



THE ECONOMIC BUREAU

المركز الاقتصادي  
بالتعاون مع

JAPAN INTERNATIONAL  
COOPERATION AGENCY (JICA)

NURSE EDUCATION AND EMPLOYMENT  
IN SAUDI ARABIA

A SECTOR PROFILE

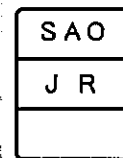
JICA LIBRARY



J1166195(6)

PREPARED BY:

THE ECONOMIC BUREAU  
RIYADH, SAUDI ARABIA



APRIL 1999





**JAPAN INTERNATIONAL  
COOPERATION AGENCY (JICA)**

**NURSE EDUCATION AND EMPLOYMENT  
IN SAUDI ARABIA  
A SECTOR PROFILE**

**PREPARED BY:**

**THE ECONOMIC BUREAU  
RIYADH, SAUDI ARABIA**

**APRIL 1999**



1166195【6】

## TABLE OF CONTENTS

|  | <b>Page</b> |
|--|-------------|
| <b>1 GENERAL DESCRIPTION.....</b>                            | <b>1-1</b>  |
| INTRODUCTION .....   | 1-1         |
| NURSE EMPLOYMENT.....  | 1-2         |
| NURSE EDUCATION .....  | 1-3         |
| <b>2 RESPONSIBLE AGENCIES .....</b>                          | <b>2-1</b>  |
| <b>3 PRIVATE COMPANIES INVOLVED .....</b>                    | <b>3-1</b>  |
| THE SEBAI INSTITUTE.....                                     | 3-1         |
| MISCELLANEOUS SEMINARS.....                                  | 3-1         |
| <b>4 PRIORITY OF GOVERNMENT FOR PRIVATIZATION .....</b>      | <b>4-1</b>  |
| <b>5 DEGREE OF CURRENT ACTIVITY AND RELATIVE GROWTH.....</b> | <b>5-1</b>  |
| EMPLOYMENT MARKET.....                                       | 5-1         |
| EDUCATION MARKET.....  | 5-8         |
| CULTURAL ASPECTS.....  | 5-13        |
| CONCLUSION .....   | 5-13        |
| <b>6 REGULATIONS AND ADMINISTRATIVE SYSTEM.....</b>          | <b>6-1</b>  |
| <b>APPENDIXES</b>  |             |
| <b>A HOSPITALS IN THE KINGDOM .....</b>                      | <b>A-1</b>  |
| <b>B EDUCATION SYSTEM IN SAUDI ARABIA .....</b>              | <b>B-1</b>  |

## **Section 1**

### **GENERAL DESCRIPTION**

## Section 1

### GENERAL DESCRIPTION

#### INTRODUCTION

The Kingdom's health services are provided by a wide range of institutions covering many different functions. In broad terms, the provision of health care is organized through a referral system into a Kingdom-wide network of primary health centers, general and specialist hospitals, although a number of government agencies provide health care services directly to their employees.

The **Ministry of Health (MOH)** is the government agency with overall responsibility for health care in the Kingdom. The **MOH** operates the largest number of hospitals (1997: 180) and health centers (1997: 1,737) in the Kingdom.

The **Ministry of Defence and Aviation (MODA)** provides health care for military personnel (Army, Navy and Air Force), their dependents, **MODA** civilian employees and their dependents, at military bases and headquarters facilities throughout the Kingdom. Military hospitals usually have around 350 beds and are mainly primary care facilities. Military headquarters facilities are located in Riyadh, Jeddah, and Dhahran/Dammam. These are tertiary care and referral hospitals of 600-650 beds. **MODA** operates a medical evacuation service with an assigned fleet of executive jets and helicopters, with flight physicians, nurses, and paramedics to transport patients from the primary care facilities to the tertiary care hospitals.

The **National Guard** and the **Ministry of Interior** provide primary, secondary and advanced levels of health care directly to their staff and segments of the general population.

**The Red Crescent Society** provides emergency services and assists pilgrims during the Hajj. High level specialized health care is provided in the Kingdom by specialized hospitals, while the **Royal Commission for Jubail and Yanbu** provides health facilities for employees at the two industrial cities. School health units attend to the immediate primary health care needs of students. **The General Organization for Social Insurance** and the **Presidency of Youth Welfare** provide health facilities for certain parts of the population. Through their programs and medical colleges, the universities provide primary and specialized health care services, conduct essential health research and provide education programs.

Finally, the medical services of the private sector play an increasingly important role in the Kingdom and are coordinated with the referral network and the regulatory requirements of the health sector as a whole.

Appendix A includes statistical highlights of hospitals in the Kingdom.

## **NURSE EMPLOYMENT**

Nurses in Saudi Arabia are employed either by the **Ministry of Health (MOH)**, other government institutions, or the private sector. In 1997, Ministry of Health institutions included 1,737 medical centers and 180 hospitals.

Other government institutions include the following:

- King Abdul Aziz University Hospital in Riyadh (KAUH, R)
- King Khaled University Hospital in Riyadh (KKUH, R)
- King Abdul Aziz University Hospital in Jeddah (KAUH, J)
- King Fahad University Hospital in Khobar (KFUH, K)
- Armed Forces Hospitals (AFHs)
- National Guard Hospitals (NGHs)
- Security Forces Hospital (SFH) of the Ministry of Interior



- King Faisal Specialist Hospital & Research Center in Riyadh (KFSH, R)
- Royal Commission Hospitals in Jubail and Yanbu (RCHs)
- Aramco Hospitals
- Riyadh National Hospital (RNH)
- Social Insurance Hospital in Riyadh (SIH)
- Saudi Red Crescent Society (SRCS)
- Youth Welfare Hospital (YWH)
- Saline Water Conversion Corporation Medical Units (SWCCMU)
- King Fahad University of Petroleum and Minerals Medical Units (KFUP&MMU)
- Institute of Public Administration Medical Clinic (IPAMC)
- Madinah Islamic University Medical Clinic (MIUMC)
- Imam Muhammad Ibn Saud Islamic University Medical Units (IMUMU)
- Ministry of Interior Medical Services (MIMS)
- School Health Units at Ministry of Education (SHUME)
- School Health Units at General Presidency of Girls Education (SHUGPGE)

The above represent a total of 39 hospitals and 9,302 pharmacies (1997 data).

As for the private sector, it consists of 611 dispensaries, 776 private clinics, 84 hospitals, and 3,178 pharmacies (1997 data).

## **NURSE EDUCATION**

Colleges of medicine and medical sciences are maintained by each of the King Saud University (Riyadh), the King Abdul Aziz University (Jeddah) and the King Faisal University (Dammam). In addition, there are colleges of dentistry, pharmacy and allied medical sciences under the King Saud University.

As for nursing programs, they are offered by the following universities:

- King Abdul Aziz University in Jeddah
- King Saud University in Riyadh
- King Faisal University in Dammam

#### KING ABDUL AZIZ UNIVERISTY (JEDDAH)

The Faculty of Medicine and Allied Sciences was established in 1395 A.H. (1975 A.D.). The nursing program was established in the following year. In the mid-1397 A.H. (1977 A.D.) a University Hospital was established to provide teaching facilities for both medical and nursing students. In the year of 1400 A.H. (1980 A. D.) medical technology programs, such as medical laboratory technology, were established. The Bachelor of Science (B.Sc.) nursing program at King Abdul Aziz University is four years long. A Practicum (internship) is required during the second semester of the fourth year. The university also offers a Masters level program.

