MASA POLICY DEVELOPMENT PROGRAMME

POLICY BRIEF
03

Increasing Medical Specialists in Malaysia:

Beware of Vicious Cycle

CHANG JING JING
SEOW AI NA
SYAFIIE SYAMAUN
NANI DRAMAN

MASA POLICY DEVELOPMENT PROGRAMME

POLICY BRIEF 03

Increasing Medical Specialists in Malaysia:

Beware of Vicious Cycle

Chang Jing Jing
Seow Ai Na
Syafiie Syamaun
Nani Draman

2022

MASA POLICY DEVELOPMENT PROGRAMME

Increasing Medical Specialists in Malaysia: Beware of Vicious Cycle

Publisher:

INSTITUT MASA DEPAN MALAYSIA

Institut Masa Depan Malaysia (MASA)
192, Jalan Ara, Bukit Bandaraya,
59100 Kuala Lumpur.
Tel: 03-23881059 Fax: 03-23881049
E-mail: mpdp@institutmasa.com

PREFACE

Institut Masa Depan Malaysia (MASA) is an independent think tank that brings together experts in government and academia to provide quality research, policy recommendations, and analysis on the full range of public policy issues guided by the shared prosperity values.

Since its inception, MASA has been actively involved in shaping national policies and frameworks. MASA Policy Development Programme (MPDP) was introduced as a pioneering initiative aimed at promoting policy research among researchers from public and private universities across the country, in alignment with the Shared Prosperity Vision 2030 and the Sustainable Development Goals, which are integrated with the 12th Malaysia Plan.

Through the MPDP 1.0 initiative, 30 Policy Briefs have been successfully produced, encompassing policy input and recommendations across sectors such as economics, social issues, education, and sustainable development.

MASA expresses its gratitude to Assistant Profesor Ts. Dr. Chang Jing Jing and her team for the production of this policy brief. The commitment of the MPDP grant recipients, along with close cooperation with relevant stakeholders, is highly appreciated and is hoped to continue making a positive impact on national policy development.

Azril Mohd Amin
Chief Executive Officer
Institut Masa Depan Malaysia

ABOUT MASA

Institut Masa Depan Malaysia (MASA) is an independent think tank that brings together experts in government and academia to provide quality research, policy recommendations, and analysis on the full range of public policy issues guided by the shared prosperity values.

MASA was established in January 2019. The formation of the organisation was inspired and mandated by the Seventh Prime Minister, YABhg. Tun Dr Mahathir Mohamad and the Eighth Prime Minister, YB Tan Sri Dato' Haji Muhyiddin Bin Haji Md Yassin. It was founded out of a passion to forward the philosophy of shared prosperity in Malaysia and this region.

MASA also was commissioned by the government of Malaysia to author and develop the Shared Prosperity Vision 2030 plan as the new socioeconomic plan for Malaysia.

Our Vision

To be a thought leader on policy ideas and analysis guided by shared prosperity values.

Our Mission

To create a world where no one is left behind by influencing policymakers to develop data-driven policies that ensure equitable wealth distribution and continuous improvement of people's well-being.

ABOUT MPDP

MASA Policy Development Programme (MPDP) is a pioneering effort in promoting policy research that has become part of MASA's flagship project, in line with the 12th Malaysia Plan which is aligned with the Shared Prosperity Vision and the Sustainable Development Goals.

The research grant, introduced for the first time in 2021, received an encouraging response public and private institutions of higher learning as well as non-governmental organizations.

MPDP researchers have produced studies across various strategic areas, including multidimensional poverty, education for the B40 group, sustainable urban planning for low-income communities, regional inclusivity in Sabah and Sarawak, social enterprise models for Micro, Small and Medium Enterprises (MSMEs), green economy potential and food security.

Other strategic areas of studies include empowerment of the ecotourism sector, climate change, health preparedness and crisis resilience, addressing learning loss, business acceleration, affordable housing and social protection.

All these are reflections of the initiatives and aspirations, inspired by the 8th Prime Minister and Chairman of MASA, Tan Sri Dato' Haji Muhyiddin bin Hj. Md. Yassin.

