

2020-06-01

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Ahmad A. Alanazi

College of Applied Medical Sciences, King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

Mohamud S. Mohamud

College of Medicine, King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

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Recommended Citation

Alanazi, Ahmad A. and Mohamud, Mohamud S. (2020) "Masters of Health Professions Education: Review of Current Programs in Saudi Arabia," *Health Professions Education*: Vol. 6: Iss. 2, Article 12.

DOI: 10.1016/j.hpe.2019.12.002

Available at: <https://hpe.researchcommons.org/journal/vol6/iss2/12>

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Masters of Health Professions Education: Review of Current Programs in Saudi Arabia

Ahmad A. Alanazi ^{a,*}, Mohamud S. Mohamud ^b

^a College of Applied Medical Sciences, King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

^b College of Medicine, King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

Received 29 November 2019; accepted 3 December 2019

Available online 18 January 2020

Abstract

Purpose: Teaching medicine and health sciences generally requires a background in educational theory and practice. The Masters of Health Professions Education (MHPE) programs are intended to offer training for health practitioners and faculties to obtain essential competencies in education. This review aimed to investigate the current MHPE programs at Saudi universities.

Method: The authors searched all current programs offering MHPE in Saudi Arabia (SA) using professional and public search engines.

Results: Only three programs offered at three different universities namely: King Saud bin Abdulaziz University for Health sciences (KSAU-HS), King Abdulaziz University (KAU), and King Saud University (KSU) were identified. Up-to-date data from all these programs were classified according to their availability, the geographical location of their institutions, the degree title and duration, the required credit hours, the mode of delivery and website.

Discussion: This article provided information about opportunities and challenges facing these programs, the role of Saudi Society for Medical Education (SSME) and other related essential data that would help the current and future programs.

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Keywords: Medical education; Health professions; Education; Postgraduate; Saudi Arabia

1. Introduction

Health professions education (HPE) and medical education (ME) which are interchangeably used in published literature are recognized as a key element in

producing highly trained health professions workforce. HPE is a structured process that involves planned learning objectives and modern teaching techniques with appropriate theoretical and clinical assessments.¹ The proliferation of medical colleges (or schools) in the early part of the 20th century has prompted medical educators to re-evaluate the learning theories and teaching strategies, type of curriculum used and the quality assurance and accreditation processes that were in place in these institutions.^{2–4} The need for health professionals and medical educators to get advanced knowledge and training to maintain and enhance the

* Corresponding author. College of Applied Medical Sciences, King Saud bin Abdulaziz University for Health Sciences, P.O. Box 3660, Riyadh, 11481 Mail Code 3129, Saudi Arabia.

E-mail address: alanaziahm@ksau-hs.edu.sa (A.A. Alanazi).

Peer review under responsibility of AMEEMR: the Association for Medical Education in the Eastern Mediterranean Region.

quality of their clinical and academic programs has gained momentum. As a result, number of regulatory bodies were established to evaluate existing medical and other allied health sciences programs. Many academic institutions have also started to initially conduct in house faculty development programs that range from half-day workshops to weeklong interactive training programs.

More structured health professions education training at postgraduate levels deemed necessary to provide higher level training than those provided by most faculty development programs.^{4,5} Some of those institutions such as the University of Illinois at Chicago, McMaster University, Maastricht University and Dundee University established their own medical education units that offered HPE programs at masters and doctoral levels. The number of masters' degree programs in health profession education (MHPE)/master's degree programs in medical education (MME) stood around 121 programs worldwide.² These programs enhanced medical educators' understanding of educational philosophies and theories, curriculum design, faculty development and different assessment techniques.

The first college of medicine in Saudi Arabia (SA) was established in 1967.⁶ According to Telmesani et al., HPE in SA has passed through two phases.⁷ The first phase, which lasted for three decades, only involved five medical colleges that followed the same traditional curriculum. In the second phase, which could be described as the expansion era, the number of medical colleges exceeded 21 colleges across the country. These medical colleges established international partnerships with leading educational institutions and applied different educational methods, such as traditional medical education system and problem-based learning (PBL). During the second phase, the National Center for Academic Accreditation and Evaluation, also known as the National Commission for Academic Accreditation and Assessment (NCAAA), was established to monitor and improve quality of public and private institutions and programs.⁸

Currently, there are 30 governmental and eight private universities most of which offer undergraduate and postgraduate degrees in several medical and health sciences.⁹ According to the Saudi Commission for Health Specialties (SCFHS), the number of health practitioners in SA is estimated to be around 457,246 including 139,309 Saudi nationals and 317,937 expatriates.¹⁰ The Saudi Society for Medical Education (SSME), a non-profit professional organization, was

founded in 2002 aiming to (a) establish an active network among all stakeholders in HPE to raise awareness and knowledge in SA, (b) cooperate with NCAAA to establish appropriate standards for academic evaluation in health colleges and cooperate with existing international bodies, such as Foundation in Advancement of International Medical Education and Research (FAIMER) and Association for Medical Education in Europe (AMEE).¹¹

The Master of Health Professions Education (MHPE) degree is becoming a credential for education leadership. Cohen et al. (2005, p. 686) stated that MHPE is “the most specific method for medical faculty to obtain a credentialed grounding in educational theory and practice”.¹² MHPE programs was established globally decades ago; however, they are relatively new programs in SA. The first MHPE program was established in King Saud bin Abdulaziz University for Health sciences (KSAU-HS) in 2006/2007 followed by two similar programs at two other universities.¹³ Postgraduate HPE programs are expected to grow in SA because of the Saudi government's commitment on supporting the education and health systems in the country. This article aimed to review the current Saudi MHPE programs and discuss the opportunities and challenges facing such programs.

2. The current MHPE programs

As it stands, there are three MHPE programs offered at the following Saudi public universities: King Saud bin Abdulaziz University for Health sciences (KSAU-HS), King Abdulaziz University (KAU), and King Saud University (KSU). Although FAIMER reported that Qassim University has a MHPE program according to a study published in 2012, this could not be verified (Table 1).¹⁴

2.1. King Saud bin Abdulaziz University for health sciences (KSAU-HS)

King Saud bin Abdulaziz University for Health Sciences (KSAU-HS), is a specialized health sciences university that was established in 2005.¹⁵ The university's main campus is based in Riyadh with other two campuses located in the cities of Jeddah and Al-Ahsa. KSAU-HS has 14 colleges that offer undergraduate and postgraduate degrees in its three campuses.¹⁵ The MHPE program that is offered at KSAU-HS was established in 2006/2007 with approximately 20 student intake per year.¹³ It is the first postgraduate medical education program established in SA. The

Table 1
Summary of the current MHPE Saudi programs according to their availability, geographical locations of the offering institutions, the degree title and duration, the required credit hours, the mode of delivery and website.

Institution	College	Academic Department	City	Degree Title	Duration	Credit Hours	Program Delivery	Website
KSAU-HS	College of Medicine	Department of Medical Education	Riyadh, Jeddah, Al Ahsa	MHPE	Two years (Three days/week for blocks one-nine; one day/week for block ten)	42	Face-to-face and video conferencing for students in Jeddah and Al Ahsa	http://com.ksau-hs.edu.sa/index.php/2015-10-29-08-06-41/department-of-medical-education
KAU	College of Medicine	Medical Education Department	Jeddah	Ms.Med	Two years (Five days/three weeks per semester)	39	Face-to-face and self-directed learning	https://medical-education.kau.edu.sa/Pages/Ms-Med-Program.aspx
KSU	College of Medicine	Medical Education Department	Riyadh	MME	Two years	34	Face-to-face and self-directed learning	https://medicine.ksu.edu.sa/en/node/5319

Note. KSAU-HS = King Saud bin Abdulaziz University for Health Sciences; KAU = King Abdulaziz University; KSU = King Saud University; MHPE = Master of Health Profession Education; Ms.Med = Master of Medical Sciences, Medical Education; MME = Master of Medical Education.

program has collaboration with Maastricht University, a world renowned institution in health professions education research.¹³ This program is open for graduates from health sciences subjects such as medicine, dentistry, pharmacy, nursing, and other health professions. The program is run by the Department of Medical Education, College of Medicine. Masters students are recruited from all over the country. However, sessions are conducted in face to face in Riyadh and via video conferencing in both Jeddah and Al Ahsa.