The second through fourth year nursing curriculum is reproduced hereunder:

#### **Second Year, 1st Semester**

PHYN 201 PHYSIOLOGY

ANTN 201 ANATOMY

FNUN 201 FUNDAMENTALS OF NURSING I, NURSING HISTORY AND TRENDS

BCHN 201 BIOCHEMISTRY

ELCM 201 ENGLISH

HGDN 202 HUMAN GROWTH AND DEVELOPMENT

**Second Year, 2nd Semester**

MIPN 201 MICROBIOLOGY & PARASITOLOGY

FNUN 203 FUNDAMENTALS OF NURSING II

NUTN 204 NUTRITION

ELCN 201 ENGLISH (1 YEAR COURSE)

PATN 201 PATHOLOGY

PSCN 209 PSYCHO-SOCIAL CONCEPTS IN NURSING

**Third Year, 1st Semester**

SURN 302 MEDICAL SURGERY NURSING I

MATN 301 MATERNITY NURSING

PHAN 301 PHARMACOLOGY

**Third Year, 2nd Semester**

SURN 302 MEDICAL SURGERY NURSING II (1 YEAR COURSE)

PEDN 301 PEDIATRIC NURSING

PHAN 301 PHARMACOLOGY (1 YEAR COURSE)

**Fourth Year, 1st Semester**

FCHN 401 FAMILY & COMMUNITY HEALTH NURSING

CCNN 402 CRITICAL CARE NURSING

PMHN 403 PSYCHIATRIC & MENTAL HEALTH NURSING

INRN 404 INTRODUCTION IN NURSING RESEARCH

**Fourth Year, 2nd Semester**

NLPN 405 NURSING LEADERSHIP AND "PRACTICUM"

INST 406 INTRODUCTION TO STATISTICS

### KING SAUD UNIVERSITY (RIYADH)

Founded in 1976, the College of Applied Medical Sciences is now composed of seven departments: Biomedical Technology, Clinical Laboratory Sciences, Community Health Services, Dental Health, Nursing, Radiological Sciences, and Rehabilitation Sciences. The 4-year nursing program is offered at the Bachelor level only.

The number of students (male and female) enrolled in this college during 1416/1417 A.H. (1996-97) academic year was as follows: 1,165 for the degree of Bachelor of Applied Medical Sciences (B.A.M.Sc.) and 48 for the degree of Master of Applied Medical Sciences (M.A.M.Sc.). The college prides itself on its teacher/student ratio: 1:13.

### KING FAISAL UNIVERSITY (DAMMAM)

King Faisal University (KFU) was founded in 1975 in the eastern region of the Kingdom. The Dammam-based College of Applied Science of Medicine offers a 4-year bachelor-level program in Nursing. KFU is the founder of the King Fahad Educational Hospital in (Al Khobar Area). It is worth mentioning here that the training facilities and medical specialties provided by this hospital have been praised by the Arab Board for Medical Affairs.

### MINISTRY OF HEALTH (MOH) COLLEGES

In 1997, the Ministry of Health operated 44 Health Institutes (18 for males and 26 for females) and 13 Health Colleges (seven for males and six for females) distributed Kingdom-wide. Certain of these Institutes and Colleges offer nursing programs and have graduated a modest number of students.

## HOSPITALS

### **Military Hospitals**

Most military hospitals have training centers offering diverse programs of varying quality. For example, the Armed Forces Medical Hospital in Riyadh has on-the-job training programs for both male and female nurses. The Health Institute in Dhahran (Ministry of Defence) also has a training program for male nurses.

### **Other**

The Nursing Education and Research Department (NE&R) at the King Faisal Specialist Hospital & Research Center in Riyadh provides orientation, continuing education and staff development programs, and unit in-service offerings designed to meet nurses needs and interests. In addition, opportunities are available for nurse staff to earn a baccalaureate and/or master's degree through the Center for Distance Learning. The latter is an official Regents College Project LEARN Site, and an information/ advisement center for other recognized universities in the USA, Canada, Australia, the United Kingdom, and Ireland. Continuing Education Units (CEU's) for NE&R educational programs are awarded through the California State Board of Nursing, USA.

Regularly scheduled education programs include:

- Preceptor Training
- Cultural Diversity Workshops
- Intercultural Communication Workshops
- Nursing Grand Rounds
- Hematology/BMT Lecture Series
- Chemotherapy Certification
- Adult and Pediatric Physical Assessment

The Critical Care Education Programs includes:

- Shock Syndromes
- Basic and Advanced Dysrhythmia Interpretation Courses
- Congenital Anomalies

## **Section 2**

### **RESPONSIBLE AGENCIES**

## Section 2

### RESPONSIBLE AGENCIES

The **Ministry of Higher Education (MHE)** is responsible for dispensing nursing educational programs at the university level. The Ministry handles the following duties and responsibilities:

- Chairmanship of the Higher Council of each university
- Improvement and development of higher education in line with Kingdom's Development plans
- Establishment of education offices to follow-up and look after students and employees studying abroad.
- Issuance of university certificates equivalent to those obtained from foreign universities, and list those universities the certificates and degrees of which can be accepted in the Kingdom.
- Organize the matters related to granting and distributing scholarships.
- Coordinate visits exchanged between Saudi Universities and institutes and their foreign counterparts.
- Recommend the establishment of new universities or colleges, based on the findings of appropriate studies.

The **Ministry of Health (MOH)** is responsible for dispensing 2-year college-level programs in nursing leading to the Certified Nurse professional designation and/ or Associate of Art in Health Sciences diploma. The responsibility for these programs fall under the General Directorate of Nursing Schools which is headed by the Assistant Deputy Minister for Manpower Development Works. The latter reports to the Deputy Minister of Planning and Development.



**The Saudi Council for Health Specialties**, an independent government body, accredits higher-level (bachelor and master) educational programs in nursing. In addition, its services include evaluating foreign degrees and performing equivalence.

## **Section 3**

### **PRIVATE COMPANIES INVOLVED**

### Section 3

#### PRIVATE COMPANIES INVOLVED

There are no private businesses in Saudi Arabia dispensing education to nurses or aspiring nurses. There is however a program in the initial stages of development.

#### **THE SEBAI INSTITUTE**

The<sup>1</sup> Sebai Institute is planning to offer an On-The-Job Education & Training (OJET) program in the Allied Health field. This program will be open to nurses and students aspiring to become nurses, among other health and allied health professionals. The program is structured to offer a pre-job general full-time course of 2 months starting from day one, prior to branching off to on-the-job training for a period of 18 months. The full program takes 20 months to complete and will award a Diploma in Nursing, Theater Nursing (operation room) or such other fields depending on the candidates chosen area of specialization.

During the first two months of the program, the student will receive classroom teaching at the rate of 6 hours a day, 5 days a week. On-the-job training will be at the rate of 4 hours per week of direct tutoring and 8 hours per week of self-learning. At the above rates, the total program consists of 600 hours and is conducted, substantially, in the English language. Annual fees are projected at SR 15,000 per student and would normally be paid by the hospital/ clinic/ health center sponsoring the candidate.

#### **MISCELLANEOUS SEMINARS**

*Ad Hoc* seminars are offered by pharmaceutical and medical equipment/ supplies companies, with the primary aim of introducing their products to nurses and providing some form of training as to the proper use of such products.

---

<sup>1</sup> The Feasibility Study Report of On-the-Job training Project of Sebai Institute prepared by The Economic Bureau, April 1999.