LIST OF MPDP 1.0 POLICY BRIEFS

NO	TITLE	PROJECT LEADER
1.	Family Digital Citizenship in Pandemic Recovery: Prospects, Challenges, and Policy Considerations	Assoc. Prof. Dr. Nor Diana Mohd Mahudin
2.	Kajian Kelestarian Perusahaan Sosial di Malaysia: Perspektif Pasca Pandemik COVID-19	Dr. Abu Hanifah bin Ayob
3.	Increasing Medical Specialists in Malaysia: Beware of Vicious Cycle	Asst. Prof. Ts. Dr. Chang Jing Jing
4.	Public Reactions and Acceptability on Carbon Tax Implementation in the Malaysian COVID-19 Economic Recovery Plan	Assoc. Prof. Dr. Izlawanie bt Muhammad
5.	Role of People with Disabilities towards Sustainability of Tourism Sectors in Malaysia	Ms. Kalai Vani A/P Kalimuthu
6.	Pelan Pembangunan Dasar Pengurusan Pendidikan Murid B40	Dr. Bity Salwana bt Alias
7.	The Adoption of Digital Technology in Micro-Retail Enterprises	Dr. Sharifah Muhairah Shahabudin

NO	TITLE	PROJECT LEADER
8.	The Impact of COVID-Malaysia's Emergency Mitigation Measure on 10 High-Value Crops	Assoc. Prof. Dr. Fatimah Kayat
9.	Towards Enhancing Sustainability Practices Among SMEs: Awareness and Challenges	Dr. Wahidah bt Shari
10.	The Role of the Share of Energy from Renewable Sources on FDI Inflows	Dr. Goh Lim Thye
11.	Elderly Adaptive City Planning-Bringing the Age-Friendly City Concept to Live	Dr. Nur Aulia Rosni
12.	Micro SMEs Rescue Plan: No One is Left Behind	Dr. Foo Lee Peng
13.	Revitalizing the Urban B40 Communities Through The Development of a Multidimensional Integrated Community Sustainability Planning (ICSP) Framework	Dr. Peter Aning anak Tedong
14.	Grey Matter - An Examination of Malaysians Perspectives Towards Ageism and Impacts of Health	Prof. Dr. Choo Wan Yuen

NO	TITLE	PROJECT LEADER
15.	Road Safety and Health Risks of Food Delivery Riders During COVID-Implications and Recommendations	Dr. Laila Suriya Ahmad Apandi
16.	Exploring the Determinants of Community Well-being in Endemic Period: A Comparison Study between Rural and Urban Community	Dr. Naziatul Aziah Mohd Radzi
17.	Social, Economic, and Environmental Factors Determining COVID-19 Severity in Malaysia: Lessons Learnt From Non-Pharmaceutical Interventions (NPIs)	Dr. Teh Bor Tsong
18.	Human Capital Transformation in Talent Management Affecting Kelantan State Employee Performance During Pandemic COVID-19	Dr. Iskandar Hasan Tan bin Abdullah
19.	Pembangunan Sabah ke Arah Mencapai Kelestarian Hidup Masyarakat dan Kunci Kepada Malaysia Sebagai Negara Maju 2025	Dr. Mohd Ikbal bin Mohd Huda

NO	TITLE	PROJECT LEADER
20.	The Development of Youth Agropreneur Policy and Framework for Food Safety Sustainability and Poverty Reduction	Assoc. Prof. Dr. Sylvia @ Nabila Azwa bt Ambad
21.	Ketahanan dan Kapasiti Adaptasi Sektor Ekopelancongan Terhadap Pandemik COVID-19: Kajian Kes Komuniti Setempat di Pulau Tioman	Dr. Siti Nor Liyana bt Harun
22.	Input Polisi Bagi Penyelesaian Kemiskinan Situasi Untuk Keperluan Pelan Pemulihan Negara (PPN)	Assoc. Prof. Dr. Wan Ahmad Amir Zal bin Wan Ismail
23.	Ruang Hijau Bandar Sebagai Indeks Untuk Dasar Kesihatan Mental Mampan Semasa Pandemik	Assoc. Prof. Dr. Mohd Ramzi bin Mohd Hussain
24.	Assessing Organizational Resources for Post Pandemic Resiliency and Employees' Well-Being	Asst. Prof. Dr. Low Mei Peng
25.	Model T-Digital dalam Memupuk Perpaduan Masyarakat Majmuk di Malaysia	Dr Khairul Azhar bin Meerangani

NO	TITLE	PROJECT LEADER
26.	Mental Health Services Mapping for School Going Children and Adolescents	Dr. Tengku Amatullah Madeehah bt Tengku Mohd
27.	COVID-19 Outbreak-Analysis Visualization and Classification of Food Insecurity Among Vulnerable Groups	Assoc. Prof. Dr. Mohd Asrul Affendi Abdullah
28.	Government and Corporate Social Responsibilities for Malaysians' Livelihoods During COVID-19: A Retrospective and Prospective Reflective Analysis of Initiatives in 2020 and Beyond	Dr. Cheong Huey Fen
29.	Sustainable Development Goals (SDG): From STEM to Employability	Prof. Dr. Teoh Sian Hoon
30.	Big Data Analytics (BDA) Capability Model for SMEs: Post COVID-19	Dr. Mohammad Falahat

TABLE OF CONTENTS

BIOGRAPHY

CHANG JING JING

Chang Jing Jing is an Assistant Professor in the Department of Computer and Communication Technology at Universiti Tunku Abdul Rahman in Malaysia. She holds a Ph.D. in Control and Automation Engineering from Universiti Putra Malaysia, which she completed from 2011 to 2016. Her research interests lie in the areas of process modeling and simulation, system identification, model predictive control, biomedical engineering, and healthcare systems. Her work focuses on developing and applying control and automation techniques to improve medical processes and healthcare delivery.

SEOW AI NA

Seow Ai Na is a Senior Lecturer in the Department of Business at University Tunku Abdul Rahman. She obtained her MBA from Heriot-Watt University, United Kingdom. In her early years, she was involved with education industry, training accounting and business management. Later, she moved to commercial with working experience involving strategic planning, operations management, business development and retail management. Her scientific research interests include tourism management, health tourism, tourists' behaviour and small medium enterprises.

SYAFIIE SYAMAUN

Syafiie Syamaun is an Associate Professor in the Chemical and Materials Engineering Department at King Abdulaziz University Jeddah, Kingdom of Saudi Arabia. He obtained his Ph.D. in University of Valladolid, Spain, Department of System Engineering and Automatic Control.

NANI DRAMAN

Nani Draman is an Associate Professor in the Family Medicine Department at Universiti Sains Malaysia (USM). She obtained her M.D (USM 1998), MMed Family Medicine (USM, 2009). Her areas of expertise include chronic diseases especially Diabetes, hypertension and dyslipidemia. As well as common family medicine problem and women's health - breast cancer.

Executive Summary

The shortage of medical specialists in Malaysia remains a long-standing issue. However, due to the revamp of parallel pathway training programmes and an oversupply of medical officers, we may foresee a significant increase of medical specialists in the next decade.

Nevertheless, increasing medical specialists alone will not lead to better access of quality specialised care if the issues of specialist training, the disproportion of specialists in public/private sectors, maldistribution in the type of specialties and subspecialties, and geographical imbalance of specialists are not dealt with by the government.

These issues could be minimised by having a proper assessment and planning for human resources in an early stage, followed by the right policies to implement corrective actions.

Therefore, the government is urged to increase the training capacity of the specialist training and conduct a long-term needs assessment of specialists to control the quality and quantity of our future specialists. Efforts should also be made to retain specialists, especially those with subspecialties, in the public sector.

Finally, a transparent and equitable human resources management system is indeed necessary to sustain a stable and balanced healthcare system in place.

Key Messages and Recommendations

Recommendation 1

- To increase the capacity of medical master's programmes.

Recommendation 2

- To expand the list of hospitals for specialist training.

Recommendation 3

- To encourage the inclusion of the private sector in specialist training.

Recommendation 4

- To have an informed choice of specialisation and sub-specialisation.

Recommendation 5

- To strengthen retention of specialists as trainers.

Recommendation 6

- To provide transparent and equitable human resources management system.

Introduction

The human capital of medical doctors in Malaysia is facing two critical, yet contrasting problems. On one hand, there is a serious shortage of medical specialists in Malaysia. As of 30 June 2020, Malaysia has an average 3.9 specialists per 10,000 population as compared to 14.3 specialists per 10,000 population in Organisation for Economic Cooperation and Development (OECD) countries in 2018 (Academy of Medicine of Malaysia, 2020).

