As primary care doctors, treating patients with Type 2 DM is our bread and butter, as the majority of them seek treatment at health clinics. It is true that some of the patients have managed to achieve good glycaemic control, but more than half of them still have poorly controlled blood sugar as compared to the clinical practice guideline recommendation [1]. And usually, the first thing that comes to our mind when seeing these patients is to increase the dosage of anti-diabetic medication that they are currently on or to add another agent, including insulin. We also frequently tell them that the high blood sugar level is not surprising, as such is the nature of diabetes, where the worsening of blood sugar is expected due to progressive deterioration of pancreatic beta cell function.

Admittedly, we also advise them to control their diet and to engage in regular exercise, but this is usually last on the list. Although we know that exercising is good for blood glucose control to some extent, we routinely just advise diabetic patients to exercise, but rarely giving explicit instruction on how and why they should do it. Even in the local government and private health clinics or hospitals in Malaysia, none is currently offering structured exercise program as part of comprehensive diabetes management.

Many of us as doctors also seem oblivious to the advantages of exercise in patients' diabetic control and overall health as individuals, and to the national health expenditure on a larger scale. Studies have shown that exercising could bring numerous benefits to diabetic patients, and also to the healthcare system. For example, a randomised control trial by Kashaba showed that regular moderate-intensity aerobic exercise three times a week have significantly reduced HbA1c as well as improve the fitness level in diabetic patients [2]. Umpierre et al. also pointed out the finding from their meta-analysis of 47 randomised control trials that participants in the structured exercise group (aerobic, resistance, or combined) are associated with an absolute HbA1c reduction of 0.67% compared to control participants [3,4]. In the same study, they also reported that longer exercise duration (more than 2 and half hours per week) would result in an even better absolute HbA1c reduction (0.89%). [5] Meanwhile, if patients were only advised to exercise but not given a structured exercise program, it would still be as useful if it is combined with dietary advice [1].

Interestingly, exercising could also improve other health issues besides diabetes. Balducci et al. reported that among diabetic patients with musculoskeletal symptoms, exercising improves the function of their upper and lower limbs and also reduces spine symptoms as compared to the control group with no exercise [4]. Whereas, Green et al. also revealed that diabetes patients who regularly exercise are found to have higher physical and mental score, indicating better physical and mental health-related quality of life [5].

Balducci et al. also looked into the level of physical activity against a few parameters of diabetic control. They found that people with diabetes who had low and moderate intensity physical activities have better fasting plasma glucose and HbA1c level, better body mass index, waist circumference and also better UKPDS and cardiovascular risk score, as compared to sedentary diabetics [6]. Similarly, a local study by Chan et al. also showed that people with diabetes, who are not physically active and have higher energy intake from fat sources, are more likely to have central obesity, which is strongly correlated with higher cardiovascular risk. They are even more likely to develop a non-alcoholic fatty liver disease [7].

Last but not least, physically active diabetics would also require less health care expenses in terms of its related chronic disease treatments and also medical consultations, as compared to sedentary diabetics [8]. Reduction of HbA1c without another pill is a bonus for patients and government, as the patient will have less pill burden, while the government will spend less to supply the medications. As most of diabetic medications in Malaysia are fully subsidized by the government, improvements in the diabetes control and also related comorbidities should translate to a reduction in medical expenses for its treatment alone, and subsequently, the saving could be channeled to other areas. Thus, increasing the intensity level of physical activity in diabetes patients could lead to profound improvements in their overall health status, as well as for the national health expenditures as a whole. After all, isn’t it better if our patients could get better or stay healthy with fewer pills?
Reference: