

# Holding Up HALF THE SKY

## WOMEN IN SINGAPORE MEDICINE

Text by A/Prof Gan Yunn Hwen and A/Prof Sophia Archuleta

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Mao Tse-tung's famous saying reflected his appreciation of the critical role that women played, and continue to play, in China's national growth, progress and development. Decades later, Mao's conviction would be echoed by Michelle Obama at the Summit of the Mandela Washington Fellowship for Young African Leaders in July 2014: "No country can ever truly flourish if it stifles the potential of its women and deprives itself of the contributions of half of its citizens."

Women hold up half the sky in Singapore too – they raise children, care for the elderly at home, and many also hold down jobs at the same time. In healthcare, women now figure prominently across the range of roles, from administrators to nurses and from allied health professionals to doctors.

Despite the critical and diverse roles and responsibilities undertaken by women here, their economic status, corporate status and progress show a disturbing picture. Like their

counterparts in many countries, Singaporean women still lag behind men in terms of income and career progression in many professions. According to a *Straits Times* report,<sup>1</sup> women's pay has not improved in the last ten years, with men earning 20% more.

The report cited a study by consumer research firm ValuePenguin, which reviewed data from the Ministry of Manpower (MOM). The information indicated that in 2006, the median gross monthly income of men was about \$2,452, approximately 19% higher than the \$2,053 for women.

In 2016, the median monthly income for Singaporean male workers rose to \$3,991. This was 18% higher than the median for women, which was \$3,382. Encouragingly, the report added that wage gaps narrowed in health and social services, as well as in manufacturing, public administration and education, information and

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#### CLASS OF 1947

##### Tan Sri Dr Salma binti Ismail

The late Tan Sri Dr Salma was born on 19 December 1918 in Alor Setar, Kedah. She received her early education at the Kampung Bahru Girl's Kedah, passing her Junior Cambridge in 1934 and Senior Cambridge in 1935, the latter with distinction. She then continued her education at the King Edward VII College of Medicine in Singapore in 1936 under a scholarship by the State Government of Kedah. She was conferred a degree in Medicine in 1949, making history as the **first Malay woman to qualify as a medical practitioner in Malaya**. Dr Salma practised in Kedah and Selangor and died of old age in Malaysia.



#### CLASS OF 1955

##### Tun Dr Siti Hasmah Mohamad Ali

Tun Dr Siti Hasmah has set an example of personal and professional achievement for women in her country, campaigning tirelessly for women's health, family planning, drug abuse control and adult literacy.

Often a pioneer in her profession, Tun Dr Siti Hasmah was one of the first Malay women to enrol for a medical course at the King Edward VII College of Medicine in Singapore after the war.

In 1955, she graduated as a medical doctor from the Faculty of Medicine, Universiti Malaya, Singapore, and joined the government health service. Ten years later, she became the **first woman to be appointed medical officer** in the Maternal and Child Health Department and, in 1974, became the first woman to be appointed the State Maternal and Child Health Officer.

Tun Dr Siti Hasmah is the author of several articles on family medicine and the socio-economic factors associated with pregnancy and childbearing in Malaysia and has held a number of posts. She has served on various associations, including being the patron of the Malaysian Association of Maternal Health and Neonates. She has also been active in efforts to educate young people about the dangers of drug abuse.

Her decades of public service, voluntary work and leadership in the fields of public health, literacy and drug abuse control saw her honoured on numerous occasions, including awards from Malaysia's Yang Di Pertuan Agong, as well as the sultans of Selangor and Kedah.

communications, and financial and insurance services.

Two years later, things have not made much progress. According to another *Straits Times* article,<sup>2</sup> research conducted by jobs website Glassdoor found that women are still earning 13% less than their male counterparts. Among high-paying jobs, the MOM found that the largest pay gap was in specialist medical practitioners, with women specialists making only about 49.7% of their male colleagues' median wage.<sup>3</sup>

### Various reasons for under-representation

The disparities are most visible at leadership levels in the professional and occupational areas, with women under-represented in leadership ranks relative to their overall numbers and qualifications, compared to other developed countries.<sup>4</sup>

There are various reasons to explain this continuing gulf between the

genders – chief of which are societal norms and values. These biases in structures, systems, policies and processes throughout our society could be subconscious, meaning our behaviours, choices and practices are shaped by underlying assumptions and attitudes without us even realising.

These have been cited as reasons for women being assigned disproportionate responsibility for family caregiving and "softer" roles such as nurturing or welfare-supporting functions that are generally accorded less value in organisations. This, together with inadvertent effects of government policies, hold women back from making the same sort of progress marked by men. It is a development that could put women at greater risk of financial hardships in old age especially when women live longer than men; the same *Straits Times* article reported that women aged 60 years and older had Central Provident Fund (CPF) balances that were 69% of the average men's balance, while

females aged between 55 and 60 years had CPF accounts that were 84% of their male counterparts.<sup>4</sup>

### Women in Singapore healthcare

What is beyond debate, however, is the participation and crucial roles that women around the world have played in healthcare, which first gained significance in the 1800s with the work of Florence Nightingale and the International Committee of the Red Cross.<sup>5</sup> The preponderance of women in nursing reflected the historical dominance of men in medicine – a situation that was also replicated in Singapore. The country saw very few women enrolling in medical school; the second graduating class of the Straits Settlements Medical School (the forerunner of the National University of Singapore [NUS] Medical School) in 1911 included just two women – E Nunes and JS Lee.<sup>6</sup>

Modest beginnings notwithstanding, the list of early women doctors in

Singapore includes the late Tan Sri Dr Salma binti Ismail, Tun Dr Siti Hasmah Mohamad Ali, Prof Low Poh Sim, Prof Chay Oh Moh and Prof Leo Yee Sin. (Read more about their achievements in their respective panels.)

Despite their historical and early active involvement in medicine and healthcare through the centuries, women today are still not as well represented in leadership roles, such as heads of department and assistant or vice-chairs of medical boards, as their male counterparts. At the National University Health System, 2019 figures show that women hold 21.2% or 41 out of 193 senior leadership posts, and out of a clinician population of 1,700, women make up 39.1%, or 664. At the NUS Yong Loo Lin School of Medicine (NUS Medicine), 33.3% assistant professors, 28.6% associate professors and just 10.1% tenured full professors (as of 2019) are women.

At the National Healthcare Group, women occupy 32 of 117 senior leadership posts in 2019. Out of the clinician population of 1,512, women comprise 42%. Over at SingHealth, 48% of the 2,393 clinicians are women and they hold 76 out of 272 leadership positions.

### More women in medical practice today

The 1979 quota capping female enrolment in medicine at NUS to just a third has been identified as a major contributing factor to this imbalance in gender representation.<sup>7</sup> In the intervening years, Singapore's steadily ageing population, higher immigration flows, as well as the attrition of doctors leaving for the private sector, led to an increase in demand for healthcare services, which translated into a need for more medical staff. The growth of Singapore's biomedical research and development sector that added to the growing demand for more doctors also helped to convince the Government to abolish the policy in 2003. The decision was well-received universally and "served to rectify the anomaly in which 'less qualified' male students were preferentially admitted to NUS Medicine over 'more qualified' female

#### CLASS OF 1974

##### Prof Low Poh Sim

Senior Consultant, Division of Paediatric Neurology, Khoo Teck Puat-National University Children's Medical Institute

National University Hospital Professor, Department of Paediatrics, NUS Medicine



Prof Low is a senior consultant paediatrician and is one of Singapore's leading specialists in paediatric neurology.

Her long and distinguished career of 40 years has seen her hold key appointments, including being Chairperson at the Khoo Teck Puat-National University Children's Medical Institute, National University Health System (NUHS); Head of Department of Paediatrics at NUS Medicine and the National University Hospital (NUH); as well as Associate Dean at NUH. She has also been Head of the Division of Paediatric Neurology and Developmental Paediatrics and is a member of several medical advisory panels.

As Head of the NUH Division of Paediatric Neurology, Prof Low led her team to develop greater capabilities in clinical services and oversaw the development of new and essential clinical services and programmes in the area of paediatric neurology, as well as the development of the Child Development Unit at Jurong Medical Centre.

Over the years, Prof Low has also nurtured and mentored countless young paediatricians, many of whom are now established paediatricians and leaders in the profession. She has been appointed by the NUS as the Chief Examiner for the Master of Medicine in Paediatrics, a post she has served faithfully in for the past 20 years. With the introduction of the residency programme for post-graduate training in Singapore, Prof Low continued to play a seminal role in maintaining national training and assessment standards as a member of the Residency Advisory Committee and the Chief Examiner for Paediatric Medicine.

Prof Low's sustained involvement in and commitment to the area of clinical care and student development runs alongside her research work, which has resulted in the publication of several scientific papers in high-impact peer-reviewed journals.

students, many of whom went overseas to study medicine and never returned to Singapore."<sup>8</sup>

Five years after the quota was removed with the strong support of the Remaking Singapore Committee's Group on Women's Issues, the Association for Women Doctors (Singapore) and Members of Parliament Dr Lily Neo and Mr Charles Chong,<sup>9</sup> women made up nearly 49% of enrolment in 2008 for the NUS Medicine undergraduate degree programme. In 2018, the intake of females comprised at least 55% of the freshman cohort entering NUS Medicine. In the same year, the percentage of females enrolled in Duke-

NUS Medical School made up at least 53% of the incoming cohort, while they comprised between 30% and 40% of the students in the Lee Kong Chian School of Medicine's first four intakes.<sup>10</sup> The female students from NUS Medicine are at the forefront of student leadership, helping projects and initiatives such as large-scale public health screening campaigns, as well as community service programmes here and even in neighbouring countries.

### Working towards a better tomorrow

We are hopeful that women will eventually fill more leadership posts in the coming years but this requires

## CLASS OF 1976

### Prof Chay Oh Moh

Senior Consultant, Department of Respiratory Medicine, KK Women's and Children's Hospital



Prof Chay is a senior consultant in the Department of Respiratory Medicine Service of the KK Women's and Children's Hospital (KKH). She is also the Associate Designated Institutional Officer of SingHealth Residency, Campus Director of KKH, and Professor in Paediatrics, Duke-NUS Medical School and NUS Medicine.

For more than 20 years, Prof Chay has been an outstanding mentor and educator par excellence, making significant contributions to the professional initiation and development of innumerable medical students and residents in the areas of paediatrics and paediatric respiratory medicine, with her teaching, training and mentorship.

As the first Academic Chair of the SingHealth-Duke NUS Paediatric Academic Clinical Programme, she established a robust framework that has effectively cultivated strong mentor-mentee relations across all levels of doctors at KKH, as well as in SingHealth. She was awarded the National Outstanding Clinician Mentor Award, National Medical Excellence Awards 2014.

## CLASS OF 1983

### Prof Leo Yee Sin



Director, Institute of Infectious Diseases & Epidemiology  
Clinical Director, Communicable Disease Centre  
Senior Consultant, Department of Infectious Diseases, Tan Tock Seng Hospital  
Clinical Professor, NUS Medicine

Prof Leo proved her mettle during one of the worst health crises to hit Singapore in recent times: the 2003 SARS virus outbreak. She has also participated in the fight against Chikungunya and pandemic influenza virus outbreaks during the late 1990s and 2000s. While heading the Institute of Infectious Diseases and Epidemiology at Tan Tock Seng Hospital, Prof Leo was also involved in various research in dengue, influenza, HIV and emerging infections. Singapore's evolution from developing to developed country has led to changes in the disease landscape.

intentional efforts by institutions and individuals to recognise, acknowledge and address the issues. Since 2017, the National University Health System's (NUHS) Women in Science & Healthcare (WISH) has been working closely with the NUHS leadership to raise awareness, facilitate access and promotion for women, as well as address misperceptions and unconscious biases in the clinical and medical sciences. More recently, the creation of the Equal

Opportunities for Career Development Office within NUS Medicine in 2019 seeks to plug the leaky pipeline of women in academic medicine and aims to offer both men and women equal opportunities and rewards in academia. We look forward to embracing a future where more women can fulfil their full potential as they continue to make their mark in medical thought and practice, and help shape the course of health-care in this country and beyond. ♦

*Disclaimer: All figures cited in the article were contributed by the relevant parties.*

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