



WOMEN IN DIABETES

The war on diabetes has been ongoing for the past year, and unlike national service where largely only men are conscripted, the Ministry of Health has recognised that to win the war, women have to be involved as they are key stakeholders.

In April this year, a campaign was launched targeting women. The goal was to educate them on healthy cooking and eating habits, in the hope that with their great influence on the dietary habits of their families and friends, great positive change would result.

Women play numerous roles in society—they are wives, mothers, daughters, sisters, employers and employees. They are indeed great influencers and powerful change makers, and I am privileged to share three stories to illustrate several points.

1 WRESTLING WITH DIABETES HEALTHY PREGNANCY AND HEALTHY BABY

Mdm O has polycystic ovarian syndrome (PCOS) and type 2 diabetes mellitus, and was planning to start a family. She was struggling with poorly controlled diabetes mellitus, with a glycated haemoglobin (HbA1c) of 9.1% with metformin alone.

Risk of foetal malformations increases in mothers with poorer glycaemic control. Hence it is standard of care to optimise diabetes control prior to conception.¹ She was motivated to make significant changes to her lifestyle, and reduced her carbohydrate intake and spent 30 minutes each day brisk walking. Once-daily basal insulin was added to optimize diabetes control. Within a few months, her HbA1c improved to 6.9%, which was a fairly good level of control.

Her menses, which had previously been irregular and spaced as far apart as 60 days (due to PCOS) became regular as a result of her purposeful lifestyle changes. To her great joy, she was able to conceive naturally without the need for in-vitro fertilisation.

STEADFAST COMMITMENT

Mdm O's commitment to her health and that of her unborn child remained steadfast throughout her pregnancy, and she kept on a strict diet throughout, not giving in to the random cravings most women experience when pregnant. She also remained active and energetic.

Most impressive of all, she endured the pain of pricking her fingertips to check her capillary blood glucose as much as seven times a day. As pregnancy progresses, one's requirement for insulin will increase, and it was inevitable that she had to increase her insulin injections from one to four times a day to keep her glucose levels in the normal range.

I last saw her in August this year. She had delivered a healthy baby boy the month before, and was enjoying every day of new motherhood. The child was born full term and healthy, with no health problems at all, due in no small part to her unwavering commitment. Mdm O truly inspired me, and showed me the great sacrifices women are willing to make for their children, the great love they have for their children, even before they are born.

2 GENES VERSUS LIFESTYLE PREVENTION OF DIABETES

You cannot choose your genes but you can choose your lifestyle. Type 2 Diabetes Mellitus does run in families; however, it is not a definite “cast in stone” destiny that awaits all whose parent or parents have diabetes.

Diabetes runs in my family. Both my grandmothers have the disease, and my maternal grandmother passed away some years back from diabetic complications. I have a maternal uncle with the disease, and three years ago my own dad was diagnosed with it. You do not need to be a doctor to appreciate that I am at significant risk of developing diabetes.

In 2014 I was awarded the Healthcare Manpower Development Award to pursue a Fellowship in Endocrinology at the Garven Institute of Medical Research in Sydney, Australia. My wife, who is an eye surgeon, had just delivered our younger daughter, and was on maternity leave. Our family relocated to Sydney for a six-month period for me to pursue my fellowship.

ENVIRONMENTAL IMPACT

The significance of this introduction is to highlight the impact that environment and stage of life have on lifestyle. We were young parents in a foreign land with no help, and had to balance both family and work commitments. “Stress-eating”—eating as a way of life became the norm for us, and coupled with little time for exercise, our weight ballooned. This is a strong risk factor for diabetes development.

The reality check came in 2015 when we returned to Singapore and could no longer get into any of our previously well-fitting work clothes.

Lifestyle changes take time, patience and discipline. My wife downloaded a calorie counter app onto her smart phone and began tracking her calorie intake. She joined a gym near to work and exercised regularly. She modified not just her own but also the entire family’s diet—the usual stash of calorie-laden snacks was replaced with fresh fruits and vegetables. Her influence had a positive effect on the whole family, especially me, and I was motivated to start jogging again with friends. I have since completed a couple of half-marathons and one full marathon. Both my wife and I achieved our weight goal within a year, but more importantly, my annual national service check-up showed no signs of diabetes for the last few years.

An observational study suggests that the risk of a husband developing diabetes increases with increasing spousal BMI.

My personal take to that study is that the wife or spouse does play an important influential role at home and can lead by example. I can personally testify to that major influence. It allows me to empower my patients who are pre-diabetic or diabetic to take major steps towards healthy eating and an active lifestyle to reverse risk of diabetes, or to effect better control of diabetes, in addition to appropriate medications.



SPECIAL FEATURE

3 AGEING GRACEFULLY WITH DIABETES

The silver tsunami is upon us and it is not surprising that many patients are living to the eighth and ninth decade. I had the opportunity to review one of my oldest patients in July last year.

Mr B was 99 years old then and had had diabetes for at least 10 years. He was able to ambulate into clinic without a walking aid or assistance. His wife accompanied him for this routine specialist clinic check-up. I noted his diabetes control was excellent with HbA1c 6.4%, and this level of control had been maintained for many years. I was curious how he managed to maintain this relatively good health.

He attributed it to the strong support of his wife who still does the home cooking and also reminds him daily to take his medications, particularly the ones for diabetes, which he has to take three times a day. This was a wonderful snapshot of how it is possible to age gracefully even with diabetes to a ripe old age!

A 20-year follow-up study suggests that group-based lifestyle interventions (diet, exercise or diet plus exercise) can decrease incidence of diabetes by 43% over the 20-year period.³

Data plus this snapshot of a 99-year-old diabetes patient suggest that a combination of influence, support and lifestyle choices can make a difference in the trajectory of one's life—preventing diabetes if possible and controlling diabetes when it occurs.

There are many more similar stories of women who wrestle with diabetes personally or who support their family or friends in their lifelong journey with diabetes or diabetes prevention. Such stories are encouraging to us caregivers and doctors and serve as stimulus to galvanise more change makers to step up in this war against diabetes.

References

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About the author: Dr Matthew Tan will be Medical Director and Consultant Endocrinologist at Dr Matthew Tan Diabetes and Endocrine Care, with effect from 1 November 2017. His clinical interests include diabetes mellitus, thyroid, general endocrinology and sub-specialty interests in osteoporosis and calcium disorders. Dr Tan also enjoys jogging and spending time with his two daughters.