

Postgraduate specialization in Kuwait: choices of physicians in training during 2003 to 2007

Medical Education Study Group

Background The limited amount of published data on the specialties selected by physicians in the Gulf region for postgraduate training suggest that male trainees prefer the specialties of Medicine and Surgery, with their female colleagues opting for Obstetrics & Gynecology, Pediatrics, or Family Medicine. Senior medical students, too, tend to have a similar pattern of preferences in their choices for subsequent specialization.

Objective This study aimed to determine the trend in the choices made for specialization, either within Kuwait or abroad, by Kuwaiti medical graduates during the 2003 to 2007 period.

Method Data pertaining to all trainees registered with Kuwait Institute for Medical Specialization (KIMS) from 2003 to 2007 available in the records maintained by the Postgraduate Training Division of KIMS and the Civil Service Commission of the Government of Kuwait were analyzed. Data on the physicians sent abroad by the Faculty of Medicine, Kuwait University for obtaining postgraduate qualifications in clinical disciplines within the past five-year period were also included. In identifying the specialties and subspecialties and for grouping, the scheme recognized by the American Board of Medical Specialties (ABMS) Member Boards was used.

Results Of the total of 375 trainees in postgraduate training at the training centers in Kuwait, the highest proportion (35.2%) had selected Family Medicine,

with Internal Medicine (14.7%), General Surgery (10.1%), Pediatrics (8.3%), Radiology (7.7%), and Laboratory Medicine (7.4%) being next in an order of preference. Out of 231 physicians who had gone abroad for higher training, Internal Medicine and its subspecialties had attracted the highest proportion (20.8%) of trainees. General Surgery and its subspecialties (13.0%) and Pediatrics and its subspecialties (12.6%) were the next fields in highest demand. A substantial proportion (8.2%) of trainees had chosen Public Health, as well. Only a few physicians had selected the specialties of Emergency Medicine, Intensive Care, Ophthalmology or Radiology.

Conclusion The majority of physicians undertaking postgraduate training locally tend to choose Family Medicine, while those going abroad on scholarship show a preference for hospital-based specialties. With the State providing opportunities to medical graduates for postgraduate specialization locally or abroad, physicians need to be directed towards choosing specialties that match the health-care service needs of the country. Expanding the opportunities available for training within the Gulf region is likely to contribute positively towards success in the measures implemented.

Key words: postgraduate training, specialty choices, Kuwait

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Introduction

Data on the medical specialties that medical graduates choose for undergoing higher training have important implications in the development of healthcare services. They will enable the policy makers to identify under-represented specialty fields so that appropriate steps could be taken for developing them and

attracting sufficient numbers of trainees with the aim of correcting any imbalances that could be expected to arise.

Kuwait Institute for Medical Specialization (KIMS) is responsible for planning and implementing postgraduate training for medical graduates locally and, in collaboration with selected institutions, abroad. Each year approximately 130 new graduates from Kuwait University and from universities abroad follow internship training at selected major hospitals in Kuwait under the administrative authority of KIMS. On completion of internship, they are offered the opportunity of postgraduate training locally or abroad depending on the

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specialties they chose and their ability to pass entrance qualifying examinations of the specialty boards.

There is only a limited number of published studies available on the specialties selected for postgraduate training by physicians in Kuwait. Recent studies conducted by KIMS pertaining to the trainees who had enrolled in programs conducted by or under the administrative authority of KIMS^{1,2} during a three-decade period have shown that male trainees preferred the specialties of Medicine and Surgery for higher training, while females opted for Obstetrics & Gynecology, Pediatrics, or Family Medicine. Another study of a relatively small series of medical graduates in Kuwait, conducted prior to these, revealed that Pediatrics, Internal Medicine, and Obstetrics & Gynecology were preferred by females, while Internal Medicine and Surgery were the specialties of choice for males.³

The relative paucity of data regarding specialty preferences and choices is applicable to the neighboring countries that come within the Gulf Cooperation Council (GCC) as well. While a study of a small sample of Saudi women doctors suggested that the constitution and legal procedures of the country and the existing cultural and value systems affected the choice of specialty,⁴ another on the intended career choices of final-year students at four Saudi medical colleges showed that the most frequently preferred specialties were Internal Medicine, Surgery, Pediatrics, and Obstetrics & Gynecology, with males opting for Surgery and females selecting Obstetrics & Gynecology or Ophthalmology.⁵

Aim

The aim of this study is to determine the trend of specialty choices among medical graduates who had obtained basic medical degrees locally or from abroad and who had subsequently enrolled in the postgraduate specialty training programs conducted by KIMS at training centers in Kuwait or had been sent abroad on scholarship during the 2003 to 2007 period.

