Standardized training for resident doctors in China

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Medical graduates are not fully trained physicians when they leave medical school. Currently, standardized training for resident doctors in most hospitals in China is carried out according to the Ministry of Health guidelines. However, these guidelines provide only outline guidance, and specific resident training is managed independently by and varies with individual institutions. Therefore, it is important to study training demand to learn about the content and emphasis of training.

Goad established a gap analysis model of training demand, and the “gap” between “realistic condition” and “ideal condition” was set as the starting point of research^[1]. In this model, the “ideal condition” is determined according to the organizational characteristics and industrial development conditions. However, there will be gaps between the “ideal condition” and “realistic condition”, including gaps in knowledge, study, attitude and skills. The gaps, according to Goad, will generate training demand and any training activity should aim at eliminating or narrowing such gap. Using this model, we surveyed 137 resident doctors and 53 department directors at a tertiary care hospital in Qingdao, China.

We found that while resident doctors and department chairs share certain priorities in residency training such as “professional dedication and sense of responsibility,” “team work” and “basic clinical skills”, they differ on other priorities such as “clinical thinking ability”, “communication skills with patients and their families”, and “scientific research ability” (**Table 1**). Both resi-

dents and directors gave high scores (> 4.5) on the ideal condition status values of 11 main training programs, indicating that the residents and directors attach great importance to them. Our survey shows that both resident doctors and department directors consider that they should reinforce training of basic clinical skills and safeguarding their own legal rights with medical law knowledge. However, they have different opinions on the importance and demand in respect of clinical thinking ability, scientific research ability and communication skills with patients and their families. Clinical thinking is a core clinical ability and determines the diagnosis and treatment level of a doctor^[2]. As resident doctors are still in the stage of professional training, they differ in perspective from their department directors who see cultivating the basic clinical skills of residents as the key to laying a good foundation for resident training. Scientific research capability also requires cultivation, but it is not on the priority list of department chairs. However, with the pressure of seeking jobs, professional advancement and evaluation for physician performance^[3], resident doctors may feel an urgent need for scientific research achievements to give them advantages in their career. In addition, residents rank effective communicating with patients lower in priority while department directors consider it conducive to resolving conflict between doctors and patients.

Gap analysis effectively defines training demand and identifies priorities of residents and department chairs. It is important for residents and department directors to align their priorities so that resources are

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Table 1 Demand analysis of resident training

Item	Residents		Department directors	
	Gap value	Demand	Gap value	Demand
Professional dedication and sense of responsibility	0.35	Low	0.33	Low
Teamwork	0.49	Low	0.42	Low
Clinical thinking ability	0.81	Moderate	1.15	High
Clinical expertise	0.87	Moderate	0.9	Moderate
Basic clinical skills	1.08	High	1.21	High
The writing of standardized medical data	0.43	Low	0.57	Moderate
Professional English level	0.61	Moderate	0.73	Moderate
Specification of clinical medication	0.75	Moderate	1.04	High
Scientific research ability	1.02	High	0.64	Low
Safeguarding their own legal rights with medical law knowledge	1.17	High	1.02	High
Computer application ability	0.21	Low	0.18	Low

better utilized to meet the needs of resident doctors and provide effective training to resident doctors. As clinical skill is the most basic skill for a resident doctor, it should always be the top priority of training^[4]. Currently, hospitals in China are averse to practices that might cause medical disputes^[5] and are reluctant to allow residents to perform certain procedures, thus decreasing the opportunity of clinical training for young doctors. To gain clinical competency, resident doctors are recommended to actively participate in clinical practice under the supervision and guidance of clinical teachers, and hospitals should build operative skills training centers to facilitate training of resident doctors. Moreover, humanistic curriculums only account for no more than 8% of the total curriculum in medical education in China^[6]. Doctors with good humanistic quality are more skillful in communicating with patients and their family, which helps build better doctor-patient

relationship. Hospitals may include contents of humanistic care in their resident training.

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