This means that the density of specialists in Malaysia is almost four times lower than the average density in high-income countries. According to the then Health Minister Khairy Jamaluddin, it is estimated that Malaysia will need 28,000 medical specialists by 2030.

Yet there are currently less than 13,000 medical specialists in both the public and private healthcare sectors (Zainuddin, 2021). The severe shortage of medical specialists has resulted in a long waiting time for the public to receive specialist treatments (Su-Lyn, 2017).

Considering the ageing population and the prevalence of non-communicable diseases (NCDs) in Malaysia, the need for complex specialized care in the future will grow even stronger. Increasing medical specialists is therefore a vital measure to meet the demands for healthcare in the future. On the other hand, there is a large number of medical graduates entering the workforce.

Prior to 2015, there were only approximately 3,000 medical graduates annually. This number has almost doubled to 5,000 to 6,000 per year since 2016 (The Sun, 2021).

In this regard, to avoid the long waiting time for a vacant post to receive their mandatory training, the Public Service Department through the Ministry of Health (MOH) has introduced a contract scheme for House Officers and Medical Officers.

Since then, the number of contract medical officers has increased tremendously. In 2020, there is a total of 22,334 contract medical officers in the MOH institutions (Ministry of Health Malaysia [MOH,2021).

With the specialist training pathway among the contract medical officers gradually sorted out (Allison, 2022; Jalil, 2021), an increase in the number of specialists is likely to be underway.

Generally, there are two main paths for a medical officer to become a specialist in Malaysia, namely: the medical Master's programme, and the parallel pathway training programme.

A Master's programme is a postgraduate programme offered by local public universities while the parallel pathway is a self-funded medical specialty programme provided by various recognized awarding bodies such as the Royal Colleges of the United Kingdom or Ireland.

The Master's programmes have been the major pathway to train specialists in Malaysia since the 1980s. However, the parallel pathway has since gained accelerating popularity upon the strengthening and expansion of the parallel pathway in recent years.

Over the next decades, we may begin to witness a noticeable increase in medical specialists in Malaysia. That said, this does not necessarily translate to better access in quality specialised care.

Taking into account the long period of training time, policies that can increase the training capacity of specialists, as well as tackling the disproportion of specialists in terms of public/private sectors, types of specialties and subspecialties, and geographical imbalances must be in place as soon as possible. The quality of specialist training must not be watered-down by the increase of specialist trainees.

Finally, an oversupply of medical specialists should be avoided. Countries with an oversupply of specialists such as Greece and Australia have reported serious geographical inequities and imbalances within the specialist category (Moynihan, 2016; Kaitelidou, 2012).

This policy brief identifies the shortfalls of the current system in supporting an increase of medical specialists, and recommends a set of policies that promote a competent and balanced medical specialists' workforce in the future.

Critique of Current Policy Option

The Master's programme is the largest contributor of specialists in the public sector due to the mandatory contractual period for Federal Training Prize recipients (HLP) to serve in MOH health institutions. Parallel pathways, while also eligible for HLP, only make up 3% of the scholarship (MOH, n.d.).

Therefore, the role of the Master's programme in specialist training is arguably irreplaceable even with the expansion of parallel pathways.

In an effort to produce more specialists in the country, the intake of medical officers for master's programmes has increased remarkably, from 809 in 2014 to 1214 in 2020 (MOH, 2021; MOH 2017).

In the subsequent years, the government has planned to maintain the intake of approximately 1200 master students per year (MOH, n.d.). However, the medical faculty's resources have already been overstretched to support the high influx of students every year.

The number of academic staff in medical faculties has largely remained static for the last decades despite the cumulative increase in master's students.

Recruitment and retention of senior specialists meanwhile have remained challenging due to the high salary gap, unrealistic promotion system, overloaded administration work, discrepancy of benefits with MOH posts, and the lack of appreciation for their expertise.

More often policymakers may have disregarded the fact that medical master's programmes are work-based training, thus requiring more supervision and one-to-one coaching as compared to other postgraduate programmes.

