

# Curriculum framework for a master's degree in community medicine: some reflections with reference to Saudi Arabia

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إطار برنامج دراسي لدرجة الماجستير في طب المجتمع : أفكار تتعلق بالمملكة العربية السعودية  
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خلاصة : تصف هذه المقالة هيكلًا لبرنامج دراسي جديد لتعليم طب المجتمع ، بهدف الحصول على درجة ماجستير معترف بها . فالبرنامج الدراسي ينبغي أن يتضمن إطارًا من المقررات التفصيلية ، وأساسًا منطقيًا مميزًا ومبررات ، مع غايات وأهداف محددة ، ومحتويات ، وطرائق للتدريس والتقييم السليم ، وبيانا بالموارد المتاحة . كل ذلك في إطار زمني جيد التحديد . إن إعداد برنامج دراسي شامل مطلب أساسي لا غنى عنه قبل بداية أي مقرر للدراسات العليا . ويجب أن يعالج هذا البرنامج الدراسي كافة المسائل ذات الصلة على أساس نصف نظري في المملكة العربية السعودية ، وربما في أماكن أخرى بعد إدخال التعديلات الملائمة عليه .

**ABSTRACT** This paper describes a skeleton of a new curriculum intended for the teaching of community medicine leading to a recognized master's degree. The curriculum should have a detailed course framework and a distinctive rationale and justification with aims and specific objectives, contents, teaching methods, proper evaluation, available resources, and a well defined time framework. It is a prerequisite to develop a comprehensive curriculum before any postgraduate course is started. This curriculum must address all the relevant issues outlined in this paper. The authors recommend that the semitheoretical construction of the curriculum could be utilized in Saudi Arabia or possibly elsewhere with appropriate modifications.

## Cadre d'un programme de maîtrise en médecine communautaire: quelques réflexions concernant l'Arabie saoudite

**RESUME** Cet article décrit le cadre schématique d'un nouveau programme destiné à l'enseignement de la médecine communautaire et sanctionné par une maîtrise reconnue. Le programme devrait avoir une structure de cours détaillée ainsi qu'une justification particulière et devrait comporter des buts et des objectifs spécifiques, des contenus, des méthodes d'enseignement. En outre, une évaluation appropriée devrait être prévue, des ressources devraient être disponibles et un calendrier bien défini devrait être établi. Il est nécessaire au préalable d'élaborer un programme complet avant la mise en route de tout cours d'études supérieures. Ce programme doit aborder tous les thèmes pertinents qui sont exposés brièvement dans cet article. L'auteur recommande que la construction semi-théorique du programme puisse être utilisée en Arabie saoudite et éventuellement dans d'autres pays en y apportant les modifications appropriées.

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## Introduction

The specific goal of this research is to develop, test, and evaluate a new curriculum for the teaching of community medicine for a recognized master's degree [1]. The postgraduate course for the master's degree in community medicine would be for two years, and would be designed both to meet the needs of various professional or occupational groups active in community health, as well as for the further development of qualified community medicine specialists. The curriculum should be developed in relation to the target population whose most common health problems will be examined. Teaching units should explore medical, educational and behavioural aspects of health problems and their solutions if required. Another important point of the postgraduate course is to develop, assess and evaluate teaching and learning philosophies and methodologies.

In order to achieve these particular perspectives of the proposed postgraduate course, the following aspects should be considered: 1) development of a conceptual framework within which the new course could be located; 2) identification of the aims of the course; 3) location of the population for whom the programme would be designed; 4) planning of a relevant course structure; 5) appropriate course content; 6) development and preparation of teaching methods and materials; 7) staffing requirements, financial support and technical resources; 8) development of methods of course and student evaluation; and 9) testing of the feasibility of the approach and the content and methods, as much as possible with existing students.

