

Chapter 6

Securing Medical Personnel: Cases of Two Source Countries and Two Destination Countries¹

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Abstract

The shortage in medical personnel has become a critical problem for developing countries to expand medical service delivered towards the poor. In order to highlight driving forces determining the international allocation of medical personnel, the cases of four countries, i.e. the Philippines and South Africa as source countries and Saudi Arabia and the United Kingdom as destination countries, are looked into. A conclusion from this review is that changes in demand generated in major destination countries determine international allocation of medical personnel at least in the short run. Major destination countries often alter their policies on how many and from where they accept supplies of medical personnel, and source countries are required to respond to the changes in demand accordingly.

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Introduction

The shortage in medical personnel has become a critical problem for developing countries to expand medical service to the poor. There are two aspects for the issue to be critical, the one related to the demand for and the other related to the supply of medical personnel.

The demand for medical personnel is enhanced in developing countries because of persistently broad infection of deadly diseases such as HIV/AIDS, tuberculosis and malaria, and of intensified efforts to fight against the diseases made by the international society. The enlarged endeavor carried out by the international society is symbolized by the Millennium Development Goals which resulted from the United Nations Millennium Summit in 2000 and which featured improvement in health of the poor and the establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) in 2002. As a result of those efforts a great amount of fund has been raised and necessary medicines became available, as shown by other chapters of this book. However, the number of medical personnel served in developing countries did not keep up with the increasing availability of fund and medicines for the infectious diseases³.

The shortage in the medical personnel in developing countries is further worsened by the problem lying in the supply side of medical personnel, which is the main topic of this chapter. There is a long-run trend towards frequent international labor migration due to the decline in transportation costs and massive information flow over the globe. On the one hand, the trend was set back by the September 11 terrorist attacks followed by a series of conservative actions against foreigners. On the other hand, the consecutive expansion in the number of countries affiliated with the European Union and its principle of free movements in people within its territory have facilitated outflow in people living in low income countries to high income countries inside the EU seeking for higher earnings. Medical personnel are among the persons left low income countries for high income countries.

The shortage in medical personnel in developing countries is driven by another

³ It is known that the medical personnel is critically insufficient to take care of people living with HIV/AIDS, now that the antiretroviral became available more than before in developing countries thanks to GFATM and other initiatives supplying for the medicine (WHO [2006: 144]; Dräger, Gedik and Dal Poz [2006]).

steady momentum, which is the aging in high income countries. Due to the decrease in fertility in developed countries, elder people's share of population is steadily increasing, and the aging boosts demands for medical service. However, the aging results in the shortage in young medical personnel as well. Thus, there are sufficient reasons why medical personnel move out of low income countries towards high income countries.

This chapter describes momentums for international migration of medical personnel grown in both origin and destination countries and responses of the governments of the countries to maximize the national welfare through this phenomenon. On the part of source countries, both benefits and costs are entailed by the outflow of medical personnel. That is, the remittance given by them helps the national income increase in terms of foreign currencies, while the labor shortage at medical facilities in the source country deteriorates the level of health service for its nationals.

In this chapter a couple of major source countries and another couple of major destination countries are investigated as case studies to understand the momentum for and responses to international migration of medical personnel. The first two countries are the Philippines and South Africa, and the other two are Saudi Arabia and the United Kingdom. As elaborated shortly, they are typical and symbolic countries as either an source or destination country.

The rest of this chapter is organized as follows. The section 1 gives a general overview of the problems caused by international migration of medical personnel in the world. The following four sections describe the problems which each of the above countries faces and the policies which the governments of the countries have adopted and implemented to mitigate the problems. The final section concludes.

1. Unequal Allocation of Medical Personnel in the World

It is widely known that low income countries face poverty in health, which is symbolized by low life expectancy. This problem has been deep-seated and long challenged by people in low income countries and international society. However, the situation might be seriously jeopardized by the outflow of medical personnel from low income countries towards high income countries (Ahmad [2005], Bach [2004], Kapur and McHale [2005: 25-29], Mejia [1978]).