To this end, there is an urgent need to provide relief to the overburdened medical faculties to uphold the quality of specialist training while increasing the capacity to train the specialists.

The Parallel pathway programmes have gained increasing popularity in recent years. The number of graduates from Parallel Pathway has already more than doubled in just two years' time, from 128 in 2017 to 270 in 2019 (MOH, 2017; MOH, 2018; MOH, 2019).

This is even before the "spill-over effect" of the drastic increase of medical officers. However, the limited posting in tertiary hospitals is insufficient to absorb the number of parallel pathway trainees.

Instead of placing them in hospitals with relevant specialties, trainees are often placed in an unoptimized setting for specialty training such as the district hospitals.

Trainees may request for a short attachment in other hospitals, but it is subject to the eagerness of the trainee, mentor/supervisor, and hospital management for the arrangement. Exposure to subspecialties is highly competitive. As the number of trainees increases, efficient management of attachment and gazettement placement will inevitably become tricky.

The lack of opportunity to get sufficient exposure to the cases and procedures may delay their completion of the specialist training and jeopardise the quality of our future specialists.

This in turn will lead to a vicious cycle that poses a threat to the professional-skills-maintenance among the specialists in Malaysia.

Due to the long training of sub-specialty and a worrying outflow of consultants with sub-specialties to the private sector (Planning Division, MOH, 2020), there is a serious shortage of consultants in public hospitals.

Sub-specialty training usually requires at least another 3 years after the completion of specialist training. The long training duration to a certain extent has demotivated the specialists to further sub-specialisation and also reduced the productive years of a consultant to serve the public.

Not only that the lack of sub-specialists will hinder the quality of public healthcare services, but it also limits the capacity to train subspecialists. The lack of qualified consultants (trainers) to train our future subspecialists will create a vicious cycle that limits the expansion of subspecialties.

Furthermore, the choice of specialty or /subspecialty is greatly influenced by the clinical experience they obtained during their services in healthcare institutions (Rogayah & Zulkifli, 2001).

Without adequate exposure to the specialty/sub-specialty and the lack of government's long-term healthcare human resources strategy, the problem of specialists' shortage of less-common (sub)specialties and surpluses of common (sub)specialists will only be exacerbated.

As such, a study should be done to review the possibility of fast-tracking sub-specialty training and encourage the specialists to continue sub-specialization through incentives.

Moreover, the government must continue to improve its remuneration strategy to retain specialists and subspecialists in public hospitals and universities.

For critical sub-specialty, the inclusion of the private sector in the training of subspecialists could be an option but it must be accompanied by sufficient efforts to maintain subspecialists in public hospitals and universities.

A transparent and equitable healthcare human resources management system is indeed paramount to gaining specialists' trust in the MOH, improving morale at work, and lowering job-related stress. It is also a powerful tool to tackle the imbalances in sectors and geographical distribution.

Unfortunately, the MOH human resources management is often criticised for not being transparent and equitable, for example in the award of HLP, and placement of attachment, gazettement, and permanent positions.

The MOH is also urged to convert the hospital's on-call system to a shift system, whereby every doctor will have a fair and fixed working hour per week. This will help to reduce the doctor's working hours and promote better work-life balance.

Methodology, Result, and Discussion

In this study, a system dynamics approach was adopted to build a better understanding of the system required to support an increase in medical specialists.

System dynamics is an approach to study the dynamic behavior of a complex system. It is known for its usefulness in the analysis and solving of complex policy problems.

A system generally refers to a network of multiple variables that are interconnected through causal relationships. Here, a causal loop diagram (CLD) was employed to map the structure and feedback of the system. The model was developed based on the input from interviews and validated through a focus group discussion.

