EDITORIAL

Diabetes Epidemic in Malaysia

B E Mustaffa

Executive Director, National Diabetes Institute (NADI), Kuala Lumpur, Malaysia

Some fourteen years ago, I wrote an Editorial in the *MJM* on diabetes in Malaysia [1]. It could be therapeutic to reflect what has transpired since then. Well, there are still plenty of problems and yet many more challenges, to improving diabetes care in this country. For one, prevalence of diabetes mellitus in Malaysia, both of Type 1 and especially that of Type 2, has increased to epidemic proportions. In my previous Editorial, prevalence was noted to be only 0.65% in 1960 and in the early 1980s, 2-4%. We have made much "progress" since then: surveys in the mid-1990s showed a prevalence of about 8-12% [2,3,4] while a recent report of our study undertaken in 1998 [5] showed a prevalence of diabetes amongst rural and semi-urban populations of 14.0% (range 7.1% to 20.3%). We are now six years since our last survey; it may not be unreasonable to estimate a current prevalence in the range of 16-18%! Assuming just 40% of the population (estimated at 25 million) are 30 years and above, we should have at least 1.6 million adult diabetics in this country now. That, we must agree, is a sobering revelation especially when we realise that the WHO's estimate for Malaysia for the year 2025 was only 807 thousand! Surveys have shown that for every two known diabetics, there is at least one more who never know of having the disease (and by extension, may never seek treatment) until irreversible complications set in. Worse still, Type 2 diabetes is seen as no longer a disease of middle or old age – children as young as 10 years old suffering from diabetes (both Type 1 and Type 2) are not an uncommon sight nowadays.

Diabetics, especially when the disease is not well controlled, are prone to develop diabetic complications. Thus, it is very telling when we note that the rate of microvascular complications is high amongst Malaysian diabetics. In a country-wide survey that we conducted in 1997 [6], 53% of diabetics had retinopathy, 58% neuropathy and 52% had microalbuminuria. Malaysian diabetics are also at high risk of macrovascular complications including ischaemic heart disease and stroke, in part due to late diagnosis and poor glycaemic control (mean HbA1c >9%), but also because of the high association with other components of the metabolic syndrome such as obesity (43-52% are either overweight or obese, more so in female Malays and Indians), hypertension (10-37%) and hyperlipidaemia (63-76%).

But, what have we learned since the last Editorial? We now have evidence to show that with good glycaemic control, we can reduce or delay diabetic complications[7]. We know that we can expect better results in preventing complications (especially macrovascular) if we give due attention to the comorbidities such as hypertension, hyperlipidaemia (and smoking). Most importantly, we now know that we can prevent diabetes through simple measures such as avoidance of obesity and being more active [8].

The government has undertaken various campaigns on healthy lifestyle, on diabetes awareness and proper nutrition over the years. But we know that these campaigns (that must have cost millions of Ringgits) have not been a resounding success: diabetes is still on the increase and obesity is still prevalent even in children. The truth is that the government (specifically the Ministry of Health) will not be able to have a significant impact without the full commitment of the *rakyat*. Can we, the medical profession help? The answer must be "yes". Education is most important, both for the patients and healthcare professionals. Lee TW et al. [9] and Wong JS and Fatimah N [10] showed clearly that diabetes care even in general practice and in remote rural primary care clinics respectively, can be greatly improved. But, as pointed out in these two papers, there are many constraints, both on patients and doctors.

Corresponding Author: B E Mustaffa, National Diabetes Institute (NADI), Kuala Lumpur, Malaysia

A change in attitude (and practice) and a better commitment, as these studies showed, would help. If cost is an issue, there are many generic preparations that can provide equivalent effects at a much reduced rate. Anyway, medications, even expensive ones, can be obtained at nominal cost in government hospitals and clinics. The government should also be able to provide test kits to improve control at subsidised rates through such privileges as exemption of taxation. What we need is a commitment from all: decision makers in government (politicians included), the private sectors especially those involved with patient care, patients and the general public, and the medical profession. The government must be committed to fight the diabetes scourge, from prevention of the disease to providing optimal care for persons afflicted with the disease and complications. The private sector, NGOs must also help complement the government's effort. The *rakyat* must respond positively to these initiatives by presenting for regular health checkups, and taking the responsibility of caring optimally for his/her illness. And in the midst of this, we, the medical profession must be prepared to come forward to volunteer, to lead. But, we will not achieve much if we subscribe to "time is money" and the easy way out of "no time". I would like to believe that our health professionals still believe in "to give the best to our patients" (time and money aside) and would be ever willing to contribute to the betterment of society. Fourteen years down, I am still waiting for my "Educate your Patients" week. Hopefully, I may not have to wait another fourteen years for it to materialise.

References

1. Mustaffa E. Diabetes in Malaysia: Problems and challenges. Med J Malaysia 1990; 45.
2. Rugayah B. Diabetes mellitus among adults aged 30 years and above. Report of the Second National Health and Morbidity Survey (Vol. 9). Ministry of Health, Malaysia 1990.
3. Mafauzy M., Mokhtar N., Mohamad WB and Musalmah M. Diabetes mellitus and associated cardiovascular risk factors in North-East Malaysia. Asia Pac J Public Health 1999; 11(1): 16-19.
4. Khebir BV, Osman A. and Khalid BA Changing prevalence of diabetes mellitus amongst rural Malays in Kuala Selangor over a 10-year period. Med J Malaysia 1996; 51(1): 41-47.
5. Mafauzy M., Than Winn, Lekhraj Rampal GR, Abdul Rashi d AR and Mustaffa BE for the PIKOM Study Group. Cardiovascular risk factors intervention study (PIKOM Study): Diabetes mellitus, hypertension and their associated factors.
6. Mustaffa BE, Wan Mohamad WB, Chan SP, Rokiah P., Mafauzy M., Kumari S., Chandran AA, Ong GKC, Jogensen LN and Yeo JP for The Diabetes Data Collection Project (Diabcare – Malaysia) Study Group. The current status of diabetes management in Malaysia. J ASEAN Fed Endo Soc Vol 16 No. 2 (Supplement) July 1998 (1-13).
7. UK Prospective Diabetes Study (UKPDS) Group. Intensive blood glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). The Lancet 1998; 352: 837- 53.
8. Tuomilehto J., Lindstrom J., Eriksson JG, et al. Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. N Engl J Med. 2001; 344: 1343-350.
9. Lee TW, Chan SC, Chua WT et al. Audit of diabetes mellitus in general practice. Med J Malaysia 2004; 59(3) 317-22.
10. Wong JS and Rahimah N. Glycaemic control of diabetic patients in an urban primary health care setting in Sarawak: The Klinik Kesihatan Tanah Puteh experience. Med J Malaysia 2004; 59(3) 411-17.