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Arabic Guidelines for Curriculum Development in Health Professions Education

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REVIEW ARTICLE

ABSTRACT

Worldwide there is an increasing care of academic programs and research in Health Professions Education (HPE). Despite this there is still a lack of the Arabic academic programs and literature related to this field. The Eastern Mediterranean Regional Office of the World Health Organization (EMRO-WHO) is interested in enriching the Arabic literature of HPE in order to promote education and training of health manpower.

In 2012, Suez Canal University, with the support of EMRO-WHO, has inaugurated a Diploma of Health Professions Education conducted through distance e-learning in Arabic language. The target group of the Diploma are health professions educators and trainers in the Arab region.

To provide convenient, contextual and case sensitive literature for study in the Arabic Diploma of HPE, a set of practical guidelines were developed by a group of experts and consultants. Among these, practical guidelines for curriculum development were developed and published in an Arabic book.

Key Words

Curriculum Development, Health Professions Education, Educational Objectives, Content, Methods of instruction and Students' Assessment

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INTRODUCTION

The evolution of the health workforce has been one of the achievements that have occurred in the health systems of the Arab countries in the past three decades. In parallel with the rapid developments in the health services in the Arab region, there has also been notable progress in training of the health workforce in the region.¹ These health systems of the Arab states have adopted western models of medical education in curriculum, instructional methods, and implied expectations about the role of the physician. Students' aspirations, administration, faculty-student relationships, and social context for learning were extensively influenced by politico religious identifications, traditional family and sex-role values, student weakness in the language of instruction, and other extracurricular factors.²

The Arab Medical Union established in 1961 had as its first objective to arabize medical education and received the backing of the WHO and the Council of Arab Health

Ministers to publish the Unified Arab Medical Dictionary as a stepping stone for the achievement of this goal.³ However and since that date, only 5 of the 156 medical schools in the Arab world, teach in Arabic.⁴

The international literature is rich with research papers and publications in the field of curriculum development in HPE. This can be seen opposite in Arabic literature. Accordingly, there is a demand to provide Arabic resources that address curriculum development in HPE in relevant to the unique cultural, social and economic perspectives of this region.

Through this article an initiative to develop practical and simplified Arabic guidelines for curriculum development in HPE is addressed with emphasis to the motives of this work, defined steps, needed resources, identified obstacles and lessons learnt.

WHY ARABIC GUIDELINES FOR CURRICULUM DEVELOPMENT IN HPE?

The Arab world consists of 22 states on the territory of northern and north-eastern part of Africa and southwest Asia with total population equal to 348,755,830.⁵ All of these states share a common language and traditions while diversify in economy and resources. A considerable number of HPE institutions, 156 medical school for example, are working in these states.⁶ These schools were traditionally established based on British, American, French or Italian models of education. In the 1970s, the number of medical schools in Arab region became too great and a lot of these schools were recognized by the UK's General Medical Council and the Association of American Medical Colleges and were included in WHO's World directory of medical schools.⁷

Adopting western models of curricula in the Arab HPE in spite of having a lot of advantages, has encountered a set of barriers to effective implementation and achievement of the intended outcomes. These barriers can be summarized in the following:

- I. Language barrier: Most of the available literature and curriculum guidelines in HPE are written in English. Related jargons are different from those used for study of medicine while dealers with the area of curriculum development in HPE are usually health disciplines' experts who have no expertise in educational design.
- II. Complexity barrier: In addition to the language barrier, the available literatures in most of cases are non-practical and theory-based making its utilization by non-specialized health professions educators ends up by unsatisfactory results.
- III. Context barrier: This available literature is addressing different social and cultural perspectives which may contradict politico-religious identifications, traditional family and sex-role values of the Arab world. For instance, when some of the medical schools from the Arab territory made use of curriculum materials of western medical schools, these materials included case scenarios and health practices that are unacceptable or inapplicable to the local social and religious contexts of the Arab region. Examples of these are single motherhood, alcohol abuse and euthanasia.
- IV. Resources' barrier: The Arab world is characterized by a great discrepancy between the two extremes of very poor and rich states. Some states like Arab Gulf states have financial resources rather than human resources while others like North African states have human resources rather than financial resources. Some other states in the north-eastern part of Africa are lacking both types of resources. Applying western curriculum models usually encounter shortage in one or both types of resources which may not be the case in states of origin of these models.

WHAT WAS DONE?

To overcome these barriers, bridge the gap between reality and expectations and to achieve the ultimate goal of defining Arabic guidelines for curriculum development in HPE, the following sources were relied on:

First is the revision of the available literature and variety of international guidelines in the field of curriculum development in HPE.

Second is our own experience in curriculum development and technical support of curriculum implementation in more than one institution in the Arab states like Libya, Saudi Arabia, Yemen and Syria.

Third are the results of program evaluation of the educational programs adopting curricular models developed by the Medical Education Department at Suez Canal University.

Fourth is the needs assessment conducted as part of the development of the academic and professional programs on HPE offered by the Medical Education Department at Suez Canal University.

Fifth is the feedback received from students who are enrolled in the academic and professional programs on HPE offered by the Medical Education Department at Suez Canal University.

The first draft of the developed guidelines was assembled in 2010 then revised by a group of experts as regard the technical and linguistic aspects. Comments and modifications of the reviewers were considered then the final version was prepared for publication. In January 2012, the final version of the guidelines was published in an Arabic book of three sections *titled* "Curriculum Development in Health Professions Education".

WHAT IS THE OUTCOME?

The main section of the guidelines comprises practical four steps for curriculum development in HPE (Figure 1). The other two sections comprise foundations of curriculum development in HPE as well as an Arabic glossary of the most common HPE jargons with their English and/or Latin synonym. In the section of curriculum foundations the following are addressed: historical background, general concepts, different approaches and strategies of curriculum development in HPE.

The recommended four steps for curriculum development in HPE are:

1- Educational Needs Assessment

Needs assessment is an essential step to diagnose the gap between a current situation and an ideal one. Educational needs assessment of a HPE institution helps the definition and prioritization of its goals and objectives⁸. Educational needs assessment ensures the development of a curriculum sensitive to the local community health needs as well as expectations of targeted learners and health professionals. Like other territories of the world, Arab states has its unique geographic, demographic, economic and social characters

that shape its health needs. Compliance to community health needs as well as mechanisms and resources required all that can be best identified and provided through meticulous needs assessment.

According to the Arabic guidelines for curriculum development in HPE, efficient needs assessment can be conducted through a variety of tools like questionnaires, interviews, focus groups and documentation reviews. What can be seen different here is the Arabic language used in designing and utilizing these tools. The targeted groups of needs assessment are students and faculty staff members of HPE institutions, community leaders and/or representatives, health professionals and patients.

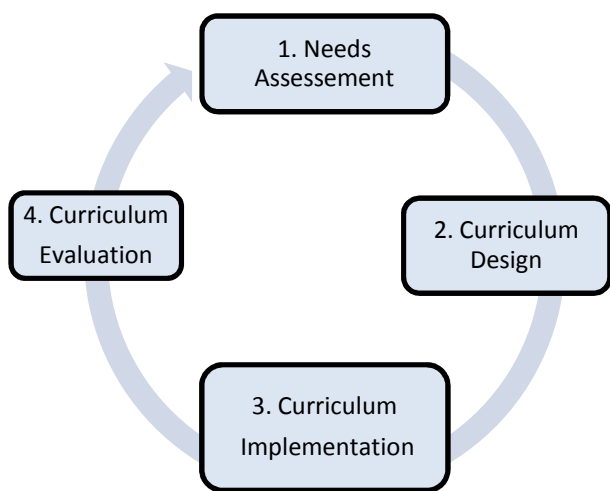


Figure 1: The Four Steps for Curriculum Development within the Arabic Guidelines for Curriculum Development in Health Professions Education

2- Curriculum Design (the four curriculum elements)

A curriculum has at least four important elements. Determination of these elements frame what is called “curriculum design”. Perideaux has defined the four elements of curriculum design as: content; teaching/learning strategies; assessment processes and evaluation processes.⁹ McKimm and Barrow added “approach”, “models” and “resources” to these elements.¹⁰ Among Kern’s Six-Step Approach for Curriculum Development, steps 3 and 4 comprised “objectives” and “content and methods of instruction” respectively while assessment of students was considered within step 6 “evaluation and feedback”.¹¹