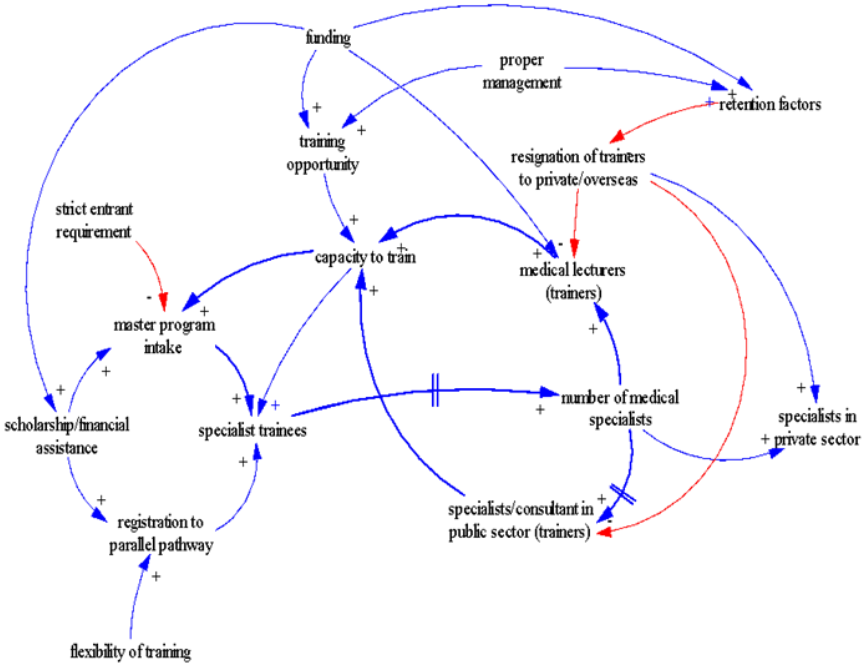
Overall, the feedback from 24 stakeholders, which includes 5 specialists, 6 lecturers, 10 master students, and 3 parallel pathway trainees was collected to build the CLD.

Figure 1 shows the CLD developed in this study. Variables are linked using arrows. There are two types of causal links: positive link (+) and negative link (-).

A positive causal link indicates that two linked variables will change in the same direction, i.e., an increase in the cause will increase the effect. A negative causal link indicates that the two linked variables will change in the opposite direction. The hash marks (||) on the causal links represent a delay. Delays are what cause the systems to fluctuate.

As shown in Figure 1, the capacity-to-train is the key to increasing the number of medical specialists. The capacity to train equates to the number of trainees that a system can be trained whilst ensuring the competency of the trainees (Royal Australasian College of Physicians, 2022).

Figure 1
Causal Loop Diagram



Accordingly, to ensure the competency of trainees, they should be exposed to quality training time, good supervision, sufficient volume of practice and procedural exposure, training resources and rotation availability, opportunities to develop communication skills with patients, as well as standardised and rigorous workplace-based and formal assessments (Ashbolt, Cork & Venkatesh, 2017).

These can be further summarised into two domains: trainers and training opportunities. Trainers are the medical lecturers and specialists or consultants working in the hospitals who train the trainees. Ideally, the more (qualified) trainers are available, the more specialist trainees can be trained.

Training opportunities are the adequate exposure of the trainees to the procedure, resources, patient interactions, etc. that solidify their skills as a specialist.

Proper management and sufficient funding are crucial to ensure adequate and equitable training opportunities among the trainees.

From the diagram, two feedback loops were identified, with one involving medical lecturers, and one involving specialists/consultants in the public sector.

An increase in trainers will create a positive feedback loop in the system by increasing the capacity to train, thereby increasing the number of specialist trainees and medical specialists.

On the other hand, insufficient manpower to train the specialists will create a vicious cycle that sacrifices both the quantity and quality of our future medical specialists.

This means that the number (as well as the quality and type of specialties) of trainees may fall into a vicious cycle if there is an insufficient number of qualified trainers.

Based on the analysis, there are two main routes to increase the number of trainers: through the retention of specialists in the public sector/medical faculties, or via the inclusion of the private sector in specialist training.

Lastly, proper management is critical to provide fair and quality training opportunities to the specialist trainees, as well as to retain specialists and consultants in the public sector.

In short, our findings have suggested the need for policies to increase the number of trainers and the training opportunities while increasing the specialist.

Policy Recommendations

Undoubtedly, meeting the fulfilment of medical specialists is not a relatively easy task. The lessons learned from this study can be utilised as collective knowledge and be employed to meet the needs of medical specialists and subspecialists in the near future. Some of the suggestions are highlighted below.

(1)Increase the capacity of medical master's programmes

In comparison to the parallel pathway, the master's programme is a more viable approach to tackle the public/private specialists' disproportion, maldistribution in the type of specialties and subspecialties, and geographical imbalance of specialists.

