GENDER DIVERSITY:

SINGHEALTH DUKE-NUS ACADEMIC MEDICINE PERSPECTIVE

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Photo by Duke-NUS Medical School

Prof Cook (PhD, Cornell University) joined Duke-NUS Medical School in 2006 and established the Medical Education, Research and Evaluation Department, and, in 2012, the Academic Medicine Education Institute (AM.EI). She is a fellow in National University of Singapore's Teaching Academy and received the Master Scholar Award from the International Association of Medical Science Educators. She is currently a senior leader in Office of Education and AM.EI at Duke-NUS.

In 2003, the National University of Singapore (NUS) lifted a quota that limited the number of women entering the MBBS undergraduate entry medical school.[1] The article suggested that this action resulted in a matriculation shift such that about 50% of the entering cohorts are now women. This raises two interesting questions. Are the rates different for graduate entry programmes, like Duke-NUS Medical School (Duke-NUS); and how does that increase play out in careers and leadership positions post medical school at Singapore Health Services (SingHealth)?

Women in medical school

Historically, Singapore is not alone in having fewer women entering into the medical profession. In the US, which has a long-standing tradition of graduate entry to medicine, very few women entered medical school prior to the mid 1970's. In my dissertation, I gathered information about women graduates from Cornell Medical School from 1950 to 1979, and I found that only 6% of the physician graduates were women through 1975.[2] It was only after that time where the numbers began to rise. This is similar to data provided by the American Association of Medical Colleges (AAMC) where in 1950, only 6% of the matriculates were women.[3] In 1975, the number of women matriculates was still relatively small (23%).[4] One possible explanation to these earlier trends was that few women entered university in the first place in the 1950s. As the men returned from the Second World War and were given financial aid to go to College through the Veterans

Association Education Bill, women left the workforce and returned to their homes to start families. However, in 1972, the US government passed a law called Title IX, one of the Education Bill Amendments that stated:

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

This led to greater financial aid and opportunities for women to enter into universities. Not surprisingly, you start to see the increase in women entering medical schools. By 1979, the percentage of women was 33% at Cornell University. By 2000, the numbers at all US universities were at 46% and in 2016, AAMC reports that the number has risen to 50%.[3,5]

For Duke-NUS, which offers a graduate entry programme in Singapore, we matriculated our first class in 2007. During the first two years, we had almost twice as many women applicants and our entering class had 73% women in 2007 and 63% in 2008. It is easy to infer that these women may have had an interest in medicine prior to 2003 but sought alternative undergraduate options after being impacted by the quota limiting women entering medicine at NUS. The opening of the Duke-NUS programme in 2007 allowed for many of those women to once again consider the possibility of going to medical school after their first degree. From 2009 onward, however, the number of men and women applicants and the class distribution has been roughly 50:50, similar to the US proportions.

Women in the profession

The next question is what happens to the women physicians following medical school? The proportion of US women graduating has been similar to those entering residency; thus, they are not dropping out of medical school.[6] They do, however, vary a great deal in the residency choices, with women accounting for 50% or more in specialties such as: obstetrics and gynaecology (83%); paediatrics (71%); family medicine (55%); psychiatry (55%); and pathology (55%); and very few in the surgical disciplines.[3] In 2014, AAMC reported the distribution of women medical doctors by faculty rank in universities, a marker for career growth,[7] and found that 51% of the women were instructors, 43% assistant professors, 32% associate professors and only 19% full professors. This presents a steady decline in representation at the higher academic levels.

Now, there are many possible reasons for this decline. Barsh and Yee found that many women drop out or get stuck along the way for career advancement in business, despite their significant numbers at entry.[8] The barriers they noted were:

- **Structural:** Top leadership is not necessarily supportive of advancement and few role models are available as examples.
- **Lifestyle:** Women are often both primary breadwinners and primary caregivers, thus slowing their progress. Most top leaders do not have to balance those two roles and there are not enough flexible opportunities to permit a balance.
- **Institutional mindsets:** Women often do not ask or seek advice. In addition, there are assumptions that women will not or cannot do the job due to lifestyle issues. Furthermore, women are more often evaluated and promoted on their accomplishments, while men promoted on their potential.
- **Individual mindsets:** Women themselves tend not to ask for leadership roles.

However, women have been found to be better leaders as they are more results-oriented, more resilient, better at seeking out feedback, better team leaders, have a more robust work ethic and most importantly, are great sponsors for the next generation.[8]

In 2016, a *Straits Times* article suggested that Singapore women face many of the same mindset issues as reported by McKinsey. In addition, however, many Singapore women do not return to the workforce after having children, unlike in other countries, which has negative economic impact for organisations and Singapore.[9]

In a presentation at the Women in Science Network symposium in March 2017,[10] Prof Wong Tien Yin looked at the distribution of SingHealth women physicians and scientists. While the percentage of women in residences was roughly equal (52%), he found similar career trends that are noted in the US – in that the proportion of specialists, heads of departments, division chairs and other leadership positions was much lower and declined as one moved up the leadership ladder.

In Singapore, however, it is possible that the quota has had a big impact on these numbers. Prior to 2008 (five years after the quota lifted in 2003), there was a limited number of women physicians graduating. Most likely, a majority of those who now hold leadership positions in SingHealth had finished specialist training back in a time when there were fewer women in the class. Furthermore, as per the reasons noted by the *Straits Times* article, they may have resulted in fewer women being available for leadership positions.[9] And, if you consider the fact that most specialist trainings take five to six years, you would naturally also have fewer women finishing training prior to 2013/2014. Couple that with the time it takes to progress to leadership positions, it is not surprising to see so few women in leadership roles at SingHealth.

For Duke-NUS, our first class graduated medical school in 2011. If they went straight on through residency and senior residency without a break, they are just now (2017) receiving their junior consultancy status. So, clearly, there has not yet been enough time for Duke-NUS graduates to achieve significant leadership positions.

What can Singapore do now, for those women finishing medical school and residency to see them blossom into leadership positions within the next ten

years, and not follow the trends in the US? The McKinsey report suggested:[8]

- Leadership should invest in supporting and actively role modelling the desired mindset and behaviours that support women promotions.
- Monitor progress but call out and make sure there are consequences should individuals or departments not reflect a progressive mindset.
- Actively sponsor high potential women (and men).
- Actively promote/recognise efforts at gender diversity.
- Use data to support targets, goals and aspirations.

Applying these principles along with Singapore's residency system provide great flexibility in training progression and support – nay, even encouragement – for women returning to the workforce. We will not only see a greater percentage of women in leadership roles, but also see their positive impact in enhancing the healthcare work environments. ◆

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