

Executive Summary

The report of Future Plan for Higher Health Profession Education composed of 5 major chapters that collectively achieve the study objectives. Chapter 1 includes determining the points of strength and weakness in the current undergraduate health education system. The prediction of available and applicable opportunities for developing, promoting and supporting the capabilities of this system is also studied. The threats were also presented. In addition, this chapter included the analysis of gap between the current and the expected status, and the suggestion of appropriate solutions to bridge this gap. Also the vision, mission, values and goals of the undergraduate health education were outlined. Chapter 2 includes the study of undergraduate health education outcomes in terms of numbers and specialties needed for the job market. It deals with the survey of the current health workforce and the needed requirements till the year 2029. This was achieved through considering the expected increase in population of the kingdom and the use of acceptable percentages in health field relative to population for all major health specialties. Chapter 3 deals with suggesting general frameworks for study plans. In addition, it describes the skills and competencies that the graduate should acquire to efficiently perform job tasks. It also includes an evaluation of the educational environment in health colleges. This chapter also tackles the admission procedures and conditions. It also covers some methods and techniques of contemporary health education such as electronic learning (e-learning), virtual reality, and finally it envisaged the essential contents of any curriculum and the strategies of the effective health education. Chapter 4 contains the revision of international trends and experiences in health education in each specialty, and choosing suitable ones to be adopted in Saudi Arabia in the light of job market and social and cultural background of the kingdom. Chapter 5 however, devoted to extracting practical recommendations, and outlining the strategic choices for some critical issues related to health education and the

extent of their applicability. The Executive Recommendations were presented at the end of this chapter through suggested program of several stages to safely and confidently achieve objectives in a practical and well-studied way.

The results of SWOT analysis showed some strengths of the current health professions education in Saudi Arabia. However, the weaknesses were much more dominant. The experts have explored the main and identified the main obstacles and gaps in the current health professions education between the present situation and future ambitions. It was very obvious, from this study, that the gaps between the two situations were too wide. The widest gaps were found in the quality and quantity of health professions education Outcomes in General, the Equipment and Information Technology, the Salaries and Incentives, the Job Satisfaction, the Study Plans and Curricula, the Competency and Development of Faculty Members, the Availability of Faculty Members of both gender, the Training and Educational Constructions and Facilities, the Educational Environment and lastly the Teaching Techniques and Assessment.

The vision that was stated by the experts was to make utmost Endeavors to place Saudi universities in the leading front of internationally recognized universities in health professions education, through creation of a comprehensive undergraduate health professions education system with high quality. This system is capable of graduating highly proficient national health professionals to satisfy the needs of the health sector of various health specialties. This vision requires a lot of efforts and honest intention from the higher level of decision makers to adopt the practical strategies.

The existing situation for the workforce in the health sector in its all specialties was analyzed depending on the available health statistics from various governmental sectors. The ratio of workers in the health field to population was as follows: 1:577 for physicians, 1:3035 for dentists, 1:1739 for pharmacists, 1:568 for nurses and 1:1366 for applied

medical sciences specialists. It was also found that the percentages of Saudis in the following health professions were as follows: 21.4%, 15.9% and 14.4% for physicians, dentists and pharmacists, respectively.

To identify the size of future demands of health cadres in the next 25 years, a Saudization percentage of 90% was set for all disciplines with a target ratio of health workers to population was also set as follows: Physicians 1:500, Dentists 1:2000, Pharmacists 1:2100, Nurses 1:300, Applied Medical Sciences Specialists 1:300 (General ratio, not limited to a particular specialty). These ratios are still higher than those encountered in developed countries such as most of the European countries, Canada and the United States. At the same time, they are clearly less than those found in the intermediate-income countries such as the Arabian Gulf countries, Iran and Malaysia. Reaching these ratios will reasonably raise the Saudization percentage to 60%, 68%, 41%, 70% and 80% for physicians, dentists, pharmacists, nurses and applied medical sciences specialists, respectively. Consequently, Saudization will increase several folds compared with the current situation. The achievement of these percentages is considered acceptable since 90% Saudization may be not possible to reach during the specified period for this study due to many obstacles.

The Survey study that include patients asked about the most important characteristics they like to see in their health practitioners, showed that they would like them to be smiling, compassionate, sympathizing with them, and respectful. These desired characteristics focused on the communication skills. Therefore, there is a great need to teach communication skills as an integral part of the health colleges' curriculum. On the other hand, the study that investigating the health colleges' students' perception of educational environment showed significant problems in the educational environment of health colleges especially in the colleges of medicine and dentistry.

The international trends in health education (nursing, pharmacy, medicine, dentistry, and applied health sciences) were studied by reviewing the international literature, reports, statistics, national researches, and websites of international universities, scientific and professional societies, and accreditation bodies. The current situation of health education in the Kingdom of Saudi Arabia was also studied in view of development plans requirements and job market needs. Recommendations were made for improvement of quality and quantity of health education outcomes in the kingdom, which are summarized in the following:

1. Review and update of curricula in terms of structure with specific and clear objectives, integrated components, and priority for community health problems. Also, involving the student in the learning process through problem based learning, electronic learning, and self-study. Finally, assessment tools with high validity and reliability and directed to the educational objectives.
2. Attention to attitudes and concepts such as comprehensive (holistic) patient care, evidence-based health care, and ethics of practice.
3. Training on important skills such as effective communication, leadership, teamwork, self-evaluation, critical thinking, Research, and utilization of health informatics.
4. Attention to faculty development programs in areas like instructional and assessment methods, student mentoring, curriculum design and course development and evaluation, and dealing with electronic learning.

To enhance the admission capacity of undergraduate health education system while avoiding negative impact on the performance and efficiency of this system, it was recommended to adopt several strategies which are summarized in the following:

1. Supporting the newly established colleges financially and administratively and furnishing them with the necessary infrastructure to enable them produce more graduates.
2. Supporting the existing health colleges through modifying the admitted number of students to render the (student : teacher) ratio compliant with the international standards, in addition enhancing the financial and human resources, and support the infrastructure to increase the admission capacity.
3. The expansion in the inauguration of health colleges through a well designed plan that specifies the time and location to achieve balance between regions of the Kingdom, the specialty of the college and the sponsor (Ministry of Higher Education or private sector). Standards and criteria should be set prior to inauguration of any new health college (governmental or private) to guarantee success.
4. Giving the private sector the chance to open more health colleges within the framework of the previously mentioned expansion plan and academic conditions and criteria.
5. The independence of the National Commission for Assessment and Academic Accreditation in practicing its jurisdictions for setting the rules of accreditation and assessment and imposing them on all health colleges either governmental or private, and suspending the admission in noncompliant colleges.
6. Enhancing scholarship missionary programs in health related disciplines to universities and colleges locally and abroad. The missions abroad should be for postgraduate education and the local missions are for the Bachelor degree to private health colleges.
7. Studying all ideas previously mentioned in "enhancing choices for admission and satisfying the job market needs" paragraphs.

Several executive recommendations were suggested at the end of this report through recommended program of several stages. The First stage included the recommendations that considered basic turn in the implementation of the future plan. The second stage covers the recommendations related to the developing educational environment and study plans. However, the rest of the recommendations were presented in the subsequent stages.