## Aims and expectations

The general aims of the proposed two-year master's degree in community medicine are for the students: 1) to be able to appreciate community medicine as one of the available solutions to health problems, and to demonstrate this appreciation through individual or group written assignments, project work, examination papers and a piece of research leading to a thesis; 2) to acquire the relevant knowledge, skills and attitudes and understand the present potential and limitations as far as community medicine is concerned, and to identify the areas where future developments are most needed; 3) to have an opportunity to contribute actively to the development of the community medicine by means of their own work leading to a thesis on a topic of their choice under the supervision of the academic staff [2].

These expectations can be translated into educational objectives, the achievement of which by the end of the course should enable the students to apply the acquired knowledge and skills in the fulfilment of their community health education role within the general context of their professional/occupational activities [3]. To achieve these expectations, the course should concentrate on three main target groups: the family, the school population and the community, including health care as a supportive system for people's maintenance of health and for the prevention and treatment of diseases.

## Educational objectives

The educational objectives can be specified in terms of what the students should be able to do (if appropriate to their professional/occupational role) at the end of the course,

such as: 1) appreciate community medicine in its historical context and be able to understand the reasons for, and the use of, different models and approaches which have dominated community medicine activities at different periods of its development, in terms of the new role given to community medicine at present; 2) recognize the limited but vital role that community medicine can and should play in the solution of health problems which are prevalent today or are likely to become so; 3) become aware of both the different options that community medicine methods offer at present and also the need for new ones in terms of the new role community medicine is to play in the general movement towards health promotion; 4) understand the meaning of the concept of health promotion, the central place of primary health care within health promotion, and the contribution community medicine can and should make to primary health care; and 5) acquire competence in diagnosing community health problems and prescribing effective solutions, including their monitoring and evaluation.

For these purposes, the students will acquire the necessary knowledge and skills which will enable them to do the following: 1) identify the structure and functions of the systems within which they operate, i.e. health, social and educational; 2) identify the structure and functions of the systems within which the client population operates, i.e. social occupational, family and school; 3) define the part a specific behaviour or action plays within the more general concept of a lifestyle of a certain client group; 4) translate the behavioural experiences of the client population into medical concepts of promotion, maintenance and restoration of health; 5) follow up the health educational diagnosis by prescribing, applying, monitoring and evaluating

appropriate community health interventions; 6) become acquainted with and competent in research methods and contribute to the future development and critical assessment of community health practices; and 7) develop skills necessary for self-directed learning, and be able to apply them as a part of the process of "on the job" continuous education in their future careers.

These educational objectives should be viewed in the light of past experiences and the future role of the students. Community medicine in this context is considered to be a generic term including a number of specialties, and it will be up to each student to work out the contributions of community health to his/her own specialty, either by using what already exists or developing new community health specialties [4]. In addition to these institutional and educational objectives, course units and teaching materials should have their specific aims and objectives (Box 1).

## Course structure

The proposed master's degree course should be based on a problem-solving approach which requires the identification of the main problem areas in which community medicine can provide solutions [5]. These are: 1) problems facing a healthy population in striving to remain healthy and prevent the occurrence of illness and to reduce health risks (primary prevention); 2) problems facing a population experiencing acute episodes of ill health in its attempts to recognize symptoms and take actions to ameliorate them and, where self-help is not successful or appropriate, to seek timely medical advice, comply with prescribed regimen if appropriate and return to the state of health (secondary prevention); 3) problems facing a population suffering

**Box 1 Course framework and justification****Course framework**

Course number  
Semester  
Duration  
Credit hours  
Title of the course  
Coordinator  
Co-coordinator

**Course rationale and justification**

Aims

Specific objectives

Contents

Teaching methods

- problem-based tasks, group discussions, field visits
- lectures, seminars, workshops, self-learning

Evaluation

- course evaluation
- student evaluation (end of course examination)
  - verbal feedback
  - written feedback

Resources

- Library
- Staff
- Available teaching aids

Timetable including

- Date and time
- Contents and activities
- Supervisor
- Notes and observation, resources needed

the contributions of community medicine in the following way: Term I—factors related to the healthy population; Term II—factors related to acute problems; Term III—factors related to chronic health problems. During each term the students will have an opportunity to explore the contribution of community medicine to each of the problem areas with regard to the three main population groups, namely: infants and preschool children (0–4/5 years old); school children and teenagers (4/5–18 years old); adults, including the elderly. The community health solutions for each problem area for each population group will be considered in practical terms according to the easiest access provided by the three main locations: the family, the school and the community (including the work place).