Method

This study involved analyzing the data retrieved from the records available at the Postgraduate Training Division of Kuwait Institute for Medical Specialization and those

obtained from the Civil Service Commission of the Government of Kuwait.

All trainees who had registered with KIMS during the period 2003 to 2007 were included in the study.

In addition to the above, data pertaining to the physicians sent abroad by the Faculty of Medicine, Kuwait University for obtaining postgraduate qualifications in clinical disciplines under the scheme that had been introduced for appointment as academic clinical staff within the past five-year period were included in the study.

The categorization recognized by the American Board of Medical Specialties (ABMS) Member Boards was used in identifying the specialties and subspecialties and for grouping them.⁶

Results

Local Training Programs

During the five-year period from 2002 to 2007, a total of 375 trainees had been enrolled in the postgraduate training programs conducted by KIMS at the various training centers attached to the major hospitals in Kuwait. While the highest proportion of trainees (35.2%) had selected Family Medicine for postgraduate training, Internal Medicine (14.7%), General Surgery (10.1%), Pediatrics (8.3%), Radiology (7.7%), and Laboratory Medicine (7.4%) were next in a rank order among the specialties chosen (Fig. 1).

Training on Scholarship

A total of 231 physicians had been sent abroad on scholarship for higher training. This includes 21 candidates who were appointed by the Faculty of Medicine, Kuwait University to join its academic staff and were sent abroad for obtaining higher qualifications in clinical disciplines.

Among the candidates sent abroad on scholarship, Internal Medicine and its subspecialties had attracted the highest proportion (20.8%) of trainees (Figs. 2). General Surgery and its subspecialties (13.0%) and Pediatrics and its subspecialties (12.6%) were the next fields in highest demand. Another field that had been chosen for specialization by a substantial proportion (8.2%) of trainees in programs conducted abroad was Public Health.

Prominent among the specialties that had attracted small numbers of physicians were

Fig 1. ABMS Member Boards recognized general and subspecialty certificate specialties chosen for postgraduate training in Kuwait and for obtaining qualifications (n = 375)

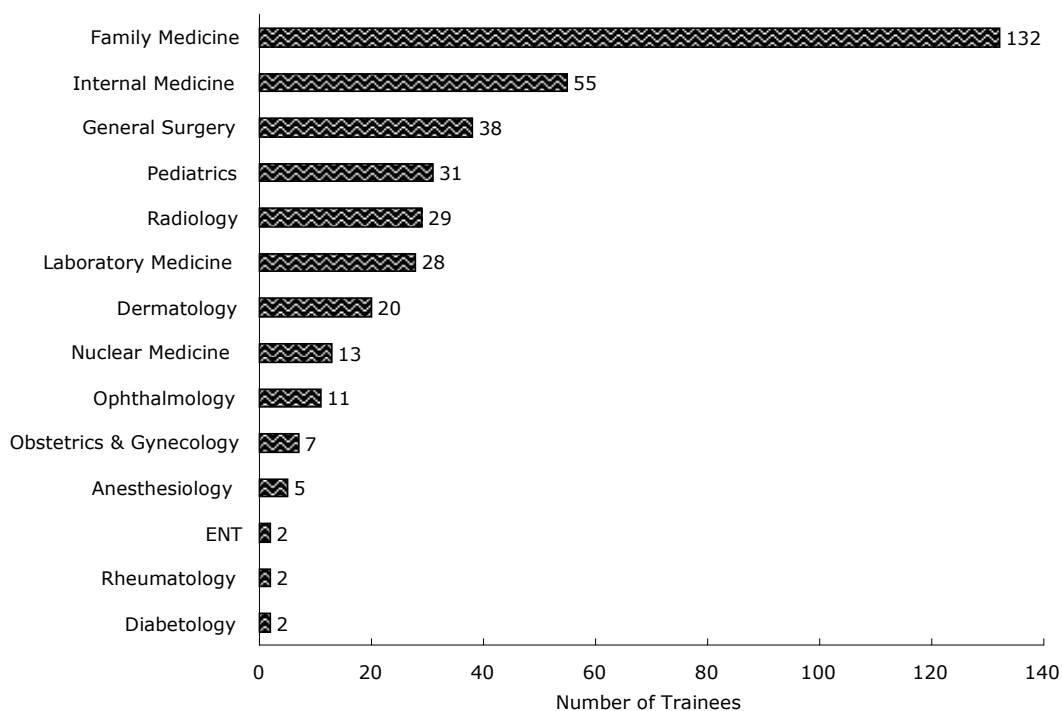
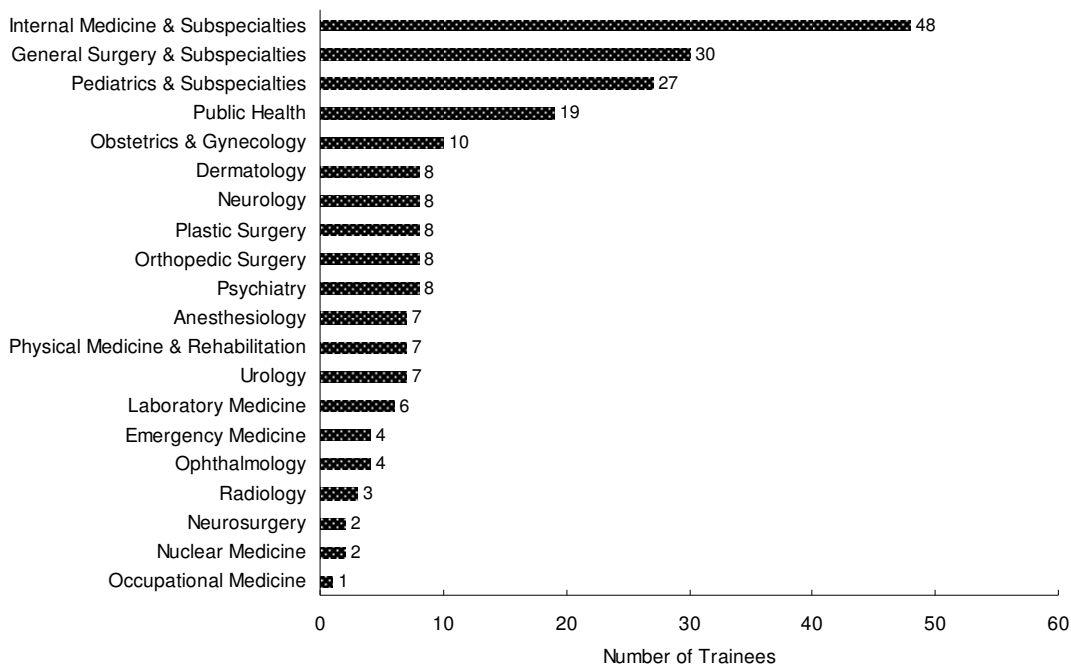


