. It is estimated that as many as 80% of the patients we see have initially consulted alternative or traditional practitioners. Under the circumstances, it is impossible to provide holistic and unprejudiced care if this fact is ignored by allopathic physicians. Although our knowledge of traditional practice is still at an elementary stage, Dr P M H Maduna has attempted to provide us with a list – though not complete – of a number of therapeutic products from traditional practice, e.g. *Aloe ferox*, African potato, cancer bush, buchu and wild dagga. He also briefly writes on a number of hypoglycaemic agents but accepts that research on 'vigorous human clinical trials' is still awaited. However, the vast majority of traditional products have long been and are being used on human subjects, and to

subject them to the same research format followed by pharmaceutical companies is a waste of resources and is unfair. Professor Tang, writing on traditional Chinese therapeutic agents, proposed the following format: 'Research priorities in traditional Chinese medicine need to be reviewed and I propose an efficacy driven strategy'.<sup>2</sup>

Concerning an evidence-based approach on the management of diabetes mellitus, one might ask whether this approach is of any value. There may be more than one answer to this question, involving:

- the most up-to-date optimal approaches to management benefiting the patients
- doing what one's peers do
- encouraging lifelong learning
- giving informed answers to 'difficult' patients.

Professor Gboyega A Ogunbanjo has supplied answers to all of the above to assist a reflective practitioner. He also clearly addressed the issues of the metabolic syndrome, i.e. the syndrome consists of

- dyslipidaemia
- insulin resistance
- type 2 (maturity-onset) diabetes.

Associated features of the syndrome are hypertension and obesity. Empirically, it is accepted that an increasing percentage of South Africans satisfy the criteria for the label metabolic.

With the developing new health system for South Africa, an increasing number of family physicians are employed in district hospitals in both urban and rural areas. Under this system, such family physicians are expected to deal with emergencies prior to referring patients to a secondary or tertiary hospital. With regard to diabetes, these doctors will frequently encounter hyperglycaemic diabetic emergencies. Dr A Reinbrech-Schütte briefly sketches the problem in its

context, i.e. diabetic ketoacidosis complicated by hyperglycaemia, dehydration, ketoacidosis, and hypokalaemia.

Dr Reinbrech-Schütte also lists the investigations that need to be carried out and a list of common complications. In a schematic fashion the management to be followed is also outlined.

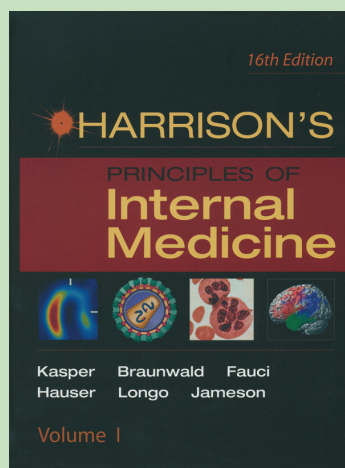
The management of a controlled diabetic is without doubt the domain of a family physician and primary health care. This area has been looked at and reviewed by Dr J V Ndimande, who rightly looks at all aspects relating to the optimal and continuing care of patients whose glucose is well controlled. In a series of hints, he touches on the ideas and beliefs of such patients. It should be pointed out that hypoglycaemia presents with frightening symptoms to patients whereas hyperglycaemia tends to develop gradually and may be ignored by the patient. Under the circumstances, poor compliance with medication which may cause hypoglycaemia tends to be the rule. This was shown in a qualitative study among patients in Scotland.<sup>3</sup>

Dr Clark looks at current thinking into the pathogenesis and pathophysiology of type 1 diabetes. He discusses the diagnostic criteria and evaluation of diabetes, looking specifically at the components of comprehensive diabetes evaluation as enunciated by the American Diabetes Association. While urine testing is relatively inexpensive and easy, it has been replaced by the more reliable self-monitoring of blood glu-

cose (SMBG). Glycated haemoglobin (HbA<sub>1c</sub>) gives a good indication of medium- to long-term control of blood glucose and has been found to correlate strongly with the risk for eye, kidney and nerve diseases in type 1 diabetes mellitus. Dr Clark also brings into focus the non-drug management of this type of diabetes in terms of diet and exercise, enabling the patient to actively make a meaningful contribution in the disease management.

The teaching and training of medical students and primary health care nurses about diabetes mellitus (types 1 and 2) can be regarded as the cornerstone in the long-term management of patients with diabetes mellitus, since it ensures that the carers are well equipped. Indeed, care patterns learnt in training are reflected in later practice. Dr Mabuza looks at the important clinical and laboratory parameters in the monitoring of the control of diabetes mellitus: glycated haemoglobin (HbA<sub>1c</sub>), self-monitoring of blood glucose (SMBG), eye examination, diabetic foot care, diabetic nephropathy and annual lipid screening. Health promotion, lifestyle modifications and preventive aspects of medicine are additional areas of care addressed by Dr Mabuza.

1. McWhinney IR. *A Textbook of Family Medicine*, 2nd ed. Oxford: Oxford University Press, 1977.
2. Tang J-L. Research priorities in traditional Chinese medicine. *BMJ* 2006; **333**, 19 August .
3. Cunningham-Burley S, Neil P, eds. *Reading in Medical Sociology*. London: Tavistock/Routledge, 1989.



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