Each of the three problem areas of each term will be introduced by a workshop or seminar on a relevant topic. In addition, specific courses will be provided in research methods, epidemiology, statistics and first aid. In order to maintain the multi-disciplinary nature of the course, workshops, visits, placements and thesis supervision will be structured into the course planning (Box 1).

**Course content**

To achieve the aims and the objectives of the course, it should be planned in such a way as to provide the students with the following: 1) knowledge relevant to community medicine, taking into account the students' educational background, and providing them with complementary knowledge on other relevant subjects; 2) a historical perspective covering past developments and future demands in community medicine; 3) a theoretical framework with

from chronic illness or chronic states of capacity in striving to manage such states, either with its own resources or with the help and support of its social environment, including special services provided by the community (tertiary prevention).

These three problem areas coincide with the three terms of the course, so that the students will be engaged in exploring

in which past and emerging models of community medicine can be integrated in both their theoretical and practical aspects; 4) the knowledge and skills needed to put the community medicine aspects of their professional or occupational activities into practice; and 5) the competence to plan, execute and evaluate a community health activity using scientific methods of research, including the diagnosis of a community health problem, the collection and interpretation of information and the selection of appropriate interventions, accompanied by monitoring of progress and evaluation of the outcomes.

### Teaching models and method of evaluation

The traditional method of teaching by lectures has limited value in the present circumstances. The most important disadvantage of this model is the one-way delivery of the message without interactions. With overall improvements and advances in technology, there is tremendous emphasis on teaching methods which are simple and effective, coupled with interaction between the teacher and the students and also associated with audiovisual presentations. Besides lectures, other methods of teaching involving the concept of group interaction and encouraging the mental faculties of students for their skill development are: appropriately organized group discussions, workshops, seminars, self-learning and -teaching methods, practical field visits and problem-based graded tasks with their final solutions. The self-learning might well be achieved by providing the postgraduate students with comprehensive manuals. The common denominator of these teaching methods is actively, (i.e. visual as well as auditory) to involve the stu-

dents so that they can clearly comprehend the message from their tutors.

The evaluation of the curriculum and its main components is extremely important. The evaluation is broadly categorized into: 1) the evaluation of course; and 2) the participant/student evaluation at the end of the course which should be carried out by verbal (oral) and written (multiple choice questions) feedback. These evaluations should result in enhancing the knowledge of the postgraduate students in community medicine and also reflect their overall satisfaction with the course and its content. At the end of the evaluation, students should have self-confidence in dealing with minor as well as major health-related problems both from the preventive and curative perspectives. Examples of such problems often encountered at their place of work and in the community are: sexually transmitted diseases, immunization, waterborne diseases, malnutrition and vitamin deficiencies, outbreaks of infections, alcohol and other drug abuse problems, automobile accidents, environmental problems and natural disasters.

### Conclusions and recommendations

The semitheoretical construction of a curriculum for the postgraduate course of community medicine leading to a recognized master's degree is a scientifically sound idea. The curriculum must include a distinctive framework, and rationale and justification. Within these two important domains, relevant course structure and appropriate content as outlined in this paper are of tremendous educational significance. We recommend that the curriculum devised for any postgraduate course must address the important concepts defined

here with particular reference to the course of community medicine. This paradigm of curriculum development in relation to a master's degree in community medicine

could be utilized as a model in Saudi Arabia or possibly other parts of the world with appropriate modifications.

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WHO continued (in 1996) to promote and support activities related to postgraduate training courses and continuing education for health personnel, as well as educational initiatives that will make health education more responsive to community needs.

Source: The work of WHO in the Eastern Mediterranean Region. Annual Report of the Regional Director. 1 January-31 October 1996. Page xvii