## **Section 4**

### **PRIORITY OF GOVERNMENT FOR PRIVATIZATION**

## Section 4

### PRIORITY OF GOVERNMENT FOR PRIVATIZATION

The Sixth Development Plan stipulates that the private sector will be given the opportunity to finance the construction of many health facilities under appropriate arrangements with the government agencies concerned. These projects include:

- Establishing intermediate health colleges
- Establishing health institutes
- Establishing training centers for emergency medical services

The plan also states:

“The potential for existing medical colleges and health institutes to attract more Saudi nationals amongst their students and trainees will be expanded, and new intermediate health colleges opened, while the number of training programs and scholarships for Saudis will be increased, particularly bachelor’s degree programs. The private sector will be encouraged to provide more health training programs for Saudis.”

However, no specific incentives have been put forward by the government.

## **Section 5**

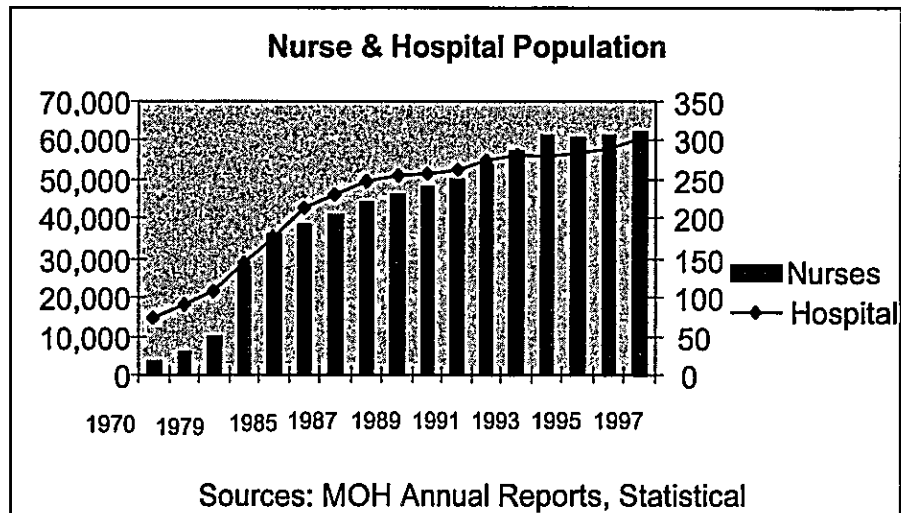
# **DEGREE OF CURRENT ACTIVITY AND RELATIVE GROWTH**

## Section 5

### DEGREE OF CURRENT ACTIVITY AND RELATIVE GROWTH

#### EMPLOYMENT MARKET

The nurse population in Saudi Arabia increased rapidly in the 1970s and 1980s, overshadowing the growth in the number of hospitals. Since then, and especially during the second half of the 1990s, the sector activity level has slowed down.



The aggregate number of employed nurses stood at around 62,000 in 1997. Of these, 82.5% (or about 51,200) were employed by the public sector and the remaining by the private sector. The total number of employed nurses over the 1994-1997 period has been relatively stable and the distribution per employment sector has changed little, with perhaps a slight increase in private sector employment at the expense of MOH employment share. Tables 5-1 through 5-3 present these findings in details.

**Table 5-1: Nurse Distribution by Employment Sector**

| Sector         | 1992          | 1993          | 1994          | 1995          | 1996          | 1997          |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| MOH            | 32,229        | 33,373        | 35,687        | 35,219        | 34,947        | 34,739        |
| Other Gov.     | 11,422        | 12,485        | 15,622        | 15,534        | 15,679        | 16,447        |
| Private Sector | 10,216        | 11,232        | 9,937         | 9,983         | 10,588        | 10,800        |
| <b>TOTAL</b>   | <b>53,867</b> | <b>57,090</b> | <b>61,246</b> | <b>60,736</b> | <b>61,214</b> | <b>61,986</b> |

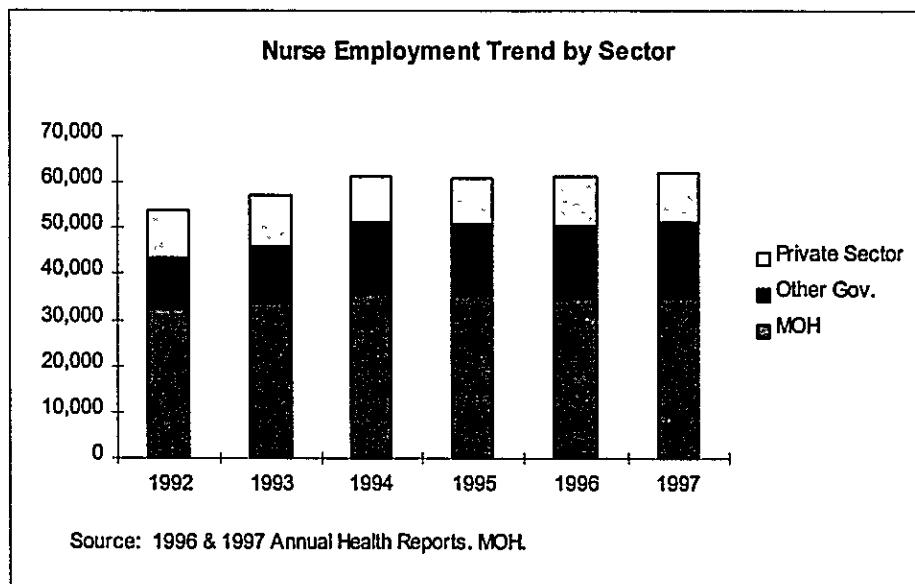
**Table 5-2: Nurse Distribution by Employment Sector in %age**

| Sector         | 1992          | 1993          | 1994          | 1995          | 1996          | 1997          |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| MOH            | 59.8%         | 58.5%         | 58.3%         | 58.0%         | 57.1%         | 56.0%         |
| Other Gov.     | 21.2%         | 21.9%         | 25.5%         | 25.6%         | 25.6%         | 26.5%         |
| Private Sector | 19.0%         | 19.7%         | 16.2%         | 16.4%         | 17.3%         | 17.4%         |
| <b>TOTAL</b>   | <b>100.0%</b> | <b>100.0%</b> | <b>100.0%</b> | <b>100.0%</b> | <b>100.0%</b> | <b>100.0%</b> |

**Table 5-3: Nurse Employment Trend by Employment Sector**

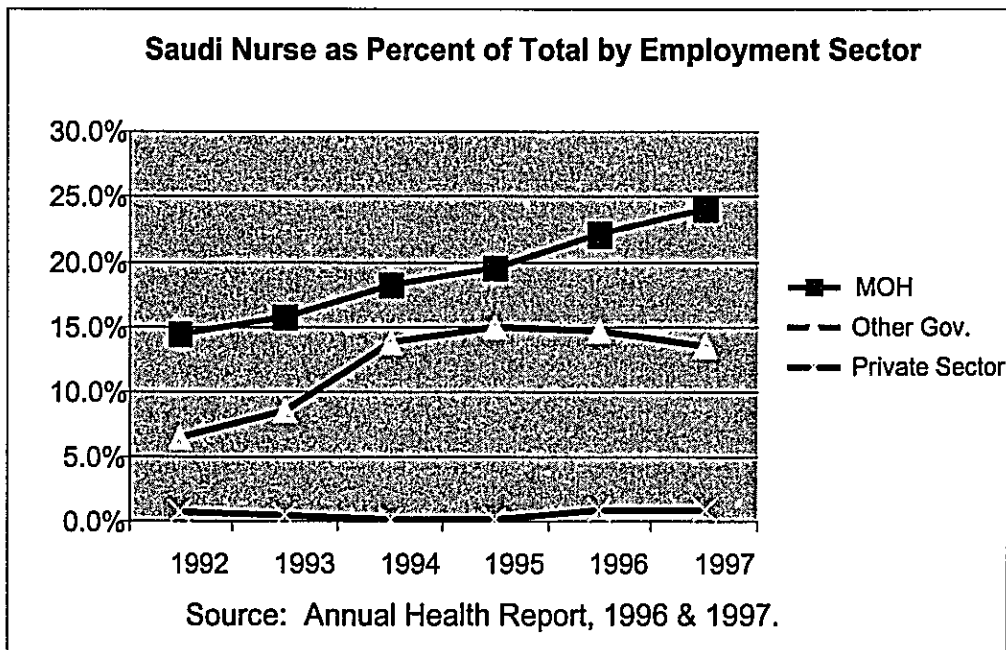
| Sector         | 1993        | 1994        | 1995         | 1996        | 1997        |
|----------------|-------------|-------------|--------------|-------------|-------------|
| MOH            | 3.5%        | 6.9%        | -1.3%        | -0.8%       | -0.6%       |
| Other Gov.     | 9.3%        | 25.1%       | -0.6%        | 0.9%        | 4.9%        |
| Private Sector | 9.9%        | -11.5%      | 0.5%         | 6.1%        | 2.0%        |
| <b>TOTAL</b>   | <b>6.0%</b> | <b>7.3%</b> | <b>-0.8%</b> | <b>0.8%</b> | <b>1.3%</b> |

