Challenges and the Future of Residency Education in the UAE After ACGME-I Accreditation

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n the United Arab Emirates (UAE), graduate medical education programs exist in Abu Dhabi and in Dubai, and both are accredited by the Arab Board of Health Specialization.¹ Residency programs in Abu Dhabi also have achieved accreditation through the Accreditation Council for Graduate Medical Education International (ACGME-I), beginning in 2012. Since then, there have been marked improvements in clinical education and residency training outcomes.² The concept of competency-based medical education (CBME) has progressively evolved in the UAE, producing positive residency training outcomes and greater trainee and educator satisfaction.² At the same time, challenges have emerged in the residency programs in Abu Dhabi. Three critical areas for these programs include addressing burnout and promoting well-being in trainees, advancing assessment of residency graduates' competency through certification, and enhancing the quality and safety of patient care.

Ensuring trainee wellness and preventing burnout is critical. In the United States, systematic reviews showed increases in burnout and depression in medical residents,^{3,4} prompting the establishment of wellness initiatives. A qualitative study emphasized the need for more rigorous research on promoting well-being during residency.⁵ However, data on this topic from Arab nations are scarce, and only one study has analyzed the patterns of burnout and depression among residents in the UAE.⁶ This multicenter, cross-sectional study assessed burnout in residents in programs in Dubai and Abu Dhabi.⁶ The majority of respondents showed symptoms of burnout, including emotional exhaustion, high depersonalization, a low sense of personal accomplishment, and a high rate of depression.⁶ Residents from psychiatry, family medicine, and general surgery had the highest rates of self-reported burnout and depression (approximately 100%).⁴ Over one-third of respondents reported burnout in the final years of residency, and burnout rates were significantly higher for UAE nationals compared to non-nationals.⁶ Work hours (more than 40 hours per week) and heavier call schedule (less than 5 days between on-calls) emerged as factors significantly related to burnout,⁶

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underscoring the importance of work hours and on-call limitations and guidelines, like those mandated by $ACGME-I.^7$

A particular phenomenon in the Arab world is that the extended Arab family structure provides stability as well as physical and financial support.⁶ Supportive personal relationships help to maintain well-being and prevent depression, and these relationships are stronger in the Arab world.⁶ Strengthening personal and family relationships while improving work-life balance has been suggested as a measure to markedly improve resident wellness,⁵ and this strategy would be particularly effective in the UAE. Thus, international studies evaluating resident wellness-related measures are needed, including those that assess the impact of local context and the effect of ACGME-I accreditation. Future studies that identify the nature and extent of the problem of resident burnout in the UAE could inform customized interventions to reduce resident burnout and depression.

Another challenge is to define and maintain medical board certification standards. The Arab Board of Health Specialization is the current graduate examination for ACGME-I accredited programs in the UAE. However, it is important to mention that variations in program-level implementation of the Arab Board regulatory framework resulted in some programs lacking clear educational outcomes.⁷ The establishment of a UAE National Board Examination that is aligned with the ACGME-I educational framework will ensure standardization and rigor of residency training outcomes.²

Another challenge is recruiting physicians who are board-certified in specialties critical to health care delivery. One example is the shortage of adolescent medicine physicians to care for patients and serve as faculty in ACGME-I accredited programs, which is critical given the rapid increase of the adolescent population in the UAE. The shortage of adolescent medicine physicians in the United States also makes it difficult to recruit board-certified adolescent medicine physicians to the UAE. Thus, in an attempt to meet curriculum requirements and key residency training outcomes, several pediatric programs in the UAE have enrolled board-certified pediatricians, and use a multidisciplinary approach to train adolescent medicine physicians, similar to efforts in place in the United States.⁸ The establishment of a UAE National Board for Adolescent Medicine will be an important step in addressing this critical, largely unmet, need.

Another challenge is improving residency training to promote patient safety and quality of care and ensuring that the outcomes of ACGME-I accredited and nonaccredited programs are similar. CBME and entrustable professional activities (EPAs) play important roles in this endeavor. CBME helps to ensure that residents provide high-quality, safe care to patients when they enter unsupervised practice after completing their training.9 Although there is growing emphasis on CBME, particularly in ACGME-I accredited programs, assessing trainees' competencies in clinical settings remains a challenge.¹⁰ EPAs connect competencies with clinical practice. The EPA rating scale of supervision can be aligned with medical education milestones to produce meaningful decisions about supervision and assessment of relevant educational outcomes.10

The internal medicine residency program at Mafraq Hospital began using EPA ratings during the 2018– 2019 academic year. Our initial observations suggest this has improved both clinical competency committee evaluations and residents' medical milestone mapping. Faculty development workshops are important to improve residency training outcomes. These workshops unify the faculty members' frames of reference, and foster a shared mental model for assessments and EPA and summative entrustment decisions. A similar process, taking place in the Netherlands, serves as an example that the UAE could follow.⁹ Since 2015, almost all medical specialties in the Netherlands have restructured their curricula and training methods to emphasize EPAs.⁹

ACGME-I accreditation has had a significant positive impact on residency training outcomes in Abu Dhabi, but several challenges remain. Practical solutions are needed to address them and improve resident training, patient safety, and residency training outcomes. The creation of a UAE National Board Examination that is aligned with the CBME model would be a significant step toward improving outcomes. Additional studies of resident well-being are needed to identify the nature and extent of resident burnout in the UAE. Results could inform customized clinical policies focused on decreasing resident burnout and depression. Finally, a National Board of Adolescent Medicine needs to be established, and board-specified training criteria need to be formulated. The UAE also should establish a unified curriculum and training methods that emphasize EPA as building blocks for improving training outcomes. Although these refinements require time and resources, they will contribute to further improvement in residency education in Abu Dhabi.

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