Fig. 2. ABMS Member Boards recognized general and subspecialty certificate specialties selected for postgraduate training by trainees sent abroad on scholarship (n = 231)



Emergency Medicine, Intensive Care, Ophthalmology and Radiology.

Discussion

According to the latest (2006) data available on the health and population status of Kuwait, cardiovascular disease, neoplasia and road traffic accidents rank as the leading causes of

death in both sexes, while endocrine, nutritional and metabolic diseases, and diseases of the respiratory system are found to be causes of considerable levels of morbidity and mortality.⁷ The major reasons for hospital admission (excluding those for pregnancy and normal delivery) had been chronic non-communicable diseases such as cardiovascular disease and diabetes. Although there has been a drop in the incidence rate of death and injuries due to road traffic accidents, the figure still remains high at 43.0 per 100,000 of population.

The development of health care services in Kuwait during the past few decades has taken place along two streams, viz. primary health care (PHC) and hospital-based services. Primary Health Care service centers, which have been established in all regions of the country, are responsible for population screening, managing the common health problems, and undertaking health promotion activities in the field of preventive medicine. The hospital-based services sector is involved in providing secondary and tertiary level care through the appointment of medical specialists in the established medical specialties comprising Internal Medicine, Surgery, Obstetrics & Gynecology and Pediatrics, and specialties and subspecialties related to these medical disciplines. For strengthening these service sectors, opportunities had been made available for physicians to undergo training in the major specialties and subspecialties. Data on the anticipated short-term and medium-term improvement in the health personnel workforce would prove valuable to the health policy makers as they would highlight any deficiencies that are likely to occur in the future.

The governing structure of the health services administration in Kuwait comprises six health districts, viz. Capital Health Region, Hawalli Health Region, Sabah Health Region, Farwaniya Health Region, Jahra Health Region and Ahmadi Health Region. Each region has a major hospital and a number of Primary Health Care Centers. The different medical specialties and major subspecialties have their own Specialty Councils, with representation from each of the health regions. All clinical aspects of specialty care are managed by the concerned specialty councils.

The Ministry of Health through the Specialty Councils needs to review the requirements of specialists on an annual basis and

update the data as deemed necessary. Additionally, it should guide the junior physicians to choose training programs within an overall framework that would meet the future needs of the different specialties as regards providing an optimum level of care to the community. While the Specialty Councils would provide the relevant data on the specialist requirements, both the junior doctors as well as the senior medical students need to be enlightened on the current status, future trends and the scope and opportunities available in the different medical specialties.

