Commentary

The Saudi Medical Licensure Examination-Clinical Skills (SMLE-CS): A Call for Implementation

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Abstract

The Saudi Commission for Heath Specialties (SCFHS) was founded in 1992 to nationally regulate healthcare-related practices and accreditation. Specifically, SCFHS is the official organization that principally oversees the postgraduate residency training programs (RTPs). A crucial aim of SCFHS is to warrant that medical graduates, prior to their enrollment into RTPs as first-year resident physicians, have national minimum entry standards of learning competencies to practice safe and effective healthcare. Generally, there are three primary domains of learning competencies that should be assessed, namely: theoretical clinical knowledge, practical clinical skills and professional attitudes. SCFHS primarily evaluates the theoretical clinical knowledge of applicants through the administration of the Saudi Medical Licensure Examination (SMLE) and we call on SCFHS to rename the conventional SMLE to SMLE-Clinical Knowledge (CK), or shortly abbreviated as SMLE-CK. On the other hand, to date, there is no examination administered by the SCFHS that assesses the applicants' competencies of practical clinical skills and professional attitudes prior to admission to RTPs. Herein, we call on SCFHS to formally incorporate a mandatory national practical licensure examination. The suggested name is the SMLE-Clinical Skills (CS), or shortly abbreviated as SMLE-CS. The purpose, structure, content, rationale, potential counteractive views and future research directions regarding the SMLE-CS are presented. This proposal is not limited to Saudi Arabia only, and it may be contemplated by the other countries, too.

Keywords: Clinical skills, competences, licensure examination, national, Saudi Arabia

Introduction

The Saudi Commission for Heath Specialties (SCFHS) was founded in 1992 to nationally regulate healthcare-related practices and accreditation. Specifically, SCFHS is the official organization that principally oversees the postgraduate residency training programs (RTPs). A crucial aim of SCFHS is to warrant that medical graduates, prior to their enrollment into RTPs as first-year resident physicians, have national minimum entry standards of learning competencies to practice safe and effective healthcare. Generally, there are three primary domains of learning competencies that should be assessed, namely: theoretical clinical knowledge, practical clinical skills and professional attitudes.[1]

SCFHS primarily evaluates the theoretical clinical knowledge of applicants through the administration of the Saudi Medical Licensure Examination (SMLE). SMLE is a computer-based exam consisting of 300 multiple-choice questions (MCQs) that examine declarative (recall) and procedural (problem-solving) theoretical clinical knowledge. SMLE is administered to gauge the applicants' pool of fundamental basic and clinical science knowledge, and thus ensuring a national minimum entry standard of theoretical clinical knowledge is met. Considering the nature of the examined theoretical clinical knowledge, herein, we call

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Received: 11-02-2019 **Revised:** 23-11-2019
Accepted: 09-12-2019 **Published:** 28-01-2020

Access this article online

Quick Response Code:

Website: www.jfmpc.com

DOI: 10.4103/jfmpc.jfmpc_128_19

How to cite this article: Abu-Zaid A, Salem H, Alkattan K. The Saudi Medical Licensure Examination-Clinical Skills (SMLE-CS): A call for implementation. J Family Med Prim Care 2020;9:12-5.

on SCFHS to rename the conventional SMLE to SMLE-Clinical Knowledge (CK), or shortly abbreviated as SMLE-CK.

On the other hand, to date, there is no examination administered by SCFHS that assesses the applicants' competencies of practical clinical skills and professional attitudes prior to admission to RTPs. The SMLE, by no means, is able to assess the applicants' competencies of practical clinical skills and professional attitudes. Practical clinical skills and professional attitudes are fundamental competencies in today's 21st century. Thus, they should not be neglected. Therefore, herein, we call on SCFHS to formally incorporate a mandatory national practical licensure examination. The suggested name is the SMLE-Clinical Skills (CS), or shortly abbreviated as SMLE-CS.