Source: Annual Health Report, 1996 & 1997. Ministry of Health.





As for Saudi nationals, they constituted 17% of all employed nurses in 1997. The proportion of Saudi to total nurses however varies markedly by employment sector, ranging from 24 percent in **MOH** institutions to under 1% in the public sector.



There is a discernible trend in moving towards the hiring of Saudi nationals in **MOH** institutions, with the proportion of employed Saudi nurses augmenting from 15.8% in 1993 to 23.9% in 1997, representing an annual compound increase of 10.9 percent. Further details are included in Tables 5-4 through 5-6 below.

**Table 5-4: Saudi Nurse Distribution by Employment Sector**

| <u>Sector</u>  | 1992         | 1993         | 1994         | 1995         | 1996          | 1997          |
|----------------|--------------|--------------|--------------|--------------|---------------|---------------|
| MOH            | 4,641        | 5,273        | 6,495        | 6,868        | 7,723         | 8,303         |
| Other Gov.     | 742          | 1,074        | 2,156        | 2,330        | 2,305         | 2,220         |
| Private Sector | 82           | 45           | 10           | 20           | 95            | 97            |
| <b>TOTAL</b>   | <b>5,465</b> | <b>6,392</b> | <b>8,661</b> | <b>9,218</b> | <b>10,123</b> | <b>10,620</b> |

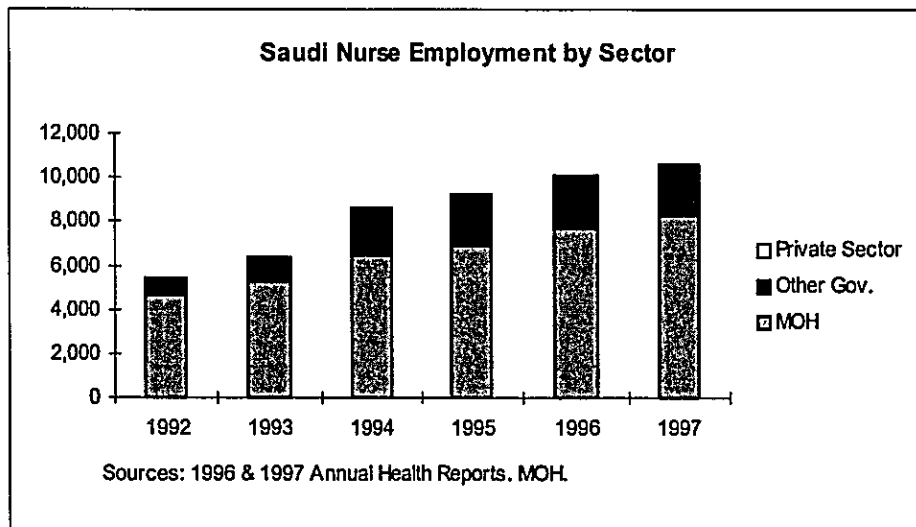
**Table 5-5: Saudi Nurse as Percent of Total by Employment Sector**

| <u>Sector</u>  | 1992         | 1993         | 1994         | 1995         | 1996         | 1997         |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| MOH            | 14.4%        | 15.8%        | 18.2%        | 19.5%        | 22.1%        | 23.9%        |
| Other Gov.     | 6.5%         | 8.6%         | 13.8%        | 15.0%        | 14.7%        | 13.5%        |
| Private Sector | 0.8%         | 0.4%         | 0.1%         | 0.2%         | 0.9%         | 0.9%         |
| <b>TOTAL</b>   | <b>10.1%</b> | <b>11.2%</b> | <b>14.1%</b> | <b>15.2%</b> | <b>16.5%</b> | <b>17.1%</b> |

**Table 5-6: Saudi Nurse Employment Trend by Employment Sector**

| <u>Sector</u>  | 1993         | 1994         | 1995        | 1996        | 1997        |
|----------------|--------------|--------------|-------------|-------------|-------------|
| MOH            | 13.6%        | 23.2%        | 5.7%        | 12.5%       | 7.5%        |
| Other Gov.     | 44.6%        | 100.8%       | 8.1%        | -1.1%       | -3.7%       |
| Private Sector | -45.0%       | -77.9%       | 100.9%      | 377.3%      | 2.0%        |
| <b>TOTAL</b>   | <b>17.0%</b> | <b>35.5%</b> | <b>6.4%</b> | <b>9.8%</b> | <b>4.9%</b> |

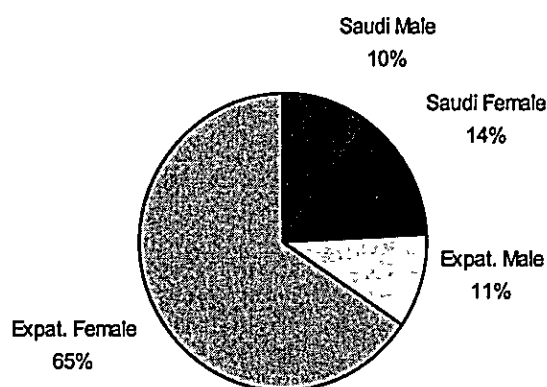
Source: Annual Health Report, 1996 & 1997. Ministry of Health.



In light of the above, it is clear that there is still a heavy reliance on expatriate nurses in all hospital sectors. Specific examples include the Ministry of Interior's Security Forces Hospital in Riyadh and its affiliated 16 Health Centers throughout the Kingdom, where we find that Saudi nurses in 1997 constituted under 5% of all 759 nurses. As to the nationalities of expatriate nurses, the case of the 583-bed King Faisal Specialist Hospital & Research Center in Riyadh may give a good indication; Out of the total 1,158 nurses, 23% are from Canada and 11% from the United States. The remaining Nursing staff are from Europe, Australia, New Zealand, the Philippines, Saudi Arabia, and other countries.

As for employment by gender, we find that in 1997 female nurses constituted 80% of all nurses employed in the MOH system. This proportion varies considerably however, when we examine the Saudi and expatriate pools separately. We find that for Saudi nationals, female nurses constitute only 58% of all Saudi nurses whereas for expatriates, female nurses constitute 86% of all expatriate nurses.

**MOH Nurses by Gender & Nationality**



These proportions represent little change from 1996 proportions, as revealed in Table 5-7 below.

