

# Postgraduate Clinical Training in Malaysia: The Beginning of a New Era

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## INTRODUCTION

Postgraduate clinical training refers to the advanced medical education that follows a doctor's initial medical degree. Currently, the landscape of postgraduate clinical training in Malaysia is undergoing a transformational shift from Outcome Based Medical Education (OBME) towards Competency Based Medical Education (CBME). In CBME, the assessment of required competencies is being conducted formatively and continuously using workplace-based assessments (WBAs) throughout the training period. This is in contrast to OBME where the assessments are summative and occur at the end of the programme.<sup>1</sup> This change is not only necessary to address the evolving demands of healthcare but is essential to support the development of highly skilled medical professionals in a constantly evolving learning and working environment.

In Malaysia, postgraduate training occurs during periods of service as a house officer, medical officer, or specialist, as doctors work towards advanced career roles to Medical Officer with Area of Interest, Subject Matter Expert, Specialist, Specialist with Area of Interest, or Subspecialist.

Having a structured training program for house officers and medical officers would provide a strong foundation in knowledge, skills, and professional behaviour. This training would better equip them to face challenges during postgraduate training.

### Laying the Foundation for House Officers

House officer training is a legal requirement for all new doctors in Malaysia. This is structured, supervised practical training that has been progressively improved, with the addition of syllabus and curriculum. In a latest development, MMC has published the 'Malaysian

Standards for Housemanship Training' on their website.<sup>2</sup> In these standards, doctors are now required to demonstrate competencies aligned with the Malaysian Qualifications Framework. And as currently being practiced, they are being evaluated through a range of structured assessments in the workplace (WBAs), portfolios, and supervisor reports. These standards ensure the trained house officers are not only clinically competent to work within the complexities of the Malaysian healthcare system but they can make informed decisions about their future career pathways.

### The Overlooked Majority: Medical Officers in Need of Structured Training

Medical officers make up over 80% of the doctors in the Ministry of Health, yet they lack a structured training pathway to develop their careers.<sup>3</sup> This workforce category is often trapped between meeting immediate healthcare demands and finding the time and resources to pursue postgraduate qualifications. In 2022, an internal survey conducted among surgical medical officers by the author revealed 85% out of 201 respondents expressed interest in postgraduate training, yet most reported feeling neglected and not given the protected time for learning activities. This issue has persisted long enough, echoing a similar predicament faced by the "lost tribe" of Senior House Officers in the United Kingdom (UK) during the 1990s.<sup>4</sup>

To address the training gap for medical officers, General Surgery has taken the lead by introducing the Basic Surgical Training (BST) program which has become part of the training pathway in general surgery.<sup>5</sup> This two-year curriculum provides the necessary foundation with expected core competencies, preparing medical officers to transition into Master of Surgery programme. BST has

been available to the general surgery community since 2022 and is included in their selection criterion for the intake into the Master of Surgery program in 2025.

Malaysia's healthcare system must consider a national-level initiative to create similar structured programs across specialties and transforming the career trajectories for medical officers.

### **Adapting to Modern Learning: The Rise of Online Training**

With the expansion of online learning, doctors in Malaysia now have the flexibility to pursue postgraduate training from anywhere in the world. Reputable online learning platforms such as Diploma MSc (Learna) and Future Learn have partnered with over eight universities in the UK, offering forty six and twenty three master's programs, respectively.<sup>6,7</sup> These online training programmes can lead to professional credentials such as postgraduate certificates, diplomas, and master's degrees. This mode of online learning has become increasingly popular, especially in the post-COVID era, as it offers busy clinicians greater accessibility, flexibility and cost-effectiveness.<sup>8</sup> This virtual education is a valuable additional learning tool but the scope of training is limited due to lack of hands-on patient experience.

### **More Specialists Are Needed**

Specialisation in medicine in Malaya (changed to Malaysia after 1963) commenced only after World War I. In the 1920s, pioneering Asian doctors pursued specialist qualifications on their own initiative by training at specialties colleges in UK. By the 1960s, arrangements were made for medical training in Malaysia to be recognized toward qualifications for Royal College examination in the UK.<sup>9</sup> Today, this Fellowship and Membership programs are still available but the educational provider not only come from the UK but other countries as well, and the training is being conducted mainly in MOH's hospitals. This pathway is currently known as the 'Parallel Pathway', and it is an alternative pathway for postgraduate training other than Master Programme.