The duration of the program is two years (i.e., four academic semesters) and students are required to take 42 credit hours in ten structured blocks.¹³ The first three semesters covering nine blocks and the fourth semester is devoted for the research project. The nine regular blocks, averaging six weeks each, focus on the following topics: PBL, learning and cognition, curriculum development, program and faculty evaluation, organization, management and leadership, authentic learning environments, basics of research in education, student assessment, and faculty development. Students are required to attend four hours a day for three days per week.¹³ The program also uses advanced and pioneering instructional methods through the use of different classroom activities, outside workshops and projects, and electronic learning aids, such as Blackboard and video conferencing. Although assessment varies from block to block, students are assessed in most blocks by individual assignments, single/group presentations, seminars, workshops, PBL tutorials, quizzes, and final exams.¹³ After successful completion of the program, students will be awarded the MHPE degree.

2.2. King Abdulaziz University (KAU)

King Abdulaziz University (KAU) was established in 1967 and based in Jeddah.¹⁶ KAU has 21 colleges and institutes that offer undergraduate and postgraduate degrees in many fields, such as health sciences, engineering, social sciences, education, etc.¹⁶ The Master of Medical Science, Medical Education (Ms.Med) program at KAU is the second health professions program of its kind in SA that was started in 2012/2013.¹⁷ KAU together with the University of Illinois Chicago (UIC) and FAIMER have designed this program's curriculum. The program is under the responsibility of the Department of Medical Education, College of Medicine and accepts students from any health sciences background.

The duration of the program is two years (i.e., four academic semesters) and students need to complete at least 39 credit hours before graduation including five core courses (three credit hours per course), four elective courses of the eight available courses (four credit hours each), and a research project (eight credit hours).¹⁸ The core courses focus on the instruction and assessment in health profession education, curriculum and program evaluation in health profession education, scholarship and leadership in health profession education, assessment methods, and research. The elective courses, which vary in content and delivery, include medical simulation, introduction to quantitative data analysis, program evaluation, ethics and professional standards, and faculty development. The final course is the research project. Core courses last around two weeks and electives for about one week.¹⁷ Students attend classes five days for three weeks per semester. Furthermore, the course structure includes both face-to-face and self-directed learning, and students are encouraged to use the electronic learning aids, such as Blackboard to enhance their learning. To be awarded the Ms. Med degree, students are required to successfully complete all the credit hours and submit the project report.

2.3. King Saud University (KSU)

King Saud University (KSU) is the oldest public university established in 1957 and is based in Riyadh.¹⁹ KSU has 24 colleges that offer various undergraduate and postgraduate degrees in health, science and engineering, and humanities.¹⁹ The Master's degree in Medical Education (MME) at KSU is the third and the newest program in SA that was established in 2017/2018.²⁰ The program is a non-thesis program coordinated by the Department of Medical Education, College of Medicine and accepts students from any health background.

The duration of the program is two years (divided into four academic semesters). The program offers 34 credit hours including eight core courses, two elective courses, and a research project.²⁰ The eight core courses include introduction to medical education, learning and clinical teaching methods, designing medical curricula, assessment and evaluation in medical education, applying technology in medical education, professional development and mentoring in medical education, leadership and innovation in

medical education, and seminars in medical education research. Students are required to choose two of the following elective courses: simulation in medical education, inter-professionalism in medical education, faculty development in medical education, and/or professionalism and professional practice in medical education which concludes with a research project and the award of the MME degree.²⁰ The delivery of the program is also 'face-to-face' and self-directed learning. Students attend classes in which they learn through a combination of taught lectures, workshops and tutorials supported by online resources and readings.²⁰

3. Similarities and differences of the current programs

All the three programs have interrelated factors that include curriculum design, learning environment, instructional and learning delivery models, program and performance evaluation, research methodology, etc. KSAU-HS program uses the block system as a model of teaching subjects while the other two programs use the course system. These courses are similar to the general courses of the programs offered worldwide.²¹ All Saudi MHPE programs are mainly offered in English and the duration of completion is two years similar to the vast majority of MHPE international programs. Two-thirds of international MHPE programs are run by the medical colleges with varying tuition fees. For example, the MHPE in Maastricht University costs approximately €15,400.²² However, all three MHPE Saudi programs are offered free of charge by the colleges of medicine in their respective universities.