**Table 5-7: Total Nurse Manpower in MOH, by Gender and Nationality**

| <b>1997</b>  | <b>Saudi</b> |               | <b>Expatriate</b> |               | <b>Total</b>  |               |
|--------------|--------------|---------------|-------------------|---------------|---------------|---------------|
| Male         | 3,487        | 41.9%         | 3,680             | 13.9%         | 7,167         | 20.6%         |
| Female       | 4,829        | 58.1%         | 22,743            | 86.1%         | 27,572        | 79.4%         |
| <b>Total</b> | <b>8,316</b> | <b>100.0%</b> | <b>26,423</b>     | <b>100.0%</b> | <b>34,739</b> | <b>100.0%</b> |

| <b>1996</b>  | <b>Saudi</b> |               | <b>Expatriate</b> |               | <b>Total</b>  |               |
|--------------|--------------|---------------|-------------------|---------------|---------------|---------------|
| Male         | 3,146        | 40.8%         | 3,870             | 14.2%         | 7,016         | 20.1%         |
| Female       | 4,559        | 59.2%         | 23,372            | 85.8%         | 27,931        | 79.9%         |
| <b>Total</b> | <b>7,705</b> | <b>100.0%</b> | <b>27,242</b>     | <b>100.0%</b> | <b>34,947</b> | <b>100.0%</b> |

Source: Annual Health Report, 1996 & 1997. Ministry of Health.

The situation is comparable in the Other Government Sector, although Saudi male nurses tend to constitute 83% of all Saudi nurses, as indicated in Table 5-8 below.

**Table 5-8: Total Nurse Manpower in Other Gov. Sector, by Gender/ Nationality**

| <b>1997</b>  | <b>Saudi</b> |               | <b>Expatriate</b> |               | <b>Total</b>  |               |
|--------------|--------------|---------------|-------------------|---------------|---------------|---------------|
| Male         | 1,815        | 82.1%         | 2,421             | 17.0%         | 4,236         | 25.8%         |
| Female       | 397          | 17.9%         | 11,814            | 83.0%         | 12,211        | 74.2%         |
| <b>Total</b> | <b>2,212</b> | <b>100.0%</b> | <b>14,235</b>     | <b>100.0%</b> | <b>16,447</b> | <b>100.0%</b> |

| <b>1996</b>  | <b>Saudi</b> |               | <b>Expatriate</b> |               | <b>Total</b>  |               |
|--------------|--------------|---------------|-------------------|---------------|---------------|---------------|
| Male         | 1,920        | 83.4%         | 2,215             | 16.6%         | 4,135         | 26.4%         |
| Female       | 382          | 16.6%         | 11,162            | 83.4%         | 11,544        | 73.6%         |
| <b>Total</b> | <b>2,302</b> | <b>100.0%</b> | <b>13,377</b>     | <b>100.0%</b> | <b>15,679</b> | <b>100.0%</b> |

Source: Annual Health Report, 1996 & 1997. Ministry of Health.

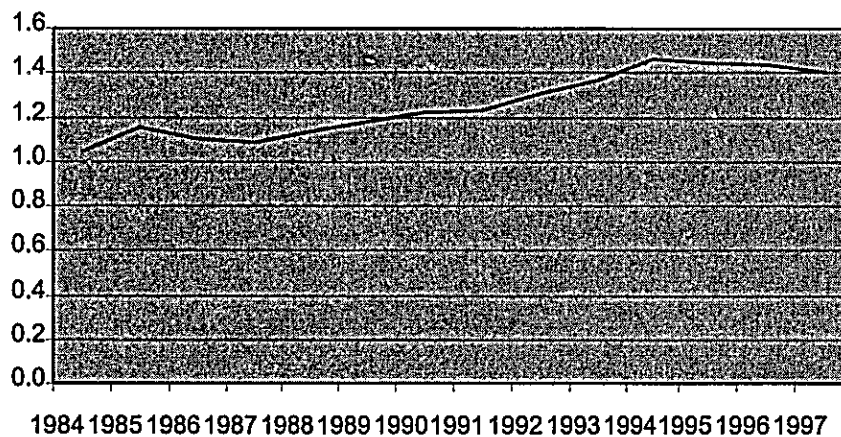
Available data for 1997 also reveal that within the private sector, where substantially all nurses are expatriates, 60% of nurses worked in hospitals and the remaining in dispensaries.

Nurse specialization in Saudi Arabia are varied. For example, at the King Faisal Specialist Hospital & Research Center in Riyadh, Nursing Affairs includes the following departments: Critical Care Nursing, Maternal Child Nursing, Surgical

Nursing, Oncology Medical Nursing, Ambulatory Care Nursing, Nursing Systems, Nursing Recruitment, Products Coordination, I.V. Therapy, Discharge Planning, Quality Improvement, Nursing Education & Research, and Infection Control.

It is worth noting that while the ratio of nurses to hospital beds has increased between 1984 and 1994, a slight downward trend has taken over since then – see chart below.

**Progression of Nurses/ Bed Ratio**



It is worth noting that while a 1.4 : 1 ratio may seem somewhat high, it is due to the inclusion of all working nurses, even those working in clinics, whereas only hospital beds are taken into consideration. This decline can be attributed to the increased opening of clinics as well as Saudization efforts at a time when qualified Saudi candidates are not coming forward in sufficient numbers, resulting in some understaffing.

Hospitals find it increasingly difficult to hire Saudi nurses. For example, almost 100 percent of the consultants at King Abdul Aziz University Health Science

Center<sup>1</sup> (KAAUHSC) are Saudis but only 14 out of 471 nurses (under 3%) are Saudi nationals, despite a conscious effort to increase the proportion of Saudi nurses. Today, the Center is said to actively seek Saudi staff, nurses in particular.

## EDUCATION MARKET

### PUBLIC UNIVERSITY EDUCATION

The number of students enrolled in university-level nursing programs and the number of students graduating from such programs are presented hereunder:

|                            |                  | 1995       | 1996       | 1997       |
|----------------------------|------------------|------------|------------|------------|
| <b>Enrolled</b>            |                  |            |            |            |
| King Abdul Aziz University | Jeddah           | 87         | 95         | 123        |
| King Faisal University     | Eastern Province | n/a        | 92         | 92         |
| <b>TOTAL</b>               |                  | <b>n/a</b> | <b>187</b> | <b>215</b> |
| <b>Graduated</b>           |                  |            |            |            |
| King Abdul Aziz University | Jeddah           | 0          | 10         | 14         |
| King Faisal University     | Eastern Province | n/a        | 14         | 24         |
| <b>TOTAL</b>               |                  | <b>n/a</b> | <b>24</b>  | <b>38</b>  |

Source: Annual Health Report, 1996 & 1997. Ministry of Health.  
n/a = not available

The above are all-female programs and enrollment is up 15% in 1997 vis-a-vis 1996. In addition to the above, the King Saud University in Riyadh has a 4-year, all female, program in nursing leading to a Bachelor degree. The program graduated 8 students in 1998.

---

<sup>1</sup> At inception, KAAUHSC was praised as one of the finest medical facilities in the world, comprising a hospital, a male medical school facility, a female medical school facility, a medical research complex which includes a school of public health, and a continuing medical education facility.

Available statistics indicate that the supply of “qualified” nurse candidates from Saudi universities is limited compared to market demand. It is unclear if such supply consists solely of Saudi nationals.

#### PUBLIC SECTOR HOSPITALS

Certain public sector hospitals provide on-the-job educational programs for nurses. For example, the Al-Kharj Riyadh Military Hospital’s Training Center for Nurses has a three and a half years educational program for nurses leading to an Associate degree. The program is accredited by the **Saudi Commission on Health Specialties** – the national accreditation body for higher level health education. In 1998, the program graduated 14 students and there are 12 enrolled students (male and female) in 1999. These students-nurses are paid a monthly stipend by the hospital. Despite the availability of a Training Center, Saudi nurses constitute less than 1% of the hospital’s nursing staff of 1,876 (1999 data).

