Nudge!

By A/Prof Chin Jing Jih

Recalcitrant patients

Those of us who manage patients with chronic diseases on a regular basis will invariably have our own private collection of recalcitrant or "can't-be-bothered" patients who do not seem to be able to take good professional advice, or make sound decisions related to their own healthcare. Typically, such patients will have a record of poor compliance to treatment advice and medications, and would indulge in lifestyles and dietary patterns that work against the goal of good health. At some point, doctors begin to doubt if these patients even have the capacity to handle choices, let alone responsibilities.

While one may not dismiss the possibility that some patients may be genetically disadvantaged and hence predisposed to certain lifestyle choices and behaviour, it remains an attractive solution if incentives such as discounts in medical fees or medication costs could be used to encourage more proactive and effective weight management and low-density lipoprotein levels among patients. Conversely, it must have crossed the minds of many frustrated doctors if punitive measures such as fines or reduced annual leave could be used to change the conduct of those who are usually irresponsible and uncooperative. Unfortunately, for many of these patients, despite a genuine desire to improve their health and disease control, instead of getting better, often yield to personal, social or environmental circumstances which get the better of them. Mere stern instructions and warnings from the doctor or nurse clinicians do not seem to make a difference, as these patients succumb to unfavourable social, environmental, psychological and personality factors. Doctors are left wondering: "How do I get my patients to quit smoking permanently? How can they be motivated to exercise regularly? What will it take for them to take their medications diligently?"

One thing is certain – most conventional medical textbooks or clinical practice guidelines do not provide the solution to such challenges. They simply state that if you have a certain disease or medical disorder, follow such-and-such a treatment protocol. That the patient will take his medications diligently, regularly and correctly, and will embark on a risk-reducing lifestyle are pretty much taken for granted in these comprehensive manuals of medical practice. But for many of these patients with chronic diseases, that freedom of choice to select and to act accordingly (or not at all), is often not handled well and do not yield what is medically and logically the best decision.

Giving a gentle "nudge"

In 2008, Richard Thaler, a professor of Behavioural Science and Economics at the University of Chicago, and Cass Sunstein, a professor of Law at Harvard, co-authored a book titled *Nudge: Improving Decisions about Health, Wealth, and Happiness*. In this seminal work based on research in Behavioural Economics and Psychology, the authors affirmed the suspicion that people in general do not make rational judgements and decisions due to their various biases, subscription to fallacies, difficulties in grasping concepts of probabilities and managing risk comparisons, and their tendencies towards herd mentality and staying with the status quo. All these, the authors argue, often predispose people to making poor decisions. And in the case of healthcare, they account for many illogical decisions and behaviours in patients.

Given this tendency for people to make unwise decisions, Thaler and Sunstein argue in their book that it is imperative that people's choices be given a gentle "nudge" or influence so that they may be facilitated to make the right choice – "in order to make their lives longer, healthier, and better". They propose that nudging can be achieved by what is called "choice architecture" – by engineering the decision making environment, and by framing the possible options in such a way that will greatly enhance the eventual selection of the option deemed to be in the best interests of the person, whether it is better health, sounder investments or cleaner environments. Choice architecture is premised on the idea that people's decisions can be significantly influenced by how the choices are presented, and that includes, for example, rules which determine the presentation and contextualisation of the choices, without taking away their freedom of choice.

The underlying ethical justification for nudging through choice architecture is what Thaler and Sunstein termed in their book as "libertarian paternalism" or soft paternalism. Unlike "shoving something down a person's throat", nudging incorporates the (libertarian) principle that the individual's freedom and autonomous right to decide and choose for themselves must be preserved and respected.

This includes allowing people to make decisions that may be harmful to their own well-being and interests. But providing counterweight to this is the legitimate expression of paternalism, which believes it is reasonable and ethically permissible for those equipped with the knowledge and information to actively influence people's choices and behaviours, gently nudging them to make wiser and better decisions.

A simple example of a nudge cited in the book is placing healthy food in a school cafeteria at eye level, while putting less healthy junk food in places harder to reach. Individuals are not prohibited from eating whatever they want, but the arrangement of the food choices in that way has the effect of decreasing consumption of junk food and increasing consumption of healthier food. By carefully designing the choice architecture, the decisions people make can be dramatically improved, without actually forcing anyone to do anything against their wishes.