The Master's program in Malaysia has been developed and tailored to meet the specific needs of the country. It was first introduced in 1973 and to date, there are thirty Master's programs being conducted by eight public universities and one private university, and has produced more than 10 000 specialists. Majority of the trainees are government sponsored, and the training scholarship increased from 1,220 slots for the 2020/21 session to 1,650 slots for the 2024/25 session.<sup>10</sup>

Malaysia's need for specialists has reached a critical point as both the Master's Program and Parallel Pathway are unable to produce enough specialists to meet the country's needs. There are currently 8,853 specialists representing 15.7% of doctors in MOH, and this figure falls short of meeting the MOH's target of a 30% specialist to 70% non-specialist ratio.<sup>3</sup> This shortage is further complicated by various governance issues within the training pathways with dropout rates and low graduation on time ranging from 30% to 40%. Other challenges include lack of qualified candidates, functionality upon graduation, lack of competent trainers, and constraints on training resources, and case-loads.

### **Malaysian Standards for Medical Specialist Training**

In 2019, the 'Malaysian Standards for Specialist Medical Training', developed by the Malaysian Medical Council (MMC), came into effect. The standards are divided into seven key areas, with the training programme learning outcomes mapped to the Malaysia Qualification Framework (MQF) level 7 learning domains.<sup>11</sup> They govern the quality of training, supervision, and assessment for all medical specialist training programs, ensuring that graduates meet the requirements for registration in the MMC Specialist Register. Currently, Specialty Specific Requirements (SSR) is being developed by each specialty. This document endeavour to specify the minimum specialty specific requirement pertaining to training curriculum, trainers, educational resources, head of programme, the basic and core competencies expected upon graduation.<sup>12</sup> As of November 2024, the MMC has approved nineteen SSRs, with the remaining still under development. These standards and SSRs serve as crucial

regulatory measures to ensure consistency and quality in postgraduate training programs.

In another significant development, the National Postgraduate Medical Curriculum (NPMC) project, led by the Majlis Dekan Fakulti Perubatan Universiti Awam Malaysia, has completed twenty-two NPMC Specialty Applicant Guides, including one for Cardiothoracic Surgery.<sup>13</sup> This historic step is achieved through collaboration among the National Specialty Committees, the Ministry of Higher Education and the Ministry of Health. The document provides a unified structure and training framework for each specialty, aligned with Malaysian Standard for Medical Specialist Training and the Specialty Specific Requirements (SSR). These curricula are largely CBME-based, where WBAs play a significant role. As part of the NPMC Project, the NPMC Training the Trainer (NPMC TtT) programme was developed, covering 18 topics across 15 core areas of knowledge and skills essential for trainers.<sup>14</sup> To date, over 1,600 trainers and programme directors from both the Ministry of Health and universities have been trained, to effectively bridging the gap between a well-designed curriculum and development of skilled specialists.

### **The Unregulated Realm of Subspecialist Training**

The training for subspecialty and area of interest (AOI) has long been provided by Ministry of Health (MOH) that benefits from the large patient load and diverse case mix. A survey conducted in February 2023 among Malaysian specialists, collated responses from 1,326 specialists, revealed that there are at least 126 subspecialty and 206 areas of interest. The recent Medical Act (Amendment) 2024 has included a Fifth Schedule, which list only 66 recognised subspecialties.<sup>15</sup> This significant discrepancy underscores the lack of governance and regulation in postgraduate training for subspecialties and areas of interest. The need to govern and regulate subspecialist training is clear. With regulations in place, Malaysia can ensure that the competencies of its subspecialists meet both the national needs and training standards,

guaranteeing a high quality of care. Subspecialty training need to comply to the Malaysian 'Standards for Specialist Training', and subsequently develop their 'Subspecialty Specific Requirements' before being subject for accreditation or peer review process.

### **Conclusion: Embracing Change for a Stronger Future**

The shift towards Competency-Based Medical Education (CBME) in postgraduate training is more than an educational reform, it's a commitment to building a healthcare workforce ready for the future as we embrace the evolving challenges in our learning and working environment. From house officers to specialists, each stage of training is now guided by MMC Standards with clearly defined programme learning outcomes. However, the training gap for medical officer need to be addressed and subspecialty training need to encompass a stronger regulatory governance. The Medical Act (Amendment) 2024 has recognised the Ministry of Health (MOH) as a specialised training provider, and it serves as a major training ground for house officers, medical officers, specialists, and subspecialists. It is timely for the MOH to reinvent itself by establishing a dedicated Postgraduate Training Unit with an expanded team to strengthen governance and oversight, better balancing the needs of both service and postgraduate training.

As Malaysia transitions into this new era, the role of trainers, regulators and training institutions are crucial to ensure these changes lead to an improvement in the quality of healthcare. With the foundation laid and the commitment in place, Malaysia is on the path to becoming a regional leader in medical education and healthcare. The next step is ours to strive for it.

### **CONFLICT OF INTEREST**

None

### **Funds**

None

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