In the developed Arabic guidelines, a compromise between these approaches was conducted. Accordingly, the recommended four elements of curriculum design included are: educational objectives, content, teaching/learning methods and students’ assessment (Figure 2). The main determinants of these four curriculum elements in the Arabic guidelines are the need to prepare for them synchronously, their direct use by the targeted learners in classrooms and

other teaching facilities as well as their direct impact on driving the process of learning.

An important principle supported by educational theory and practice is that “establishing objectives” is a crucial element that can guide the development and identification of other curricular elements as content, teaching/learning methods and assessment procedures¹². In the Arabic guidelines, how to formulate and educational objectives on relevance to the three domains of learning is discussed accompanied by a set of practical and contextual examples.

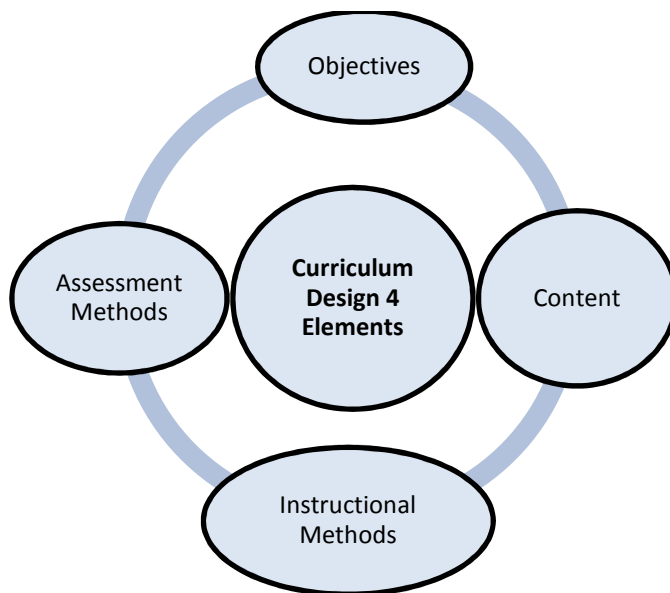


Figure 2: The Four Curriculum Elements (Curriculum Design) within the Arabic Guidelines for Curriculum Development in Health Professions Education.

Accurate content determination and organization of a curriculum is dependent on well-structured educational objectives. Over years and currently, the dominant conception of the curriculum is that of “content” or “subject matter” taught by teachers and learned by students. Phenix has defined the curriculum as the studied “content” or “subject matter” includes the whole range of matters in which the student is expected to gain some knowledge and competence.¹³

Content as the second among the four elements of curriculum design is addressed in the Arabic guidelines for curriculum development firstly through differentiation between its concept and that of syllabus and curriculum. Content management is addressed in two main components; content selection and content organization. Role of educational objectives and scope of integration among disciplines are emphasized as factors driving the content selection and organization.

The recommendations and techniques for tackling priority health problems framed by traditions and ethos of the local community are among the features that characterize this part of the guidelines.

In HPE there is a variety of teaching and learning methods to choose among. In designing a curriculum, determinants of the convenient instructional methods are identified learning objectives, students' learning styles as well as availability of resources¹¹. In the Arabic guidelines for curriculum development in HPE, selection of instructional methods is based on targeted domain of learning; cognitive, psychomotor and affective domains, some prevalent students' learning styles as well as availability of human and financial resources.

Prevalent instructional methods on each of the leaning domain in the Arab states are identified. These methods are mostly traditional lectures, classic bedside teaching and role modelling. Pitfalls of these methods are highlighted. Innovative and alternative methods of instruction characterized by more student centred approach to learning like small-group learning opportunities, role play, microteaching and supervised clinical experiences all are elaborated with emphasis to their advantages, disadvantages and optimal techniques as well as resources essential for implementation.