It was also reported recently that the UK government set up a Behavioural Insights Team, whose task is to reshape policies in order to nudge citizens into making decisions that are beneficial to them and to society, while saving taxpayers' money at the same time. Such polices involve a wide range of social behaviour, including paying taxes on time, saving energy and quitting smoking. This "nudge unit" has claimed that it will save the UK £300 million (S$575 million) over the next five years. Their favourite tactics involve making it easier for people to do what the government thinks is the right thing to do. In one of its most successful examples, the team sent reminders to late taxpayers which casually mentioned that most people in their town had already paid. This psychological trick apparently boosted returns by 15%, adding £30 million to the government's coffers in a year.

The underlying strategy in nudging is therefore to first have a clear idea of the existing psychology and behaviour patterns of the target population, the desired outcome for the population, and then to figure out how the behaviour can be modified or harnessed to produce the desired outcome. Such an approach has been used quite extensively in industrial and environmental designs to improve user experience and hence motivate regular adoption and utilisation. We are all familiar with the story of how, in order to encourage the use of staircases instead of lifts for health promotion, we need to make staircases safe and welcoming environments, with better lighting, upbeat music and interesting decoration. Another well-known example can be found at Schiphol Airport in Amsterdam, where spillage in its men's toilets was dramatically reduced by etching fake insects in the urinals, giving users something to aim at.

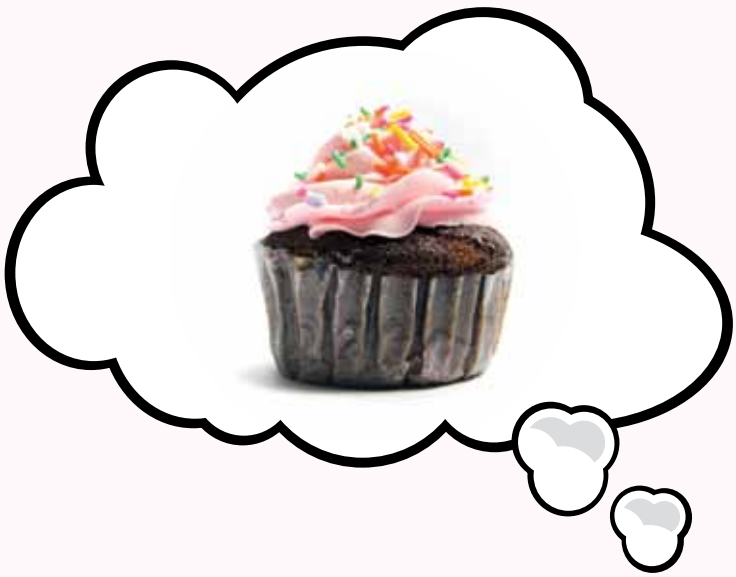
Nudging in healthcare

So is there a place for nudging in healthcare? The relevance and significance of nudging in healthcare was given clear emphasis in *Nudge*, where the authors devoted an entire section comprising three chapters highlighting different areas in healthcare that could benefit from nudging and careful design of choice architecture. Though some of these topics are US-centric, like the challenges in making informed choices regarding prescription drug benefits in health plans, the authors convincingly demonstrated that too many complex choices, without any structured choice guidance that integrates elements of human behaviour, can lead to information overload, which adversely impede good decision making.

Organ donation is an elegant illustration in the context of healthcare where some form of nudging makes a significant difference to the targeted outcome. Research has shown that most people tend to postpone or procrastinate when it comes to making important and difficult long term decisions, including giving consent to cadaveric organ donation. Or they will take the easy way out by selecting the default option. Even those who have actively decided to consent to donation are likely to put off the action of filling up a donation card or form. The presumed consent or "opt-out" system, which we are familiar with and provided for statutorily in Singapore, is a choice architecture engineered to incorporate these behavioural patterns in order to increase consent to cadaveric organ donations. In the chapter titled "Increasing organ donation" in *Nudge*, the authors cited the cross-country study conducted by Alberto Abadie and Sebastien Gay in 2004, which showed that presumed consent had resulted in a 16% increase in consent to cadaveric organ donation. They also mentioned the contrasting data in Germany and Austria (two countries socially and culturally quite similar to each other), due to the methodology of consent adopted. In Germany, where an active opt-in organ donation system is adopted, only 12% of citizens gave their consent, while in Austria, where an opt-out system is implemented, nearly all citizens gave their consent (99%).