Purpose, structure and content of SMLE-CS

SMLE-CS will test basic applied (hands-on) clinical skills and professional attitudes that are essential for effective, safe and virtuous practice of medicine. Examples of such clinical skills and attitudes include: history taking, physical examination, fundamental bedside procedures, patient-doctor communication skills, counselling, breaking bad news, linguistic articulacy in Layman's language with patients and conducting patient clinical encounters in an ethical and a cultural-appropriate fashion. This examination is suggested to follow the format of objective-structured clinical examination (OSCE) that employs well-trained standardized patients, objective checklists and examination raters. The content of examination should reflect the must-to-know practical clinical skills and professional attitudes before entry of applicants into supervised clinical practice. A pass/fail score should be adopted, and passing this examination should be made compulsory in order to satisfy eligibility to apply to RTPs. A more detailed description of the content, structure and logistics of SMLE-CS should be discussed in a countrywide consensus meeting. To that end, a taskforce committee should be established and headed by SCFHS. The Deans of medical schools and other medical education specialists can serve as members of the taskforce committee. In brief, SMLE-CS will aim to ensure national minimum entry standards of practical clinical skills and professional attitudes are achieved.

Rationale for SMLE-CS

The proposal of SMLE-CS is very unique locally in Saudi Arabia, but not internationally. This is because a practical licensure examination exists in place in various international countries, e.g., United States (Part II Clinical Skills of United States Medical Licensing Examination).[2] It is time to think internationally for relevant beneficial benchmarks, and then act locally in Saudi Arabia.

There are eight primary rationales for the need to mandate SMLE-CS as a compulsory requirement. First, the practice of medicine is a multifaceted process. It necessitates satisfactory integration of medical concepts, extraction of bedside information, performance of relevant physical examination, application of higher-cognitive capabilities (e.g., problem-solving, reasoning and decision-making), interpersonal skills (e.g., communication and active listening), professional attitudes (e.g., accountability, integrity and humbleness) and use of common comprehensible layman's language with the patient. It is very imprudent to permit a medical graduate to enter RTPs, and practice medicine as a first-year resident physician without evaluation of his/her ability to converse with and examine a patient, or conduct basic patient-centered skills that offer the ground for harmless and effective practice of patient care. SMLE-CS aims to ensure the national minimum entry standards of practical clinical skills and professional attitudes are attained.

Second, nationally, there are around 25 medical schools. Each medical school largely determines its own curricular objectives, instructional approaches and assessment (formative/summative) methods. More specifically, clinical clerkships—whereby medical students intensively nurture their practical clinical skills and professional attitudes—are not structurally uniform across the country. Students who rotate in academic and university-based hospitals are more likely expected to have better practical clinical skills and professional attitudes than students who rotate in non-academic and community-based hospitals. Also, there is—albeit in varying degrees—a mismatch between the actual planned, delivered and assessed curricula among the various medical schools. Collectively, medical graduates have different educational experiences, and thus they exhibit large variances in their practical clinical skills and professional attitudes. Unfortunately, passing the conventional SMLE (SMLE-CK) by no means at all is able to reflect on the applicants' competencies of practical clinical skills and professional attitudes. Indeed, there is a need for a focused exam to better gauge the competencies of practical clinical skills and professional attitudes among medical graduates. SMLE-CS, to a larger degree, kicks in to ascertain national minimum entry standards of practical clinical skills and professional attitudes are acquired.

Third, a great advantage of SMLE-CS is that it ensures equality in objectively evaluating the applicants' clinical skills and professional attitudes. It indeed does so fairly by disregarding the stereotypical categorization of top-, middle- and low-tier ranking of their respective medical schools that have diverse instructional and assessment methods. It also does so justly by discounting the cumulative grade point average (cGPA) scores that are widely diverse in terms of scale (e.g., 5-point vs. 4-point scale) and cut-offs of letter grades (e.g., A = 90-100 vs. A = 95-100). In brief, SMLE-CS favorably provides a scholastic and professional assessment of practical clinical skills and professional attitudes, and therefore it contributes to establishing a fair competition in the job market of postgraduate RTPs.

