

## PROFILE



TEXT BY

**DR CLIVE TAN**

Dr Clive Tan is a public health physician in the public sector. He recently returned from a posting to the World Health Organization and is busy getting re-acquainted with the local food scene (eating healthily of course!).



TEXT BY

**DR KWONG SEH MENG**

Dr Kwong Seh Meng is a general practitioner in private practice. He has a strong family history of diabetes.



ARTWORK BY

**DR NGIAM XIN YING**

Dr Ngiam Xin Ying is a paediatrician in private practice.

## Legend

1. Screenshot from Dr Kwong's Facebook post

# OVERCOMING THE LAST MILE ON DIABETES



Here's the situation. You're sitting at the dinner table with your extended family. Your cousin, who just turned 40 years old, asks you, "My GP told me last week that I have diabetes and I must take daily medications... What is diabetes? Can it be cured?"

What do you do? Do you...

- A. Jump at this opportunity to segue into your well-rehearsed ten-minute monologue on the pathophysiology of diabetes, expound on the latest research reports and impress upon your cousin the importance of a healthy diet and regular exercise;
- B. Take his rice bowl away and tell him to eat less white rice; or
- C. Welcome him to the club and show him the medications you are taking?

If you chose option A (which many of us would have done at some stage of our lives), you might receive several responses:

1. "Huh? Too much information! If I just pop the white pill every morning and eat less, I'll be okay, right?"

2. "Cannot cure *ah!* Die *lah*, die *lah*... Is it too late to buy insurance?"
3. "So what you are saying is that my pancreas isn't secreting enough hormones to break down the sugars in my blood, and if my blood glucose level becomes too high, it can damage my eyes, kidneys, skin, blood vessels and nerves. Okay, sounds straightforward!"

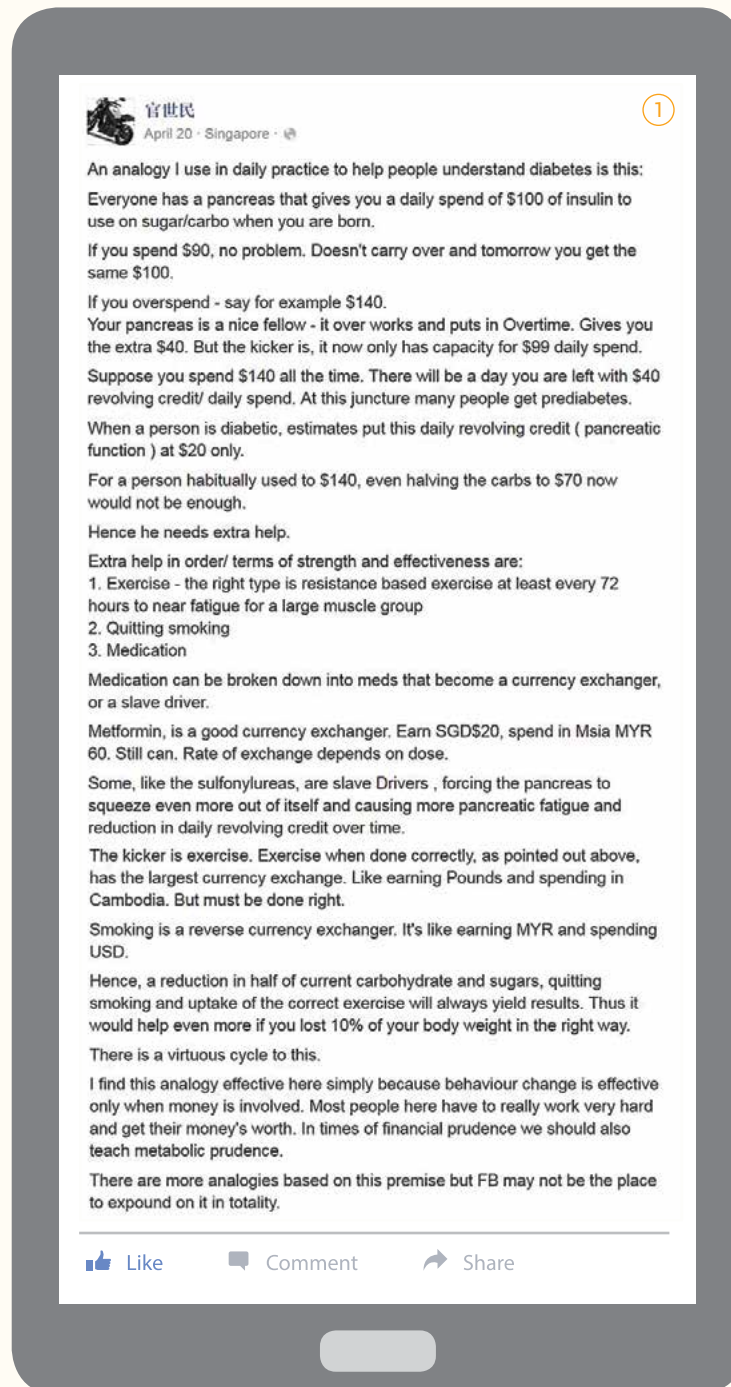
While improving health literacy and promoting self-management have been identified as critical factors for patients to better manage their diabetes, the practice is challenging. As shown by the example above, the level of readiness in both the healthcare professional and patients (and their families) need to correspond, and they need to journey together towards better patient knowledge of the health condition and the ability to self-manage.

