

HELPING STUDENTS IN NEED: MATTHEW'S CUMULATIVE ADVANTAGE AND MARK'S CLARION CALL

A study examining class stratification in schools was recently conducted and was reported in the *Straits Times* on 1 June 2016.

The study found that children from higher socio-economic backgrounds are more likely to attend secondary schools with Integrated Programmes (IP) and their affiliated primary schools, as well as primary schools that offer the Gifted Education Programme (GEP).

The study looked at families with a monthly household income that exceeded \$10,000, families that lived in private homes and families who had at least one parent with university education. Based on the results, children from such families were more likely to get into GEP primary schools and IP secondary schools. For secondary schools, almost 41% of "elite" IP secondary school students came from families with a monthly household income that exceeded \$10,000, compared to 7% in government schools. About 31% of IP secondary school students lived in private homes, compared to 2% in government schools. About 54% of IP secondary students had at least one parent with university education, compared to 17% in government schools.

Research advisor Dr Cheung Hoi Shan was quoted: "the observation from many news reports... does point to some form of social stratification in our schools; so in elite schools you tend to have families represented by higher socio-economic status

(SES) and in neighbourhood schools you tend to have the reverse." SES differences were seen in secondary schools even though entry was supposed to be determined by performance in the primary school leaving examinations (PSLE); in other words, by merit, rather than through alumni affiliation or distance from home. Dr Cheung added: "... it may point to a perpetuation – if you started off with a high SES, chances are because you have more resources, you are better prepared for PSLE..."

Studies like this are important to better understand the downstream effects on medical practitioners in Singapore, in particular the selection of students that enter our medical schools. Every year, thousands of graduates from these IP schools apply to study medicine in the NUS Yong Loo Lin School of Medicine (NUS Medicine) and the Lee Kong Chian School of Medicine (LKCMedicine), vying for the limited places available (NUS Medicine had 300 students and LKCMedicine had 90 students in their 2015 intake). The medical schools select the crème de la crème; bright students with likely near perfect scores, who are strong in core curricular activities with some social enterprise or overseas community projects on the side, and who then shine during the interview process that tests their level of compassion, communication skills and ethical judgement.

We do not have similar studies to look into the SES of medical students, but the findings from the secondary

school study serve to validate what many of us in the medical profession had long suspected and witnessed personally. Indeed, there is no doubt that many of our young doctors come from affluent and well-to-do families.

CUMULATIVE ADVANTAGE — THE MATTHEW EFFECT

Malcolm Gladwell, in his 2008 book *Outliers*, talks about the effects of cumulative advantage that is a key factor for success in society. We are often fascinated by successful individuals who seem to be able to rise to the top of their leagues through sheer talent, intelligence and effort. Autobiographies of successful personalities in business, sports and politics occupy large dedicated sections of the bookstore and often hog the best seller lists for months. It was as if there were some special skills or abilities that we too can learn and emulate. Gladwell challenges this assumption of innate ability as misleading, arguing that individuals are more often than not "the beneficiaries of hidden advantages, extraordinary opportunities and cultural legacies".

The fact is that one's upbringing and where one is born matters. The effect of cumulative advantage is such that children with better opportunities are able to turn small differences in their childhood into huge advantages later on in life. Indeed, children from families with high SES have a head start, with more opportunities to learn and try out different interests such that their talent is identified



TEXT BY

DR WONG TIEN HUA

Dr Wong Tien Hua is President of the 57th SMA Council. He is a family medicine physician practising in Sengkang. Dr Wong has an interest in primary care, patient communication and medical ethics. His two nephews are named Mark and Matthew.

early. Shortfall in academic subjects can be made up for through extra lessons outside school. Students who perform well get into these "elite" schools with higher performing classmates and teachers, translating into a significant advantage when competing with others of the same cohort in the national examinations.

This phenomenon of accumulative advantage has been coined "The Matthew Effect" and is taken from the biblical passage found in the Book of Matthew, chapter 25 verse 29:

"For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken even that which he hath."

This month's column firstly serves as a timely reminder for those of us in medicine to appreciate the fact that we did not get into medical school by our own innate abilities and talents. No doubt the process of medical studies and training is long, tough and difficult, requiring mental resilience and hard work, but we

have to appreciate and be thankful for the contributions from our family and the society that allowed us the opportunity and environment to achieve success.

Secondly, an important lesson, especially for medical students, is that their cohort of students in medical school is not representative of society in general. Students in medical school need to be cognizant of their privileged background and learn to develop a sense of humility in their attitude towards others, in particular for their teachers and above all, for their patients. When they eventually start to interact with patients in the wards and in the community, they need to empathise and connect with people from the poorest, most underprivileged groups in society. For such patients, they need to learn to treat them as equals, to be their strongest advocate and not let social standing get in the way of their duty of care.

Thirdly, we as a medical community must look out for the less privileged

among us and ensure that medical students who come from difficult financial backgrounds will not be disadvantaged in their quest to fulfil their calling in medicine.

LEVELLING THE PLAYING FIELD — THE MARK EFFECT

The idea that inequalities in opportunity should be addressed through reallocation of resources is known as "The Mark Effect" and is taken from the biblical passage found in the Book of Mark, chapter 10 verse 31:

"But many who are first will be last, and the last first."

The Mark Effect counters the Matthew Effect by giving those with less more resources to level up, by giving the weaker competitor a better chance to compete and, specifically in this case, it is a calling to help underprivileged students so that their situation will not further dampen their aspirations to do well in medical school.

With the rising costs of living in Singapore and of medical education in particular, such students may have to resort to part-time employment to help reduce the financial burden on their families.

In the domain of charitable giving, the neediest are first in line for assistance.

THE SMA CHARITY FUND

One of the stated objectives of the SMA Charity Fund (SMACF) is to provide bursaries and financial assistance to underprivileged medical students from all three local medical schools; that remains the mainstay of SMACF's charitable outreach.

In 2015, a total of 40 full bursaries of \$5,000 each were awarded to underprivileged students.

In 2014/2015 work year, there were 15 student recipients whose gross

family income per month was less than \$1,000. There were four student recipients with gross family incomes less than \$2,000 per month. This figure was three students and four students respectively for 2015/2016 work year. The majority of needy students come from families with only one breadwinner at home.

One such student was Dr T, whose father passed away when she was 13 years old. Her mother had to take on a job to support her and her younger siblings. To support herself through medical school, Dr T took on part-time jobs and often skipped classes because of her work commitments. Her burden was lightened when she received bursary support from SMACF and was also awarded financial support for her research project presentation at an international medical conference.

She is currently pursuing residency training.

Altogether, some \$395,000 in financial assistance was disbursed since SMACF's inception in 2013. The funds set aside to help underprivileged students remain accessible throughout each year to allow students with unforeseen financial difficulties to apply for assistance. Two such awards were given out to Duke-NUS Medical School students in 2015.

SMACF continues to grow from year to year, through support from the public as well as members of our own profession. It is heartening to note that the spirit of collegiality, where doctors contribute to the next generation of medical practitioners, remains a strongly rooted tradition. ◆