Contextual features that characterize utilization of instructional methods in the Arab region and may interfere with optimal utilization of these methods are addressed. These features are: the marked increase of students' number in HPE institutions, lack of human resources in some countries and financial resources in some others, lack of educational settings shared together by male and female students in some states, and the traditional inadmissibility of dealing with female patients by male students for educational purposes and vice versa.

There is an agreement that assessment should be carefully planned during the early phases of curriculum design so that it meet the requisites of reliability and validity. Student's dedication to study is often triggered by assessment. Despite efforts of medical educators to pay more attention to learning objectives as a driving force for learning, a good and congruent assessment is equally important.¹⁴

Many of relevant examples and templates of assessment methods are included within this section on assessment. A practical classification of questions and assessment tasks according to the way students can pose their answers is introduced in the Arabic guidelines for curriculum development in HPE. This classification is as follow: speaking, writing, performing or behaving. The well-known classic classifications are also addressed. A variety of assessment tools, either common ones or alternative methods, are also discussed. Features that characterize students' assessment in the Arab region are addressed. Examples of these features are excessive and uncontrolled use of the multiple choice questions, lack of either ordinary or high fidelity simulation-based assessment, less care of assessment of attitude compared to assessment of cognition and skills, norm rather than criterion referenced interpretation of results and finally fragmentation of assessment of the different domains rather than focusing on assessment competencies and professionalism.

3- Curriculum Implementation

A few books have dealt with thinking about curriculum implementation and evaluation.¹¹ The processes of developing, implementing, and evaluating a curriculum are considered essential elements of a curriculum plan.¹⁴ Curriculum implementation is about taking the actions that put the designed curriculum into practice. Issues of implementation that help achieve a curriculum potentials are resources, political and financial support, and administrative strategies.¹⁵ All of these issues are as important as the different elements of the designed curriculum for ensuring its efficiency and effectiveness.

In the Arabic guidelines for curriculum development in HPE, mechanisms to allocate different types of resources essential for curriculum implementation in the local Arab context are addressed. Types of resources identified here are similar to that have been proposed by Kern's Six-Step Approach to Curriculum Development. These types are: human resources, time, funding and equipment. Ensuring internal and external support, curriculum administration, expecting the obstacles and monitoring all are addressed. Recommended solutions to overcome the problem of lacking financial resources in some of the Arab states and lack of human resources in the other some are the integration, collaboration and twining between health professions education institutions in different countries of the region.

4- Curriculum Evaluation

Evaluation should be an integral part of any educational planning. It enables curriculum planners and educators to find out if the learning events they provide are effective and if not, how they can be improved.¹² Evaluation of the curriculum affects other steps of curriculum development.

In the Arabic guidelines for curriculum development in HPE, curriculum evaluation is considered a crucial step. Recommended methods through which curriculum evaluation can be conducted are: defining the goal of evaluation, defining the stakeholders and scope of the evaluation, identification of resources, defining the evaluation design, selection of tools for data collection, sampling, data collection and management, identification of results and finally reporting which is a pre requisite for decision making and reform.

CONCLUSION

Arabic literature is still deficient in HPE resources in general and curriculum development in particular. Enrichment of the Arabic literature in HPE can be achieved through authorship, conducting and publishing related research papers, development of practical guidelines as well as Arabization of international literature.

Through these guidelines a practical approach to curriculum development consisting of four steps is addressed. The first two steps are educational needs assessment and curriculum design. Curriculum design can be conducted through defining the four curriculum elements: educational

objectives, content selection and organization, selection and utilization of instructional methods and finally planning for assessment of students. The other two steps of curriculum development in the Arabic guidelines are: curriculum implementation and curriculum evaluation.

To help readers become acquainted with ideas in a simple and applied manner, a simple Arabic language is used all through the Arabic guidelines of curriculum development in HPE. Included within the guidelines is a set of illustrative figures and a lot of practical examples relevant to the different health professions specialties like; medicine, nursing, dentistry, midwifery, health sciences and technology, pharmacy and physical therapy.

What can be seen new in these guidelines are: the Arabic language, relevance to the local Arab contexts, simplicity and applicability. Evaluation of impact of these guidelines as well additional efforts in this regard is still indicated.

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CONFLICTS OF INTEREST

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