Although there are no MHPE programs available in the Northern or Southern regions of SA, the current geographic distribution of MHPE programs was strategically placed in three cities (i.e., Riyadh in the Central Province, Jeddah in the Western Province, and Al Ahsa in the Eastern Province). Among all three programs, KSAU-HS has been using video conferencing to reach students in other cities (i.e., Jeddah and Al Ahsa). However, other universities may do the same to extend their programs to the Northern or Southern regions of the country. To increase the uptake of the programs across the country and enhance the medical education training, universities may develop and design

user friendly MHPE specific websites for the prospective candidates to easily access the required information.

4. Opportunities and challenges of the current programs

Because of the souring number of returning medical and other health professions scholars to the Kingdom, these MHPE programs give a platform for those returnees to gain highly sought after skills to enhance their academic credentials and the knowledge and skills required in their roles as tutors and educational leaders in their respected institutions. Upon completion, candidates will be able to plan, implement and monitor the medical and allied health curricula using evidence-based approaches. Candidates will have the opportunity to integrate latest innovations in teaching, learning and assessment of the health professions students, interns and residents in training. Furthermore, with the expansion of the new medical and health professions colleges, the demand and job opportunities for qualified personnel who are well trained in HPE is expected to increase.

One of the key components of MHPE is the educational research modules where candidates are exposed early in the program the basics of proposal development where they learn on how conduct advanced literature search, compose doable research questions and develop achievable aims and objectives. This program will also give the opportunity to understand different types of educational study designs ranging from simple observational studies to more complex educational interventions. For example, KSAU-HS, candidates give scheduled progress presentations to help them review and correct their research topics. However, the ratio of MPHE programs to medical and health professions colleges is significantly low. Moreover, the faculty-to-student ratio and the level of expertise of the teaching faculty was difficult to ascertain from the information available on the respective websites. Some of these programs may have a shortage of full-time medical education educators. Even the expansion of new MHPE programs may be seen as an advantage, if not carefully planned; the quality of such programs may be jeopardized. Another challenge that all MHPE programs face is maintaining and assuring quality that may satisfy the NCAAA accreditation process. Another factor that may limit the uptake of the MHPE programs is the work schedules of the most prospective candidates who mainly work full time in their respective institutions. Candidates would

need to be granted at least a day off for them to be able to attend sessions.

5. The role of Saudi Society for Medical Education (SSME)

The SSME has been playing an important role in supporting HPE in SA through signing memorandum of understanding to promote further cooperation with international associations and organizing conferences, such as Saudi International Medical Conference (SIMEC) held in Riyadh 2012.²³ However, the role of SSME towards MHPE programs is unclear. The SSME needs to build a strong relationship with local MHPE programs and become the main source of information for those candidate programs and their graduates. Furthermore, it would be beneficial for the SSME to be active in supporting research focused on HPE and to raise the understanding and the experiences of the health professional educators.

6. Conclusions

MHPE programs are designed to promote high quality clinical education by helping those attending these programs to develop an understanding of best practice in clinical and allied health professions education. The information provided in this review is preliminary and provides an understanding of the differences among the existing MHPE programs. For few years, opportunities of enrolling in the MHPE program was limited to KSAU-HS. As the number of programs increased, the interest of potential candidates is expected to increase. However, accessing the information from the respected universities websites will need to be constantly updated for those who want to pursue such degrees. The SSME is also recommended to update its website and make it user friendly for prospective members and MHPE candidates. The current review is not intended to question the quality of these programs, instead this review is written to raise the awareness of the health professionals of their existence. However, more collaboration between these MHPE programs and with other stakeholders, such as the SSME and SCFHS is recommended to offer better training for students and support them to conduct research in HPE.

Declaration of Competing Interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

Acknowledgement

None.

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