With the vast expansion of the knowledge and skills that have taken place during the past few decades with regard to the diagnosis and management of health problems, there has been an increase in the number of recognized medical subspecialties. With this development, the field that each of the subspecialties covers, too, has become narrower. At present, the American Board of Medical Specialties (ABMS) Member Boards certify physicians in more than 145 specialties and subspecialties.⁶

The importance of having an appropriate balance between satisfying the service needs of the establishment and accommodating the aspirations and choices of individual physicians needs to be emphasized. Analysis of the pattern of morbidity and mortality in Kuwait indicates that chronic non-communicable diseases such as cardiovascular diseases, diabetes, hypertension, cerebrovascular accidents, and neoplasias and trauma have emerged as major health problems.⁷ It is therefore essential that plans for the development of the health workforce match the health care needs determined by the disease prevalence.

A study undertaken by Al-Jarallah and his co-workers on the current health personnel workforce in Kuwait and projected needs over the next twenty years showed that the number of Kuwait physicians that would become available will not be sufficient to meet the healthcare needs of the country.⁸ It also highlighted the need for developing the health service personnel resources both in quality and quantity, emphasizing that the shortfall that would appear in the supply of personnel required to meet the actual healthcare service needs is likely to continue. The training of specialists in fields such as Intensive Care, Emergency Medicine and Physical Medicine and for managing stroke rehabilitation centers

needs to be undertaken on a priority basis as these specialties do not have adequate numbers of personnel at present, nor are they likely to have the requirements met in the near future if the current trends continue.

Published data on the training patterns and specialty choices in the neighboring Gulf states are scanty, and the limited amount of data available shows that the pattern is essentially similar to that observed in Kuwait, with Internal Medicine, Surgery, Pediatrics, and Obstetrics & Gynecology ranking high among the preferences.^{4,5} It is important to explore avenues of collaboration in specialty training among the institutions responsible for postgraduate medical education in the member countries in GCC as it would be costly to establish training centers in each specialty in each of the different states. Such collaborative ventures would enable the optimum utilization of the resources, esp. in specialties such as organ transplantation or cardiothoracic surgery.

The situation with respect to the postgraduate training program in Family Medicine could be taken as evidence that if appropriate measures were to be taken, physicians are likely to choose specialties that may be relatively unattractive at present. The local availability of a program that has received approval from an internationally recognized professional institution and the provision of financial and career advancement opportunities would have been important factors that contributed to over a third of the applicants for postgraduate training choosing the specialty of Family Medicine for higher training.

Travel abroad and living for long periods in alien environments and cultural settings in the pursuit of postgraduate education may not be an attractive proposition to a substantial proportion of physicians. This may especially be so for many female physicians. Such a consideration is another important reason for strengthening the training opportunities at the local or regional levels by providing additional resources of personnel and finances.

Conclusion and Recommendation

The trend that emerges when reviewing the selection of specialties for postgraduate training and qualification is that Family Medicine

is preferred among the programs conducted locally, while hospital-based specialties such as Internal Medicine, Pediatrics and Surgery are in high demand among the training programs held at institutions abroad.

The State of Kuwait provides free education at all levels to its citizens, which includes opportunities given to medical graduates for specialization at approved training institutions locally or selected institutions abroad. The current practice of allowing physicians to choose specialties based on individual preferences needs to be reviewed to ensure that the number of specialists produced in a given specialty matches the requirements determined by the healthcare services of the country. In this connection, the vital statistics data available on the health problems, disease patterns and health personnel workforce⁷ need to be optimally used by the concerned authorities. This would also involve the authorities influencing, based on community needs, the choices that physicians make in selecting specialties for higher training. A proper needs analysis of the different aspects of healthcare services is an essential prior requirement for these moves to be implemented.

An appropriate scheme of incentives aimed at encouraging the future trainees to select specialties that do not have adequate numbers of qualified personnel will have to be designed to ensure that plans for development of the under-resourced specialties succeed. In addition, the opportunities available for postgraduate training locally or within the neighboring Gulf states need to be expanded.

The findings of this study would be applicable to the neighboring countries in the Gulf region as well since the health problems in these settings are comparable.

The Faculty of Medicine, Kuwait University and the Ministry of Health should establish an Office of Career Guidance under each institution so that informed personnel will be available to advise senior medical students and new medical graduates on making pragmatic decisions on specialty choices and on the opportunities available for career advancement within the healthcare services establishments in Kuwait and the neighboring countries in the Gulf region.

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