# Surgical Residency Program: Future Trends and Challenges

Muhammad Shamim[1*]

Currently competency based training (CBT) is being practiced for residency program by College of Physicians & Surgeons Pakistan (CPSP) though the traditional apprenticeship model of surgical training is still continuing in many countries. The surgical faculties of College of Physicians & Surgeons Pakistan has developed surgical training curriculum based upon CBT. There is still an issue as to its implementation. Many residency supervisors still follow apprenticeship model and practice it. Apprenticeship model was developed by William S. Halsted in 1904.[1] Halsted's principals of surgical training include "intense and repetitive exposure to surgical care under direct supervision of skilled teacher, acquiring knowledge and skills in patient management of increasing complexity and in the course of time gain independence". This is an opportunistic model of training and many shortcoming are found in this approach. Thus more and more accreditation bodies are switching towards CBT.

In Pakistani context, the training is not uniform across the surgical training programs. While CPSP has devised core competencies, the MS program run by various universities, is still not standardized. Even in a same province, medical universities have different curriculum. Therefore, the foremost issue is the implementation of type of surgical residency program. The Accreditation Council for Graduate Medical Education in United States defined six core competencies that surgical residents must acquire during training. These are medical knowledge, patient care, interpersonal and communication skills, professionalism, practice-based learning and improvement, and system-based practice.[2] A training program must be based upon similar competencies in each area.

In the surgical and allied discipline, the development of minimally invasive surgery over the last 50 years is phenomenal. This is due the technological advancements in this field. It is expected that the surgical residents must acquire sufficient technological knowledge and skills during their residency, which will help in their professional career. Traditionally, clinical and surgical skills are learned by performing on real patients. It is still considered as the best approach by some but the current changes in medical practice, ethical considerations and innovations in medical technology has led us to seek for alternatives. Various models are developed to enhance learning of surgical skills and both dry and wet labs have revolutionized the training. The advancement in medical simulation technology is now available to address many of practice issues related to training.[3]

Investment on development of wet and dry labs and centers for acquiring innovative skills is huge. With little investment in healthcare and in the absence of policies at government level it seems impossible that public sector hospitals where majority of residents are trained, will ever get adequate exposure to these innovative technologies. It is therefore suggested that bodies like Higher Education Commission, CPSP, Medical Universities and private sector hospitals establish these facilities in big cities of each province in Pakistan. This centralized approach will help in standardizing and imparting uniform learning opportunities for our future surgeons. This will go a long way to improve not only the quality of residency program but also the patient care addressing all the core competencies as devised of ACGME.

Correspondence:
Dr. Muhammad Shamim[1*]
Department of Surgery
Prince Sattam bin Abdulaziz University
Saudi Arabia
Email: surgeon.shamim@gmail.com

**REFERENCES:**

1. Grillo HC. To impart this art: The development of graduate surgical education in the United States. Surgery. 1999; 125:1-14.

2. Swanson AG. The genesis of the Coordinating Council on Medical Education and the Liaison Committee on Graduate Medical Education. Bull NY Acad Med. 1974; 50:1216-21.

3. Sharma G, Aycart MA, Najjar PA, Houten TV, Smink DS, Askari R, et al. A cadaveric procedural anatomy course enhances operative competence. J Surg Res. 2016;201:22-8.

How to cite this article:
Shamim M. Surgical Residency Program: Future Trends and Challenges. J Surg Pakistan. 2016;21(3):81-2. Doi:http://dx.doi.org/-10.21699/jsp.21.3.1.