#### MOH HEALTH INSTITUTES, COLLEGES, AND WORKSHOPS

**The Ministry of Health (MOH)** supervises both Health Institutes and Health Colleges.

##### **Health Institutes**

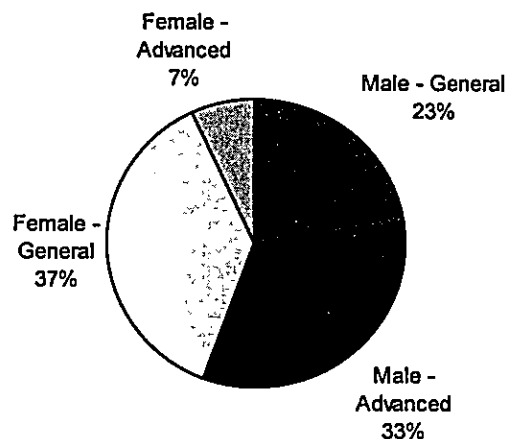
In 1997, the **MOH** operated 18 health institutes for boys and 26 health institutes for girls. Since 1995, the minimum admission requirement was elevated to high school diploma, scientific or literary section, with high Grade Point Average – A summary description of the educational system in Saudi Arabia is included in Appendix B.

Available statistics<sup>1</sup> indicate that the number of graduates doubled between 1995 and 1997, reaching a total of 1,506 of which 60% graduated from the General Nursing program and the remaining from the Advanced Nursing program. The latter was introduced in 1996. Available data also indicate that 55% of all graduates were males.

#### Graduates from Nursing Programs at MOH Institutes

|                   | 1993       | 1994     | 1995       | 1996         | 1997         |
|-------------------|------------|----------|------------|--------------|--------------|
| Male - General    | 262        | 0        | 237        | 268          | 341          |
| Male - Advanced   | 0          | 0        | 0          | 410          | 494          |
| Female - General  | 526        | 0        | 499        | 571          | 567          |
| Female - Advanced | 0          | 0        | 0          | 132          | 104          |
| <b>Total</b>      | <b>788</b> | <b>0</b> | <b>736</b> | <b>1,381</b> | <b>1,506</b> |

#### 1997 Distribution of Graduates in Nursing



There were no graduates in 1994 as the academic year was extended from six to seven semesters. No data is available in the public domain as to the distribution between Saudi and non-Saudi graduates.

<sup>1</sup> Annual Health Report of MOH, 1997 and Statistical Year Book of 1997, Ministry of Planning & National Economy.



## Health Colleges

In 1997, the MOH operated 7 health colleges for boys and 6 health colleges for girls. Minimum admission requirement is secondary school diploma (scientific section) or Health Institute diploma. The program starts with core scientific courses and intensive English over a one year period. Upon successful completion, the student follows a two-year program in nursing followed by a six-month compulsory practical training period. Upon completion of the practical training period, the student is awarded an Associate of Art degree in Health Sciences (Nursing).

**Nursing Students at MOH Health Colleges**

|                         | 1995       | 1996       | 1997       |
|-------------------------|------------|------------|------------|
| Male - General          | 70         | 86         | 198        |
| Male - Community Health | 82         | 92         | 66         |
| Female - General        | 94         | 97         | 168        |
| <b>Total</b>            | <b>246</b> | <b>275</b> | <b>432</b> |

The above enrollment figures indicate a 76% increase in the number of students between 1995 and 1997, reaching a total of 432. Of these, 61% are male and 85% follow the general Nursing program.

The quality of education however appears to be sub-standard due to the following:

- Relatively short training period, notably on-the-job training;
- Weak educational standards/ lack of proper evaluation;
- Low level of financing in recent years; and
- Perhaps somewhat dampened interest by the current Administration as the program was established by an earlier Administration.

In the past, it was easy for graduates to obtain a job within the Ministry of Health system. This is no longer the case; with the lower than desired level of skills acquired, candidates no longer stand much of a chance in competition with expatriate candidates, not even within **MOH** hospitals.

In 1997, **MOH** health centers (throughout the Kingdom) provided a total of 489 (1996: 272) quality assurance workshops to 7,562 nurses (1996: 4,095; 1995: 4,167), representing an arithmetic average of about 15 trainees per workshop (same ratio as in 1996). In the same year, 205 nurses (1996: 634; 1995: 905) attended maternal and childcare workshops.

#### RED CRESCENT TRAINING COURSES

The Red Crescent provides a first aid training course for medical students and staff. The course is considered one of the most advanced training courses in this field in the Kingdom.

#### PRIVATE SECTOR SEMINARS

A number of pharmaceutical companies and medical equipment suppliers provide *ad hoc* seminars to nurses and other allied health professionals.

#### CONTINUING EDUCATION

At least one foreign university offers further academic training for nurses and other health professionals. The University of Wales (Swansea) offers an MSc in Health Care Management by part-time out reach learning. The 18-month program is fully taught in Jeddah by Swansea faculty and is open for hospital/ clinic administrators, managers, doctors, dentists, nurses and paramedical personnel.

## **CULTURAL ASPECTS**

Female nurses graduating from **MOH Nursing Colleges** prefer to work in public sector hospitals where job requirements are not as stringent as those in private sector hospitals. For example, the washing of male patients by female nurses is not required in **MOH** hospitals. In addition, **MOH** hospitals do not insist on night shifts for Saudi female nurses. Saudi female nurse graduates therefore shy away from working in private sector hospitals and this is reflected by the low level of Saudi employment in that sector.

## **CONCLUSION**

The employment market for nurses in Saudi Arabia is relatively stable with limited growth over recent years. This market is served, to a large extent, by expatriates at a time when the demand for qualified and properly trained Saudi nurses is large compared to the supply. Although private sector educational institutions offering nursing programs are almost non-existent, public sector training centers and nursing programs are available to a certain extent but programs vary widely in quality. Not only are these programs tuition-free, but in certain cases students are paid stipends and/ or salaries (as is the case for university education and on-the-job training programs provided by a number of public sector hospitals). We find however that the number of Saudis seeking to join such educational programs, be they university-level programs or work-study program, is somewhat limited. This limitation is due to limited enrollment capacities as much as it is due to lack of participation by Saudi nationals.

The Saudization effort, it seems, is hampered by the limited number of specialized quality nurse training programs offered in Saudi Arabia, the information asymmetry that exists in the marketplace, and the local culture which does not look favorably on the nursing profession as well as “discourages” Saudi women from working night shifts and carrying out certain standard nurse functions. In addition to remuneration packages generally perceived as unattractive by national

labor, there is also a perceived limitation in career growth potential. Furthermore, many hospitals, notably military hospitals, insist on hiring Certified Registered Nurses from U.K., U.S., Canadian, Australian and other foreign Board of Nursing. Given that there is no such Board in Saudi Arabia and that Saudi nurses may find difficulty registering with such foreign-jurisdiction Boards, this limits their ability to find suitable employment and tends to discourage students from seeking a career in Nursing.

## **Section 6**

### **REGULATIONS AND ADMINISTRATIVE SYSTEM**

## Section 6

### REGULATIONS AND ADMINISTRATIVE SYSTEM

Accreditation of higher education programs in nursing is under the sole jurisdiction of the **Saudi Council for Health Specialties**, and universities wishing to offer such programs are required to obtain such accreditation. This involves submitting detailed description of programs and course offerings as well as faculty bio data.