Hence, there is a need to increase the capacity of master's programmes according to the nation's needs for specialties/sub-specialties.

Accordingly, a review of the manpower and financial resources allocated to the operation of Master programmes is crucial to relieve the overburdened medical faculties.

The MOH, MOF, and MOHE must not treat the medical master's programme the same as the other postgraduate programmes when considering resource allocation because the competency and responsibilities expected from the specialists are very distinct from the rest of the postgraduate programmes.

(2) Expand the list of hospitals for specialist training

There are a total of 146 MOH hospitals in 2020 which consist of 135 hospitals and 11 Special Medical Institutions. However, there are many departments in the specialist hospitals that are not accredited for specialist training.

As a result, there is a maldistribution of specialist trainees in MOH hospitals, with some having no specialist trainees, but some with a high number of trainees.

A high influx of trainees will affect the quality of supervision, clinical experience, procedural experience, availability of rotations, and assessment capacity.

Hence, there is a need to expand the list of hospitals accredited for specialist training in an effort to increase the training opportunities and uphold the quality of training.

(3) Encourage the inclusion of the private sector in specialist training

There are a few aspects that the private sector can contribute towards specialist training.

One of them is the availability of trainers. Due to the long duration required to train a specialist, increasing the number of consultants in the public hospital may not be feasible within a short period of time.

Nonetheless, there are many existing consultants from the private sector that are well-qualified to train specialists. Their experience is undoubtedly a valuable asset to our healthcare system.

Secondly, private hospitals can help boost the training capacity of specialists by creating more training positions. Well-established private hospitals should be allowed to train specialists. It is therefore recommended to allow more private hospitals to be accredited for specialist training.

Lastly, private hospitals may also offer scholarships to selected medical officers, similar to HLP, to pursue their specialisation. Medical officers in the private sector should always be given a fair chance to continue their professional development as a specialist.

(4) An informed choice of specialisation and sub-specialisation

Medical officers should be better informed on the choice of specialty/sub-specialty they possess before choosing their specialty. This information should include the projected vacancies in MOH health institutions and the current statistics of specialists according to the type of specialty and its geographical distribution.

Such information should be monitored and updated continuously and disseminated to medical officers in a timely manner. This is essential to minimise the risk of undersupply or oversupply of specialists in a particular specialty/sub-specialty.

There is also a need to increase the number of specialists pursuing sub-specialisation. Financial rewards and a relatively shorter duration towards sub-specialisation are recommended.

For critical sub-specialty where specialist trainers are deemed limited, the inclusion of the private sector in the training of subspecialists could be a viable option.

(5) Retention of specialists as trainers

Experienced specialists, especially subspecialty consultants, are crucial to train our future specialists workforce.

However, a sizeable proportion of MOH specialists were seen to depart from the government healthcare service sector every year.

As such, to retain specialists in the public sector, the government must continue to formulate and implement comprehensive and effective remuneration packages for these specialists.

For instance, retention factors in the form of reduction of repetitive administration work, replacing the on-call system with a shift system, attractive training allowances, sub-specialty allowance, better pay increments, and rewards based on their year-of-service are recommended.

(6) Transparent and equitable human resources management system

Ensuring transparency and equity in healthcare human resources management is vital towards tackling the imbalances in public/private sectors and geographical maldistribution, and promoting a positive working culture.

There should be clear selection criteria for the award of HLP, and the placement of attachments, gazettement, and permanent posts. Placements should be done in a fair manner, for example through a short rotation basis.

The government is also urged to consider switching the hospital's on-call system to a shift system where the doctors are entitled to receive an equal and reasonable working hours.

A transparent and equitable system will help to ensure that the specialist trainees receive the training they deserve, to build trust with the specialists, and subsequently to retain the specialists in the public sector. It holds the key to the sustainability of a stable and balanced healthcare workforce.

These policies were proposed in response to the urgent need of expanding the capacity to train our increasing future medical specialists. Interventions should be done to uphold the standard of medical specialists before it is too late.

Conclusion

To conclude, the next decades may be the most critical years particularly to solve the issue of specialists' shortage in Malaysia.