Fourth, there is a dramatic increase in the number of medical graduates from the 25+ medical schools, which is not matched to a paralleled increase in the number of positions in the RTPs. This applicants-positions mismatch requires extra scrutiny of

applicants for the limited number of available positions. This in turn entails the need to 'filter' applicants based on very critical parameters, one of which is the quality of interplay between practical clinical skills and professional attitudes — SMLE-CS fittingly serves the purpose.

Fifth, SMLE-CS should be implemented as it constitutes an essential pre-admission variable to safe and effective medical practice in RTPs. In Saudi Arabia, the National Center for Assessment in Higher Education (colloquially known as Qiyas) mandates medical schools to consider pre-admission national standardized educational tests before admitting students. These pre-admission tests include the National Achievement Test and the General Aptitude Test. Furthermore, individual medical schools conduct in-person interviews to evaluate non-academic domains (e.g., attitudes and interpersonal skills), and require certain pre-determined scores in English language proficiency tests to ensure suitable linguistic abilities. Collectively, these standardized tests are generally mandated in order to increase the predicative likelihood of selecting students who are likely to succeed in medical school. Likewise, the forthcoming first-year resident physicians, prior to joining RTPs, should be evaluated for aptness to practice safe and effective medicine based on national standardized tests conducted by SCFHS. Indeed, SCFHS succeeded in evaluating the theoretical clinical knowledge domain through administration of SMLE (or SMLE-CK). However, it unfortunately failed in evaluating the practical clinical skills and professional attitudes domains of medical graduates. This is simply attributable to the lack of the relevant national standardized test (i.e., SMLE-CS).

Sixth, the primary language of instruction in medical schools is English. On the other hand, the primary language of communication with patients is mostly Arabic. In fact, the Arabic language should be conversed in a non-technical (Layman's) manner and appropriate to the Saudi Arabian cultures and traditions. SMLE-CS is a plausible mean to examine the ability of medical graduates (applicants of RTPs) to conduct proper and safe clinical patient encounters. This suggests that a few OSCE stations of the SMLE-CS should be fully conducted in Arabic language. The Arabic language will be assessed from the aspect of conversing properly back-and-fourth with the patient to complete the clinical patient encounter.

Seventh, the quantitative and qualitative results of SMLE-CS will offer valuable benchmarks for medical schools to modify their curricular designs, teaching methods and assessment schemes. These are indeed valuable quality assurance data that can be favorably utilized to reinforce positive points and strengthen areas of weaknesses. Furthermore, the results of SMLE-CS offer a solid feedback to medical graduates (RTP applicants) on their practical clinical skills and professional attitudes.

Eighth, the introduction of SMLE-CS is advantageous in boosting the community's trust in the practical clinical skills and professional attitudes of the junior healthcare workers in Saudi Arabia by ensuring the minimal hands-on psychomotor and affective competencies are met. In addition, the implementation of SMLE-CS reflects a sincere dedication of SCFHS to maintain high quality healthcare practices and accreditation in the country. This mandatory requirement of SMLE-CS will also be perceived positively by the regional and international countries when Saudi resident physicians join overseas residency/fellowship training programs.

Potential counteractive views to the SMLE-CS

The call for SMLE-CS proposal may be confronted with opposite concerns. One example of such opposite concerns is the execution cost of SMLE-CS burdened by SCFHS in terms of logistics, facility, resources, planning, pool of trained standardized patients and workforce of examiners. It is indeed a great deal of time, efforts, monetary funds and workforce personnel are needed to execute this examination, and this may constitute the major deterring factor to the implementation of this proposal, at least for now.