But the nudge theory is not without its detractors, particularly when adopted by powerful authorities such as governments, where the general fear is that paternalistic considerations of utility might eventually overshadow the need to preserve the libertarian element. In a column in the *Australian*, Frank Furedi expressed suspicion for his government's interest in nudge theory, and described it as a form of subliminal psychological manipulation which should not be replacing democratic debate and argument. British critics have also suggested that nudging is a sneaky form of state intervention.

Indeed, like any effective tool, nudging has the potential of being misused or abused. When we become too focused on outcomes but do not give much weight to the process, the paternalistic element in a policy can potentially eclipse the equally vital free choice element intrinsic to nudging, thereby leading to unfair manipulation. It is therefore



important for this tool to be deployed with care and sensitivity, with adequate checks and balances to ensure that it does not become oppressively and disrespectfully domineering in the name of protection.

Lessons for the healthcare industry

What do all these potentially mean to both the policymakers and practitioners in healthcare?

For a start, we should acknowledge that in order to achieve and sustain certain intended population outcomes, healthcare and its delivery cannot ignore the impact of behaviour and psychology. The merits of proposed healthcare policies have to be examined beyond their fundamentals to include the feasibility of their operational plans. Otherwise, despite the best of intentions and justifications, the implementation of the policies on the ground will face challenges and end up with disappointing results. For instance, health screenings of residents living in one- and two-room HDB flats will not receive the expected enthusiastic response unless residents are "lured" to the screening stations at the void decks by generous goodie bags. Or in a different scenario, any attempt to develop shared care collaboration between public healthcare specialists and GPs will never be sustainable unless it addresses the constraints faced by GPs in running private practices. Policymakers need to regularly engage and observe with appropriate application of decision science, in order to nudge the population into the desired state.

What about medical practitioners at the frontline of care? Put simplistically, we need to know our patients individually, particularly what makes each of them tick. And because our contact time with each patient is limited, we need to adopt strategies that will have a sustained influence on their decision making and choice management even after they have left our clinics.

There are a few areas deserving of our attention. Firstly, we need to recognise and accept that patients today are more creatures of habit and convenience, rather than creatures of unquestioning obedience. While most patients do need and want a structured treatment plan to follow, one that is incongruous with their default modus operandi or requires too much effort and labour will have low likelihood of success.

Secondly, it is imperative that we take time and make the effort to better understand the key drivers behind patients' thinking and behaviours. Understanding how they feel may not be sufficient; we need to know the intrinsic and extrinsic factors that influence their decision making process, and attempt to modify the outcomes by tackling these factors.

Thirdly, we need to hone our clinical communication skills in order to bring patients through the enlightened choice architecture. This is probably one of the more challenging aspects of nudging. In *Nudge*, Thaler and Sunstein used treatment options for prostate cancer to illustrate how challenging such decision making processes can be for patients, particularly when it comes to making quantitative and qualitative trade-offs among different treatment options like surgery, radiation and mere close observation. Studies also showed that a patient's decision is also dependent on the amount of time given to deliberate, and the type or specialty of doctor consulted. While the progression in many cases can be so slow as to outlive the patient, few will choose to just sit tight and watch. After all, quipped the authors, there are no doctors that truly specialise in "watchful waiting". It is therefore imperative that in offering treatment options, doctors take extra pains to make the information more comprehensible, by translating numerical information on risks and benefits to units that are more readily understood and appreciated by patients.

More importantly, doctors need to see themselves as more than mere technicians and statisticians, and proactively provide appropriate professional opinions and help nudge patients into making good judgements. This will go a long way in improving clinical outcomes and patient experience. SMA

A/Prof Chin is President of the 53rd SMA Council. Like most doctors, he too has bills to pay and mouths to feed, and wrestles daily with materialistic desires that are beyond his humble salary. He, however, believes that a peaceful sleep at night is even more essential.