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Graduate Medical Education in the Middle East. Can One Size Fit All?

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Abstract

There are several well established graduate medical education models all of which have the same goal: Producing competent physicians who will improve patient care. However, there is nothing such as "One size fits all". A system that have worked great in a certain country may not function as well in another. One of the oldest and most successful graduate medical education systems is the ACGME competency based model. This system proved over the years to result in significant improvement in residents training in the US and subsequently patient care. Similar results have already been achieved in one pediatrics residency program in UAE. Would the same results be achieved if the system gets implemented everywhere in the Middle East is a possibility that needs to be tested.

INTRODUCTION

Historically, review of residency programs in United States was the responsibility the American Medical Association (AMA) between 1910 and 1949. Later on, in 1950 the Residency Review Committees (RRCs) emerged and became the body responsible for accrediting residencies of different specialities [1]. Surgery and internal medicine were first to form committees under RRC in 1950.1 In 1972, the Liaison Committee for Graduate Medical Education (LCGME) was introduced and began to provide a convening function

for the RRCs.1 The ACGME as we know today was established in 1981 by transitioning the LCGME to an unincorporated entity with 5 member organizations (the American Medical Association, the American Board of Medical Specialties, the American Hospital Association, the Association of American Medical Colleges, and the Council of Medical Specialty Societies) [1].

The ACGME in United States is now responsible for promoting residents' learning and patients' safety. In 2002, ACGME launched the Outcomes Project [2] to increase the emphasis on assessment of each resident's competence and create discrete educational outcomes for accreditation while maintain the highest levels of patients' safety. This project identified six general competencies necessary for all residents to achieve by the time residency training is completed. Those competencies are: medical knowledge, patient care, communication and interpersonal skills, practice based learning and improvement, systems based practice, and professionalism. Those competencies serve as a common language and a framework of thinking about and organizing graduate medical education.

Overall, residency programs are now being required to provide adequate, focused, and relatively equivalent training in less time while documenting residents' actual learning. The focus of residency learning is thus being shifted from acquiring knowledge and skills by merely being exposed to the problems in the hospital to a more focused and potentially more meaningful educational experience.

In 2009, ACGME extended its accreditation model internationally and the first pilot project was in Singapore. Later on, Qatar and the United Arab Emirates (UAE), redesigned their Graduate Medical Education (GME) systems on the competency-based framework of the ACGME-International (ACGME-I). Other countries in the region including Oman and Lebanon are joining the journey. Extending the accreditation internationally has lead to concerns over the quality of postgraduate training, where differences in culture, resources, and institutional support can have major discrepancies in residency programs quality [3,4]. Therefore, this transition by some of the residency programs in the Middle East region to the ACGME model was not without major challenges.

All residency programs aim to improve patient care through high quality graduate medical education. Adopting the ACGME-I model helped many programs reach their goals with different rates of success. The pediatrics residency program in Tawam Hospital -which is one of the biggest tertiary university hospitals in UAE- was among the first programs to

collect the fruits of this transition within three short years of the transition. That was clearly demonstrated not only by increasing the Board passing rate to 100%, but more importantly by demonstrating significant drop in average length of stay (ALOS), medication errors and incident reports; and significant increase in Case Mix Index (CMI), admission rate to the hospital and patients satisfaction [5].

But the question remains: is everyone (Hospitals administration, teachers, learners and the community) in the region ready to adopt the ACGME model? How to evaluate such a transition? Is every program in every country in the region reach the same results of Tawam Hospital Pediatrics Residency Program? We believe that every program and every situation need to be evaluated independently and transparently.

We are here to suggest that an initial evaluation of the process should start by evaluating what we believe is the most important component of the equation: The learner [6]. The learner is a person who has recently made the transition from being a member of the community (i.e: Health care receiver) to a member of the medical community (i.e: health care receiver and provider). The learner will soon participate in shaping the future of health care in the community.

The suggested evaluation would go through the following steps:

1. What was the initial reaction of the learners toward the suggested changes? Did learners like the change?

We suggest a series of lectures and workshops to highlight the basic structural and regulations changes required by the ACGME such as the mandatory rotations and the working environment regulations. Such activities would then be followed by a survey to test the knowledge, attitude and acceptance of the residents of the above regulations. The survey would identify gaps in the residents understanding that can be addressed and clarified immediately by the program's administration. Such a practice in itself is a practice of the highest levels of leadership by demonstrating full engagement of the learners/employees.

2. Did learners learn better from this change?

Once the transformation takes place, testing the change in medical knowledge should be easy to do in a very objective manner by utilizing standardized exams. In our experience in Tawam Hospital Pediatric Residency program, the difference was statistically significant only one year after the transformation using the American Board of Pediatrics In-Training

exam as a measurement tool

3. Are the residents practicing what they have learned?

This could be the most difficult step since it requires careful evaluation of the residents' performance in their day-to-day practice. Multiple evaluation tools are needed for such a step such as direct observation, Mini-Clex, faculty-to-resident evaluation, resident-to-resident evaluation, nurse-to resident evaluation, OSCE,…etc

4. Did anything in patient care objectively get better?

This is the ultimate goal of graduate medical education. The tools and Key Performance Indicators (KPIs) to objectively measure improvement of patient care could be different from one institute to the other, from one community to the other, and from one country to the other. Therefore such tools must be individualized for each institution. One of the easiest things to look at is the rate of complications and medication errors, patient satisfaction and average length of stay.

CONCLUSION

In summary, there are several well established graduate medical education models all of which have the same goal: Producing competent physicians who will improve patient care. However, there is nothing such as "One size fits all". A system that have worked great in a certain country may not function as well in another. One of the oldest and most successful graduate medical education systems is the ACGME competency based model. This system proved over the years to result in significant improvement in residents training in the US and subsequently patient care. Similar results have already been achieved in one pediatrics residency program in UAE. Would the same results be achieved if the system gets implemented everywhere in the Middle East is a possibility that needs to be tested.

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