Licensing requirements for private sector nurse education programs are not clearly established since there has not been a precedence yet, although the issuance of a license may well fall under the Ministry of Health jurisdiction. As for accreditation, and depending on the level of training, it may fall under the jurisdiction of the **Saudi Council for Health Specialties**. The Sebai Institute, which is in the initial stages of development, plans on obtaining the approval and endorsement of the following organizations – although it is not yet clear to which extent such approval/ endorsement is required by law and/ or administrative procedures:

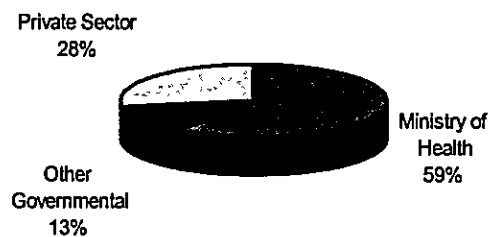
- Ministry of Health. Department of Health Education
- Ministry of Education
- General Organization for Technical Education and Vocational Training (GOTEVOT)
- Civil Service Bureau

## **APPENDIXES**

**APPENDIX A**  
**HOSPITALS IN THE KINGDOM**

The number of hospitals operating in the Kingdom increased by an annual compound rate of 2 percent over the 1992-1997 period to reach a total of 303 institutions as of end 1997. **Ministry of Health (MOH)** facilities accounted for 59 percent of all hospitals (or 180 hospitals) followed by private sector hospitals at 28 percent (84 hospitals) and other governmental hospitals at 13 percent. (39 hospitals).

**Sectorial Distribution of Hospitals**

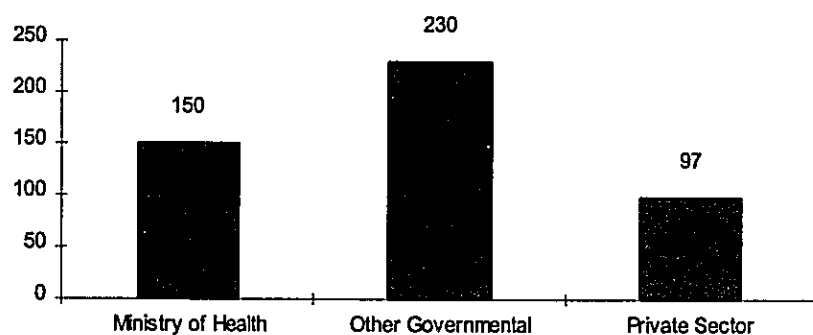


Bed-wise, **MOH** hospitals still come first with 61% of sector capacity, only other governmental hospitals occupy the second rank with 20% of setor capacity by virtue of their relatively larger size, the rest being the share of the private sector.

Other governmental hospitals have the largest average number of beds/ hospital (230 in 1997), being one and a half times as large as the average **MOH** hospital bedding capacity. Private sector hospitals tend to have the lowest average number of beds (97 in 1997).



**Average Number of Beds per Hospital, 1997**



Source: 1997 Annual report. MOH.

The highest growth in the number of institutions/ beds has been in the Other Governmental sector which witnessed a 4% annual compounded growth rate over the 1992-1997 period. The private sector came in second with a 3 percent growth. Tables A-1 and A-2 below illustrate the progression in the number of hospitals and beds over the 1992-1997 window.

**Table A-1: Hospital by Sectors**

| Sector             | 1992       | 1993       | 1994       | 1995       | 1996       | 1997       |
|--------------------|------------|------------|------------|------------|------------|------------|
| Ministry of Health | 170        | 174        | 173        | 175        | 176        | 180        |
| Other Governmental | 32         | 32         | 34         | 36         | 39         | 39         |
| Private Sector     | 72         | 75         | 72         | 74         | 75         | 84         |
| <b>Total</b>       | <b>274</b> | <b>281</b> | <b>279</b> | <b>285</b> | <b>290</b> | <b>303</b> |

**Table A-2: Beds by Sectors**

| Sector             | 1992          | 1993          | 1994          | 1995          | 1996          | 1997          |
|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Ministry of Health | 26,878        | 26,974        | 26,878        | 26,737        | 26,955        | 27,058        |
| Other Governmental | 7,285         | 7,338         | 8,357         | 8,563         | 8,794         | 8,970         |
| Private Sector     | 6,988         | 7,477         | 6,592         | 6,616         | 6,876         | 8,185         |
| <b>Total</b>       | <b>41,151</b> | <b>41,789</b> | <b>41,827</b> | <b>41,916</b> | <b>42,625</b> | <b>44,213</b> |

Source: 1996/ 1997 Annual Health Reports. MOH.

**APPENDIX B**  
**EDUCATIONAL SYSTEM IN SAUDI ARABIA**

**INTRODUCTION**

At the time the Kingdom of Saudi Arabia was founded in 1932, education was not accessible to everyone and limited to individualized instruction at religious schools in mosques in urban areas. These schools taught Islamic law and basic literacy skills. A little over 60 years later, Saudi Arabia now has a nation-wide educational system that provides free training from pre-school through university to all citizens. While the study of Islam remains at its core, the modern Saudi educational system provides quality instruction in diverse fields of modern and traditional arts and sciences. This diversity helps meet the Kingdom's growing need for highly-educated citizens to build on its rapid progress of the past few decades.

Formal primary education began in Saudi Arabia in the 1930s. By 1945, King Abdul Aziz Bin Abdul Rahman Al-Saud, the country's founder, had initiated an extensive program to establish schools in the Kingdom. Six years later, in 1951, the country had 226 schools with 29,887 students. In 1954, the Ministry of Education was established, headed by then Prince Fahd Bin Abdul Aziz as the first Minister of Education. The first university, now known as King Saud University, was founded in Riyadh in 1957.

Today, Saudi Arabia's nation-wide educational system comprises seven universities, 83 colleges and more than 18,000 schools. Open to every citizen, the system provides students with free education, books, and health services. A measure of the government's substantial commitment to this sector is the allocation of approximately 18 percent of expenditure, or 40.8 billion U.S. dollars, to education and human resources under the Sixth Development Plan (1995-2000).

Saudi Arabia prizes education because of its critical importance in developing the human potential of the country. Education is a central aspect of family and community life. Parents are deeply involved in their children's education, and the close links between home and school serve to reinforce the structure of the community and the nation.

As a result of the intensive educational programmes provided by the successive Development Plans illiteracy in Saudi Arabia has been reduced to below 20%. Expenditure on education is at one of the highest rates in the world, over 9% of Gross Domestic Product. According to World Bank figures the world average is around 5.08 percent.

## **GENERAL EDUCATION**

The objectives of Saudi educational policy are to ensure that education becomes more efficient, to meet the religious, economic and social needs of the country and to eradicate illiteracy among Saudi adults.

General education in the Kingdom consists of kindergarten, six years of primary school and three years each of intermediate and high school. The Ministry of Education sets overall standards for the country's educational system and also oversees special education for the handicapped. The General Presidency for Girls' Education administers the girls' schools and colleges, supervises kindergartens and nursery schools and sponsors literacy programs for females. The first school for girls in the Kingdom was built in 1964, and education is now available for girls throughout the country. Four million students, of both sexes (44% female increasing to more than 46% at the university level) are engaged in full-time education at all levels prior to university. They are catered for by 33,000 schools and hundreds of educational institutes, teaching centres and colleges with multiple specializations.

Students can attend either high schools offering programs in both the arts and sciences or vocational schools. In 1997, there were 888,000 students in intermediate schools and 499,000 students in high schools. Students' progress through high schools is determined by comprehensive exams conducted twice a year and supervised by the Ministry of Education.