Table 1. Indicators on Resources for Medical Services by Region

	Physicians per 1000 people	Hospital beds per 1000 people	Births attended by skilled health staff (%)
East and South Asia	0.895 (23)	2.710 (15)	57.4 (22)
Commonwealth of Independent States	3.366 (11)	7.164 (11)	93.6 (9)
Europe	3.010 (35)	5.792 (34)	99.2 (17)
Middle East and North Africa	1.479 (20)	2.379 (19)	80.1 (11)
Sub-Saharan Africa	0.204 (46)	0.907 (3)	52.0 (43)
Canada and USA	2.200 (2)	3.500 (2)	98.0 (1)
Latin America and Caribbean	1.550 (20)	2.410 (31)	85.3 (27)
Oceania	1.123 (7)	4.014 (7)	82.2 (5)

Note: The figures are regional averages of variables in the latest year when the value is available in the range of years between 2000 and 2004. The numbers in parentheses indicate the sample size for each average.

Source: World Bank [2006b].

Table 1 indicates resources for medical services available by region in the world. It is evident that resources in terms of human and physical capitals are more affluent in CIS, Europe and North America⁴. In these regions more than two physicians are available to every thousand people, and more than 90% of births are given in company with skilled health staff. In addition more than three hospital beds are ready for every thousand people.

By contrast, sub-Saharan Africa is the worst in all the three indicators. Roughly speaking, only one physician is available to every fifteen thousand people while only one hospital bed is reserved for a thousand people. Only a half of births are attended by skilled health staff. East and South Asia is the second worst, followed by Oceania and Middle East and North Africa. However, the inferiority of sub-Saharan Africa is striking.

It is believed that the shortage in human capital for medical service in sub-Saharan Africa is partly due to outflow of medical personnel towards developed countries. WHO [2006: 100] cites OECD [2005] and demonstrates that a high proportion of medical doctors trained in sub-Saharan Africa work in developed countries. It displays the numbers of doctors in ten sub-Sahara African countries and those working

⁴ Note that Mexico is categorized under “Latin America and Caribbean”.

in eight OECD countries in Europe and North America⁵. The number of doctors trained in the ten sub-Sahara African countries⁶ and are staying in the same country is 82,417, while that of doctors trained in sub-Saharan African and working in the OECD countries is 18,556, which makes up about 23% of the number of doctors remaining in Africa. WHO [2006: 100] also compile its data on nurses and midwives trained in nineteen sub-Sahara African countries⁷. According to it, there are 616,204 nurses and midwives trained and remaining in sub-Saharan Africa, while 29,597 nurses and midwives trained in Africa and working in seven OECD countries⁸. The ratio of the latter to the former is around 5%. Though the figure is lower than the counterpart for medical doctors, there are some countries where the ratio is high. The number of Zimbabwean nurses and midwives working in seven OECD countries is 34% of the same number of nurses and midwives working in Zimbabwe. The same ratios are 18% for Lesotho and Mauritius, and 13% for Ghana. Thus, it is apparent that the outflow of medical personnel is substantial for some sub-Sahara African countries, and that it is potentially highly harmful to the health service in the countries where a massive outflow of medical personnel occurs.

In theory educated emigration may benefit to augment total educated labor force remaining in the origin country. The opportunity to emigrate increases the returns to education and leads more people to invest in education with expectation of emigration. However, only a part of educated people will succeed in emigration. Then, the amount of human capital of the whole economy increases if the loss in human capital due to the emigration is smaller than the gain in human capital due to the rise in expected returns to education. This effect is called “brain gain” by contrast with brain drain (Beine, Docquier and Rapoport [2001], Mountford [1997], World Bank [2006a: 68]). However, there is not enough evidence to the brain gain effect outweighs the brain drain effect. Therefore, it is still believed that outflow of medical personnel from developing

⁵ They are Australia, Canada, Finland, France, Germany, Portugal, United Kingdom, and United States.

⁶ The countries are Angola, Cameroon, Ethiopia, Ghana, Mozambique, Nigeria, South Africa, Uganda, United Republic of Tanzania, and Zimbabwe.