The expansion of parallel pathways has fittingly complemented the master's programme in training more medical specialists. It is therefore timely for the government to introduce policies that can help manage medical specialists effectively and shift towards a healthy and balanced health services system.

There must be an expansion of capacity-to-train to uphold the quality of future specialists while increasing the number of specialists. There is also a need for a centralised long-term needs assessment of specialists, taking into consideration the various demographic, epidemiological, and sociocultural profile of our future population, as well as the impacts of technology and organisational (vacancies) changes.

Findings from the needs assessment and constructive feedback from various stakeholders should be consolidated in order to ensure effective interventions are in place at the earliest possible.

References

Academy of Medicine of Malaysia. (2020, October 21). *Permanent MO Posts Today Will Create More Specialists Tomorrow*. [Press Statement].

Allison, L. (2022, 16 January). Contract doctors can specialise. *The Star*. https://www.thestar.com.my/news/nation/2022/01/16/contract-doctors-can-specialise

Ashbolt, M., Corke, C., & Venkatesh, B. (2017). Determining the optimum capacity to train: a challenge for the College of Intensive Care Medicine of Australia and New Zealand. *Critical Care and Resuscitation: Journal of the Australasian Academy of Critical Care Medicine, 19*(4), 283–284. https://pubmed.ncbi.nlm.nih.gov/29202251/

Jalil, A. (2021,23 July). Two-year extension for contract doctors. *The Malaysian Reserve*. https://themalaysianreserve.com/2021/07/23/two-year-extension-for-contract-doctors/

Kaitelidou, D., Mladovsky, P., Leone, T., Kouli, E., & Siskou, O. (2012). Understanding the Oversupply of Physicians in Greece: The Role of Human Resources Planning, Financing Policy, and Physician Power. *International Journal of Health Services, 42*(4), 719–738. https://doi.org/10.2190/hs.42.4.h

Ministry of Health Malaysia (-).Ministry of Health Action Plan 2021-2025

Ministry of Health Malaysia (2017). *Annual report Ministry of Health Malaysia 2016*.

Ministry of Health Malaysia (2018). *Annual report Ministry of Health Malaysia 2017*.

Ministry of Health Malaysia (2019). *Annual report Ministry of Health Malaysia 2018*.

Ministry of Health Malaysia (2021). *Annual report Ministry of Health Malaysia 2020*.

Moynihan, M., & Birrell, B. (2016). *GP oversupply–ignoring the evidence*. https://tapri.org.au/wp-content/uploads/2016/04/GP-oversupply-ignoring-the-evidence-12-Dec-2016.pdf

n.d. (2021, September 15). MOH mulls study facility equivalent to Federal Training Prize for contract doctors – Khairy. The Sun. https://www.thesundaily.my/local/moh-mulls-study-facility-equivalent-to-federal-training-prize-for-contract-doctors-khairy-KY8346419

Planning Division, Ministry of Health Malaysia (2020). *Human resources for health country profiles Malaysia (2015-2018)*.

Rogayah, J., Mhped, & Mph, A. (n.d.). The Timing and Stability of Choice of Medical Specialty Among Malaysian Doctors. Retrieved February 13, 2026, from https://www.e-mjm.org/2001/v56n3/Medical_Specialty.pdf

Royal Australasian College of Physicians (RACP) (2022). *Capacity to Train Guidance.* https://www.racp.edu.au/docs/default-source/about/accreditation/capacity-to-train/accreditation-capacity-to-train-guidance.pdf?sfvrsn=d5f9ca1a_4

Su-Lyn, B. (2017, 22 August). Hours-long hospital waits driving some to abandon treatment. *Malaymail*. https://www.malaymail.com/news/malaysia/2017/08/22/hours-long-hospital-waits-driving-some-to-abandon-treatment/1447711

Zainuddin, A. (2021, September 15). Four of 10 Government Doctors are on Contract. *CodeBlue*. https://codeblue.galencentre.org/2021/09/15/four-of-10-government-doctors-are-on-contract/

INSTITUT MASA
DEPAN MALAYSIA

Institut Masa Depan Malaysia
192, Jalan Ara, Bukit Bandaraya,
59100 Wilayah Persekutuan Kuala Lumpur

For more information, visit our website:
www.institutmasa.com

ISBN 978-967-16910-5-2

9 789671 691052