The dramatic quantitative growth of the educational system since the introduction of the First Development Plan in 1970 has been more than matched by an improvement in the quality of education. One measure of this emphasis is that while the number of students in the educational system increased eleven fold between 1970 and 1997, the number of full-time teachers grew more than fourteen fold.

The Kingdom's ratio of 13.9 students to every teacher is one of the lowest in the world. The government, however, continues to work to improve educational standards. This has been achieved by raising the quality of teacher training programs, improving standards for evaluation of students and increasing the use of educational technology, principally by introducing computer science at the secondary level. The administration of the educational system has also been enhanced partly by delegating more authority to the regional boards.

As part of its efforts to make education available to Saudi students residing abroad, the Kingdom has established three educational institutions in the United States, Britain and Germany. Students attend kindergarten through 12th grade at these schools, receiving instruction in Islam and the Arabic language, in addition to the regular curriculum.

## **HIGHER EDUCATION**

Entering a new era of rapid development of the country's infrastructure and economy in the early 1970s, Saudi Arabia devoted special attention to fostering higher education. Established in 1975, the Ministry of Higher Education embarked

on a long-term master plan to enable the Saudi educational system to provide the highly trained manpower necessary to run the country's increasingly sophisticated economy.

One of the first objectives was to establish new institutes of higher education throughout the country and expand existing ones. By 1997, there were seven major universities (tertiary level) and 83 colleges. Another objective was to establish undergraduate and postgraduate programs in most disciplines at Saudi universities and colleges. As a result, Saudi students can now obtain degrees in almost any field within the country and, only if necessary, pursue specializations abroad. Every university student receives a monthly stipend of approximately SR1,000 (USD 270) per month throughout the period of study until graduation. For those living far away from their home towns the State provides accommodation and fares.

In 1993, the Saudi government introduced new provisions for the Higher Education Council and the University System. The objective is to further improve the efficiency of Saudi universities by offering programs in new fields, encouraging greater cooperation among Saudi institutes of higher learning and increasing involvement of the teaching staff in the operations of faculties.

Today, there are more than 237,000 students at Saudi universities and colleges, a dramatic improvement over the 7,000 students enrolled in 1970. Of that number, more than 108,000 are female students studying at five of the universities -- King Saud, King Abdul Aziz, King Faisal, Imam Muhammad Bin Saud and Umm Al-Qura -- that accept both male and female students, and also at 14 colleges set up exclusively for women. A total of more than 14,300 teachers is employed at Saudi universities and colleges.

The oldest university in the country is King Saud University in Riyadh. When it first opened in 1957, there were only nine instructors teaching 21 students. Since then, more than 50,000 students have graduated. The university accommodates

42,000 students in its faculties of art, science, commerce, engineering, agriculture, medicine, dentistry, nursing, education, computer science and information science. It offers doctorate programs in many fields and is noted for its schools of engineering and medicine.

The Islamic University at Madinah, founded in 1961, serves as a center for Islamic studies and for teaching Islamic culture. It also offers programs in Arabic literature and the arts and the sciences. More than 10,000 students have graduated from the university, including non-Saudis from 105 countries. Imam Muhammad Bin Saud University in Riyadh and Umm Al-Qura University in Makkah offer programs in the various arts and sciences, including engineering, architecture, science and technology and education. Both are highly regarded for their Islamic law, history and Arabic literature. Imam Muhammad Bin Saud University has branches in the United States, Japan, Indonesia, Mauritania, Djibouti and United Arab Emirates offering programs in Islamic and Arabic studies.

The King Fahd University of Petroleum and Minerals, founded in Dhahran in 1963, enrolls approximately 6,600 students. The university offers programs in the modern sciences, including engineering, mathematical sciences, finance, economics and management and marketing. Its research institute conducts studies in a variety of fields, notably in petroleum technology and environmental issues.

King Abdul Aziz University in Jeddah was founded in 1967 by a group of Saudi businessmen who understood the importance of education in national development. The university developed so rapidly that in 1971, the founders petitioned the government to assume responsibility for its operation. Since then it has expanded considerably and now has more than 38,500 students enrolled in undergraduate and graduate programs in various fields of study.

King Faisal University, with two campuses in Dammam and Hofuf, offers a range of programs, including medicine, administrative science and architecture and urban planning. Founded in 1975, the university is famous for its outstanding

agricultural and veterinary sciences programs. It has educational and experimental farms in Hofuf and conducts advanced research in agriculture and animal husbandry.

To complement their studies in universities in the Kingdom, Saudi students have the opportunity to pursue graduate and postgraduate degrees in specialized fields abroad. Supported by government scholarships, thousands of Saudi students are enrolled in universities outside the Kingdom, mainly in the United States.

One of the institutions that has been instrumental in the development of higher education in Saudi Arabia is the King Abdul Aziz City for Science and Technology. Dedicated to research in various fields, including education, it helps formulate the national policy for the development of science and technology, conducts applied scientific research and assists the private sector in research and development.

## **SPECIAL AND ADULT EDUCATION**

The Special Education Department of the Ministry of Education operates schools for the blind, deaf and the physically and mentally handicapped. Currently, more than 1,000 teachers and support staff provide training for approximately 4,550 students at more than 30 such schools. Several institutes for handicapped children have been established and more are under construction. Other institutes care for older handicapped people. The special schools are part of the Kingdom's effort to encourage every individual to reach his or her full potential.

Another important sector of Saudi Arabia's educational program is adult education. With its commitment to making education available to all and eradicating illiteracy, the Kingdom has established 2,343 adult education centers. More than 113,000 citizens were enrolled in such programs in 1997. In isolated rural areas, the government conducts intensive three-month adult education courses during the summer.

## TRAINING

The Kingdom has identified technical and administrative training as an essential sector of education to support the country's economic and social development. Graduates of training programs in health care, agriculture, teaching and other areas are steadily filling positions at industrial, agricultural and social institutions throughout the country.

The General Organization for Technical Education and Vocational Training, along with the Ministry of Labor and Social Affairs, operates most of the Kingdom's vocational training centers and higher institutes of technical education. The Ministry of Education operates vocational and secondary schools, and several other government agencies run institutes or training centers in their particular specialties.

The Royal Technical Institute at Riyadh, and the Hofuf Technical Training School emphasize machine tooling, metal working, electromechanics and auto mechanics. The General Organization for Technical Education and Vocational Training in Riyadh also offers young Saudis the opportunity to learn skills that are in high demand. Hundreds of young Saudis every year participate in training programs in a variety of fields, from electronics to maintenance of industrial machinery. Other vocational and technical schools have also been established in Jeddah, Madinah, Abha, Taif, Unaizah and Dammam.

Another important institution, designed to address the country's shortage of administrative personnel, is the Institute for Public Administration, established in Riyadh in 1961 as a semi-independent public agency. The institute provides basic as well as in-service training for civil servants, carries out research and assists government agencies in administration, communication and computer sciences. Today, it has branches in Dammam and Jeddah, and a special branch in Riyadh for training women. Currently, it enrolls over 13,000 students in courses in



administration, law, accounting, computer science, maintenance, personnel management, secretarial skills and management planning.

To build upon the advances Saudi Arabia has made in the field of education and human resource development, the Sixth Development Plan (1995-99) calls for greater efforts to improve the quality of general and higher education and vocational training. It also focuses on enabling Saudi schools, universities and training facilities to better meet the future needs of the country's increasingly sophisticated economy by offering quality education in advanced fields of specialization.

---

<sup>1</sup> Annual Report of Ministry of Higher Education of 1999, Annual Health Report of 1997 of Ministry of Health.