Perhaps there can be better ways to share this health information with patients and their families, in a way that makes sense to them and is "sticky".

However, knowledge does not always translate into behavioural change. Tobacco cessation is a fine example. Yet, knowledge and awareness are critical enabling factors for changing behaviour; knowledge of how the condition can threaten one's current way of life, and knowledge and skills in how the condition can be controlled and managed.

The government's war on diabetes has gone some ways in generating awareness on the condition, and it promises to restructure services to be more people-centred. Technologies and medicines that support the prevention and treatment of diabetes will also become more accessible. But the doctor's office and the patient's home is where the battlefield for overcoming the last mile on diabetes truly takes place.

There can be many reasons why health literacy is low in a country where literacy is almost 100%, but the important takeaway here is the huge potential for improving health literacy, since we are starting from such a low baseline. As shown in the Facebook screenshot, crafting health messages that can appeal to the masses and are "sticky" is an innovative way to help patients and families better understand and manage their medical conditions. ◆



“ In the doctor's office and in the patient's home is where the battlefield for overcoming the last mile on diabetes takes place. ”

# THE CARTOON GUIDE to TYPE 2 DIABETES

STORY: DR KWONG SEH MENG  
ART: DR NGIAM XIN YING

MOST OF US WORK HARD FOR OUR MONEY.

hmm... \$1.00 \$1.10

NATURALLY, WE TEND TO BE CAREFUL WITH SPENDING IT.

WELL, UNDERSTANDING DIABETES IS A LOT LIKE MANAGING YOUR ...

... MONEY.

REALLY?? MONEY?? NOW I'M LISTENING...

MEET YOUR PANCREAS!

HI!

YOUR FRIENDLY NEIGHBOURHOOD 'BANKER' LOCATED IN YOUR TUMMY.

PANCREAS IS A GENEROUS FELLOW WHO MAKES, SAY, \$100 WORTH OF INSULIN FOR YOU EVERY DAY.

INSULIN HELPS TO LOWER YOUR BLOOD SUGAR, ESPECIALLY AFTER EATING CARBOHYDRATES - FOODS THAT RAISE YOUR BLOOD SUGAR.

THANKS!

INSULIN BANK

yum!

IF YOU SPENT JUST \$80 OF INSULIN TODAY (i.e. ate less carbs), YOU STILL GET \$100 TO SPEND TOMORROW!

YAY!