However, that being said, there should be a rigorous movement toward meeting first-class nationwide qualities for the practice of medicine in Saudi Arabia, and SMLE-CS is likely to serve the first baby-steps toward this direction. Moreover, the anticipated advantages (benefits) of SMLE-CS outweigh its disadvantages (drawbacks) at both short- and long-term. There are several ways to reduce the costs burdened by SCFHS. For instance, the SMLE-CS can be conducted at hospital clinics or university-based clinical simulation centers (e.g., Alfaisal University College of Medicine, Riyadh, Saudi Arabia) instead of establishing designated examination centers. Well-trained board-certified fellow physicians can be recruited as examiners. University teaching assistants can be recruited as administrators who will take care of scheduling and logistical matters.

The cost concern is also extended to RTP applicants. The examination fee of SMLE-CS is going to cause additional monetary burden on medical graduates, particularly those studying in private (non-government-funded) medical schools in Saudi Arabia. The monetary burden is further compounded by absence of stipends to medical interns of private medical schools. The administration of SMLE-CS is indispensable and very pivotal to ensure the minimum standards of acceptable competencies in practical clinical skills and professional attitudes are attained. To that end, we call on SCFHS to generously fund all or partial fees of the examination to reduce the financial encumbrance on medical graduates.

An additional concern of SMLE-CS is that it may pose limitations in the design and assessment of curricula across medical schools. As a result, novelty and flexibility of medical curricula may be lost. It is time for SCFHS to mandate medical schools to ensure designing and assessing curricula that meet the minimum national competency standards of practical clinical skills and professional attitudes. Afterwards, medical schools should have a great deal of

flexibility, autonomy and innovation to supplement their curricula with ancillary individualized learning resources.

Considering Arabic is the primary language of communication with patients, it is suggested that a few OSCE stations of the SMLE-CS should be fully conducted in Arabic language. Non-Arabic speaking medical graduates are expected to display an objection to the proposal of SMLE-CS. The potential solution to this dilemma is the introduction of basic Arabic courses in medical schools. However, most importantly, these courses should focus on verbal and non-verbal language relevant to patient care in Saudi Arabia. Also, it is time for Arabic courses to include basic medical and healthcare terminologies (in Arabic) that will help medical graduates to establish effective clinical patient encounters.

Future research directions regarding the SMLE-CS

Exploring the perceptions of community (patients), medical graduates, healthcare professionals (physicians and nurses) and academicians (deans and faculty) toward the implementation of SMLE-CS proposal is a valuable research inquiry. A mixed-method approach employing a quantitative Likert scale survey and qualitative semi-structured focused interviews will formulate a strong methodological design. Also, it will be interesting to run a cross-sectional multi-institutional study that examines the baseline practical clinical skills and professional attitudes of first-year resident physicians. Findings can be further sub-analyzed according to male vs. female gender, high vs. low academic achievers, private vs. public medical schools, community-based vs. university-based clerkship training hospitals and etcetera. Most significantly, it will be interesting to inspect if SMLE-CK scores correlate positively with SMLE-CS scores. These are indeed hot research questions in graduate medical education in Saudi Arabia.

Conclusion

SCFHS bears the leading responsibility in licensing medical graduates (first-year resident physicians) to enter supervised clinical practice. It is undisputable that SCFHS should make every possible effort to certify applicants have national minimum entry standards of learning competencies (knowledge, skills and attitudes) to practice safe, effective and ethical healthcare. While SMLE-CK certifies first-year resident physicians are adequately competent in their theoretical clinical knowledge, the SMLE-CS certifies competencies in clinical skills and professional attitudes. It is understandable that SMLE-CS proposal may be faced with natural resistance and opposing concerns at the first glance. However, SMLE-CS has several plausible rationales that mandate immediate and serious implementation. Broadly, SMLE-CS emerges as a tool for quality assurance of the healthcare system in Saudi Arabia. Lastly, SMLE-CS proposal shall ignite advocating and opposing thoughts among all the stakeholders of healthcare in Saudi Arabia, including SCFHS, educators, medical schools, students and community – with an ultimate goal to reach a nationwide consensus that falls in the best interests of healthcare delivery in Saudi Arabia.

Acknowledgements

None.

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