⁷ The countries are Angola, Botswana, Cameroon, Ethiopia, Ghana, Guinea-Bissau, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

⁸ The countries are Canada, Denmark, Finland, Ireland, Portugal, United Kingdom, and

countries is detrimental to availability of medical personnel in a source country (WHO [2006]).

2. The Philippines: An Ambitious Supplier of Medical Personnel to the World

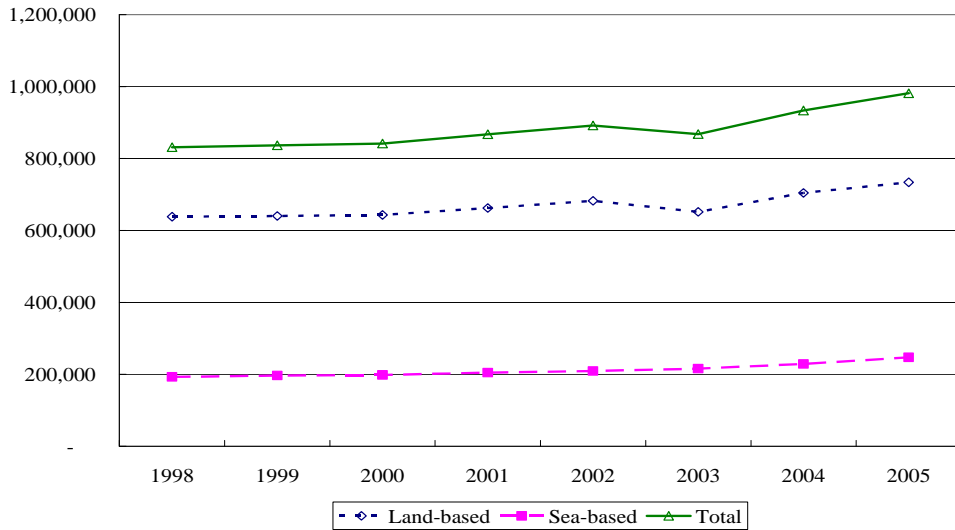
The following four sections are case studies highlighting four distinct countries which are deeply involved in international migration of medical personnel: the Philippines, South Africa, Saudi Arabia and the United Kingdom. The former two are known as source countries, while the latter two host countries of medical personnel. The characters, mechanisms, environments and policies affecting migration of medical personnel are described in turn below.

The Philippines has been a leading source country of labor force in Southeast Asia for decades (Catholic Institute for International Relations [1987: 13-19], Sagalla [1988]). It is one of the best organized developing countries in terms of administration of recruiting agencies and care about its citizens working abroad through diplomatic missions located abroad (Abella [1997: 32], ILO [1988], UNESCAP [1987: 156-202]). Thus, it is natural that it is also a leading country sending medical personnel to the world (Yamada [2004, 2006])⁹. Since there are little cultural restrictions for the Filipino women on working abroad, which are distinct from those prevailing over many Muslim societies, female nurses and midwives are greatly sent abroad from the Philippines.

United States.

⁹ Emigration of medical personnel dates back to the year 1965 when the US Immigration Act abolished the national origin quota system. Filipino doctors, nurses, dental technicians and dietitians took advantage of it to immigrate to the United States (Catholic Institute for International Relations [1987: 17]).

Figure 1. Annual outflow of Filipino workers (Unit: Person)



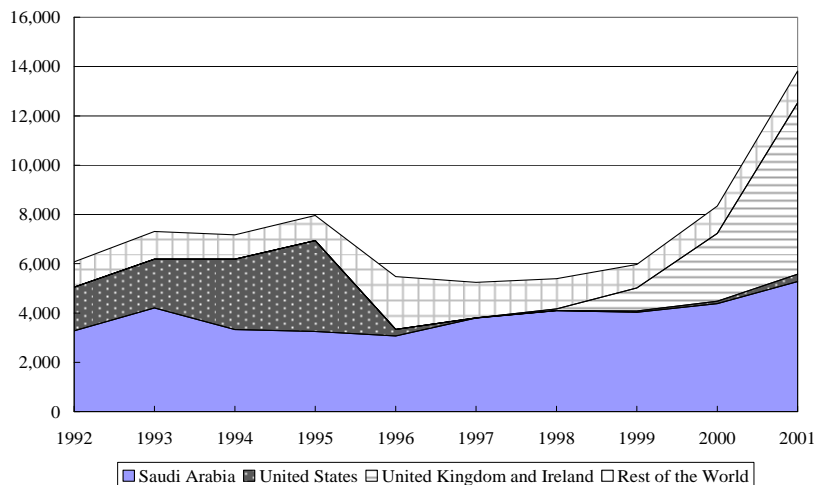
Source: A web-site of the Philippine Overseas Employment Administration (POEA): (<http://www.poea.gov.ph/stats/2005deployment.xls>).

