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Educational Article

Promoting excellence in teaching and learning in clinical education

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الملخص

يعتبر التعلم هو لب العملية التعليمية السريرية. وقد بينت الدراسات أن هناك عدد من العوامل التي تؤثر في تطوير الكفاءة السريرية، لدى دارسي الطب منها: تعرض الطالب لعدد كاف ومتنوع من الحالات المرضية والخبرات التي تحصل في ظروف أصلية، تماثل ظروف الممارسة الطبية الحقيقة، بالإضافة إلى الاعتماد على التعليم المعتمد على الطالب وتوفير بيئة داعمة للعملية التعليمية. ويبرز دور المعلم السريري في تعزيز العملية التعليمية، وذلك بدعم وتشجيع الطالب على التأمل في الخبرات العملية التي يمر بها لزيادة الاستفادة منها وإعطاء الطالب تغذية راجعة منتظمة لزيادة فاعلية تعلمه.

إن الاعداد والتخطيط للتدريب السريري يجب أن يتم مبكرا وبطريقة متكاملة في المناهج بكليات الطب، لما في ذلك من أهمية قصوى في تنمية مهارات تشخيص الأمراض ومهارات التواصل لدى طلاب الطب. كما لابد من توثيق الخبرات والممارسات السريرية التي يقوم بها طلاب الطب، حتى يتسنى تقييمها وعمل الإجراءت والتدخلات المناسبة لزيادة فاعلية هذه التجارب.

وفي هذا السياق فإن التدريب السريري لطلاب الطب، يجب أن يتم في أماكن مختلفة يشمل المستشفيات، والمراكز الخارجية، وأقسام طب الأسرة والمجتمع وذلك لتحقيق الفوائد المرجوة، والمتعددة لكل من هذه الأماكن التدريبية. إن التحديات المتمثلة بازدياد أعداد طلبة الطب وقلة الفرص التدريبية وتطور الممارسة الطبية لتتطلب حلولا إبداعية مثل التدريب عن طريق المحاكاة السريرية.

إن جودة التدريب السريري لابد أن تتم عن طريق التقييم المستمر لكل جوانب هذه العملية وسيتم التطرق في هذه الورقة العملية للعوامل التي تؤثر في العملية التدريبية السريرية واقتراح سبل تعزيز التعلم والتدريس في التعليم السريري.

الكلمات المفتاحية: التعليم؛ التعلم؛ التعليم السريري؛ البيئة التعليمية؛ طلاب المرحلة الجامعية؛ الخبرة السريرية المبكرة

Abstract

Clinical learning is the essence of medical education. Many factors have been demonstrated to influence students' development of clinical competence. These factors include students' exposure to a large volume and variety of clinical experiences, learning in authentic clinical settings, self-directed learning, and the provision of a supportive environment. Clinical teachers have an extremely important role in the effectiveness of clinical education in supporting learners, encouraging reflection, and providing constructive and regular feedback. Early and frequent clinical experiences should be planned and integrated in curricula. The provision of such opportunities is associated with the development of appropriate attitudes and the acquisition of commendation and diagnostic skills among undergraduate medical students.

The experiences of undergraduate medical students at clinical venues should be documented to enable monitoring of the quality of their exposure and planning for appropriate interventions. The combination of teaching in family practice centers and hospitals will probably provide the most effective approach and will combine the recognized advantages from different sites. The recent challenges facing the health care system necessitate the need for innovative teaching strategies, such as simulation, to meet the inadequacy of clinical cases at the teaching sites. The quality of clinical teaching should be maintained through regular evaluations of clinical

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teachers and all teaching activities. This article addresses the possible factors that could affect the process of student learning and suggests measures to promote the quality of clinical teaching and learning.

Keywords: Clinical teaching; Clinical teaching environment; Early clinical experience; Students' learning; Undergraduate medical students

The main aim of medical colleges worldwide is to graduate competent medical students who are capable of managing common medical problems in the community. This is achieved by providing medical students with authentic clinical experiences that enable them to apply and integrate their factual knowledge. The adequate exposure of medical students to a variety of clinical cases will contribute positively to motivating students and helping them in the development of their clinical competence. The curriculum of undergraduate medical schools is traditionally divided into two distinct phases: the preclinical and clinical. The exposure of students to clinical cases usually takes place at a late stage.

Early clinical experiences

The importance of early exposure of undergraduate medical students has been recognized, and more longitudinal integration of clinical experiences has been introduced in the curriculum.[1] Providing students with early and extensive clinical experiences during their training is crucial. The identified benefits of early clinical exposure were related to the following themes: the relationships and learning in early encounters with patients, integration with learning during the entire curriculum, aspects of doctoring learned, and personal and professional growth. These aspects provide unique opportunities for students in learning in an appropriate context.

The development of an appropriate attitude of medical students toward patients and their families was among the recognized benefits of early practical experiences. In addition, these early experiences promote the motivation and confidence of students. Students considered these experiences to be satisfying, and the experiences contributed to the development of the professional identity of students. The early practical experiences gave students opportunities to apply and integrate their previous knowledge, develop interpersonal skills and appreciate the value of patient-centred care.

Another important role of early practical experiences is to familiarize students with clinical settings and make enrolment in clerkship less stressful.[1,2]

Settings of clinical teaching

Clinical learning can take place in almost all sites where patients are exposed to medical care, including inpatient wards in specialized hospitals and centres, ambulatory care settings, family practice and community centres, nursery homes, and emergency and operating rooms.

Recent changes in the practice of medicine and disease patterns in the community led to significant developments in health care delivery systems. The increased use of technology leading to shorter average stays in hospitals and a move toward management of chronic diseases in the community mean that there are fewer hospital in-patients and secondary care is increasingly less able to provide medical students with sufficient clinical opportunities.

There are recognized strengths and limitations to learning in each of these clinical sites.

Secondary and tertiary care hospitals are the most appropriate settings for students to see rare and advanced clinical cases, to learn specialized diagnostic tests, and become acquainted with surgical and therapeutic procedures. In contrast, ambulatory and family practice settings are likely good sites to teach communication skills, have students deal with patients and their family, and be confronted with common presentations for medical problems as well as perform common diagnostic tests and minor procedures.[3]

Evidence shows that the experiences of students in an integrated primary care clerkship were variable; nevertheless, these experiences were of good learning value because little overlap was found in symptoms, conditions, procedures, and other educational opportunities.[4] Students who were taught family medicine clerkship had more confidence in acquiring a number of procedural and cognitive skills, including history taking and physical examination skills, while tertiary care and academic hospitals clerkship had a positive impact on the confidence of students in specialized procedures that were largely performed in hospitals.[5]

The combination of teaching in family practice centres and hospitals will probably provide the most effective approach because students will be exposed to a variety of experiences that will prepare them to face most common medical problems that they will encounter after graduation, thereby meeting the expectations of patients and the community.[6,7]

Features of high-quality learning and teaching

Teaching in the clinical context is unpredictable and dependent on the availability of sufficient clinical cases. These features contribute to the difficulty of planning clinical teaching compared to that of the basic medical sciences.

Documentation of students' experiences

Students are exposed to extensive varieties of medical and non-medical experiences during clerkship training. The documentation of these activities is vital and allows for the monitoring and evaluation of student learning. Many instruments are available to document the clinical experiences and activities, including logbooks, computers, and encounter cards. The availability of comprehensive documentation of exposure to diverse case mixes and feedback systems could enable evaluation and significantly contribute to the enhancement of student clinical education.[8]