NO PROBLEM!

BUT WHAT IF YOU OVERSPEND?

Yum! Yum!

SAY IF YOU SPENT \$140 OF INSULIN AT A GO... (i.e. ate lots of sugar and other carbs)

GOOD OL' PANCREAS WORKS HARD TO GIVE YOU THE EXTRA \$40. BUT NOW, HE'S LEFT WITH THE CAPACITY TO MAKE ONLY \$99 A DAY!

IF YOU KEEP OVER-SPENDING, DAY AFTER DAY...

CHOMP CHOMP SLURP! YUM!

I'M... SPENT...

ONE DAY, YOUR PANCREAS WILL BE ABLE TO PRODUCE ONLY \$40 OF INSULIN A DAY. AT THIS POINT, MANY PEOPLE GET PRE-DIABETES.

BY THE TIME A PERSON GETS TYPE 2 DIABETES, ONLY ABOUT \$20 OF INSULIN IS AVAILABLE EACH DAY...

SUGAR LEVELS

OH NO! I REPENT!!

AT THIS TIME, HALVING YOUR CARBS IS NO LONGER ENOUGH TO KEEP YOUR BLOOD SUGAR DOWN...

BUT WHAT ELSE CAN I DO - BESIDES CUT DOWN ON CARBOHYDRATES?

- ① EXERCISE
- ② STOP SMOKING
- ③ MEDICINES

"currency exchangers" "slave drivers"

HAVE NO FEAR! HELP IS AT HAND.

LET'S TALK ABOUT MEDICINES FIRST.

"CURRENCY EXCHANGERS" LIKE METFORMIN HELP YOU GET MORE BANG FOR YOUR INSULIN BUCK. (in doctor-speak, it's "lowering your insulin resistance")

DOH, LIKE SHOPPING IN JB!! S\$1 = RM3!

YEAH!

SALE SALE

ON THE OTHER HAND, "SLAVE DRIVERS" LIKE SULPHONYLUREAS (eg. glipizide, glibenclamide) FORCE THE PANCREAS TO PRODUCE MORE INSULIN. FASTER!?

gulp!

EVENTUALLY, THIS BACKFIRES AS THE POOR PANCREAS GETS FATIGUED & ITS CAPACITY TO PRODUCE DECREASES OVER TIME.

SMOKING IS NOT A GOOD IDEA FOR DIABETICS. IT'S A "REVERSE CURRENCY EXCHANGER" - LIKE EARNING IN RINGGIT AND SPENDING IN BRITISH POUNDS. (doctor-speak - "increasing insulin resistance")

WHAT?! THAT'S RM5.50!!

£1

THAT'S IT! I'M QUITTING SMOKING!

EXERCISE IS THE BEST CURRENCY EXCHANGER (when done correctly)! LIKE EARNING IN BRITISH POUNDS & SPENDING IN INDOONESIAN RUPIAH!!

I FEEL RICHER ALREADY!

200 KEALS BURNT

YEAH! GO! GO! GO!

WITH WISE CURRENCY EXCHANGE PRACTICES - AND REDUCING SPENDING - YOU CAN REALLY STRETCH YOUR INSULIN DOLLAR.

BEST GLYCEMIC CONTROL AWARDS

AH! NOW I CAN RELAX A BIT!

YOUR PANCREAS WILL THANK YOU FOR IT.

SO... DO YOU NOW KNOW SOME GOOD WAYS TO MANAGE TYPE 2 DIABETES?

EASY!

- ① CUT CARBS/ SUGAR BY HALF
- ② EXERCISE
- ③ QUIT SMOKING
- ④ TAKE MEDICINES AS PRESCRIBED

VERY GOOD!

DR. TANG

SO, JUST AS WE SHOULD BE WISE WITH OUR MONEY...

WE SHOULD BE CAREFUL WITH OUR "INSULIN SPENDING" TOO!

HEAR, HEAR!

THE END