Figure 1 shows that the scale of annual outflow of Filipino workers is as great as one million persons in 2005. An upward-sloping trend is apparent in the number of both land-based and sea-based migrants. The government of the Philippines has an agency which manages solely overseas employment of the Filipino, named the Philippine Overseas Employment Administration (POEA). POEA advertises job opening abroad; supervises recruitment agencies; and checks contracts between employers abroad and Filipino workers before the workers leave the country (Achacoso [1987]). The Philippines emphasizes the role of overseas employment for its economic development more than its neighboring countries. Therefore, the government of the Philippines, in general, has taken better care of its workers than ordinary labor-exporting countries.

Medical personnel working in high income countries are an important part of overseas employment in destination countries. That is particularly apparent in some countries whose population pyramid is skewed for elder people due to a decrease in young generation, and whose income is high enough for physically demanding jobs such as nurses and caregivers to become unattractive occupations. In the meantime, the Filipino workers have shown advantages in engaging in occupations which take care of people, such as housemaids and entertainers in addition to nurses, midwives and

caregivers. Thus, expanding demands for medical personnel in high income countries opens up favorable prospects of a new employment opportunity for the Filipino.

Figure 2. Outflow of temporarily migrating Filipino nurses (Unit: Person)



Original Data: Bureau of Labor and Employment Statistics, the Philippines.
Source: Chalamwong [2005], Table 12.16.

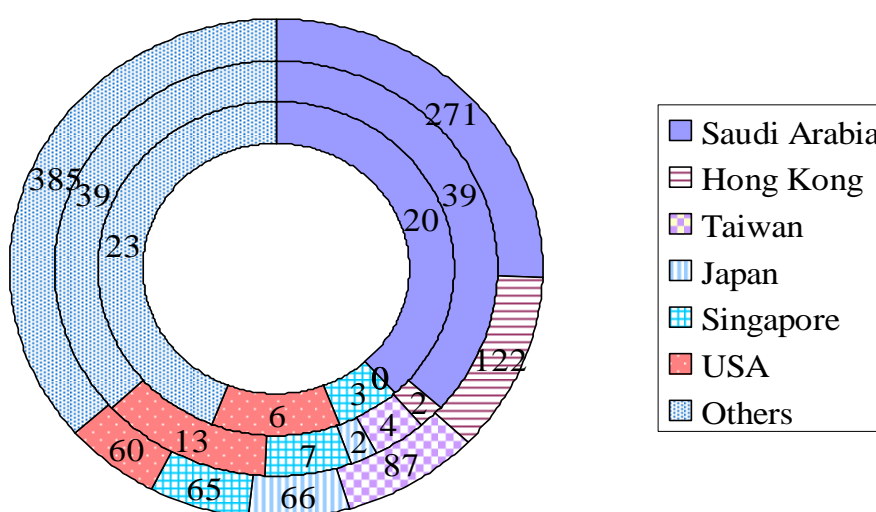
Figure 2 demonstrates the scale of migration of Filipino nurses by destination country for 1992-2001¹⁰. The overall trend in the number of Filipino nurses going abroad is upward-sloping except for a drop in 1996 and consecutive stagnation for 1997-98. The drop is solely explained by a sudden stop of reception of the Filipino nurses by the United States. The annual outflow of Filipino nurses departing for the United States had increased and amounted to around three thousand persons in 1995. The movement was, however, almost terminated in 1996, and the outflow of nurses from the Philippines decreased almost as much as the drop in nurses heading for the United States. On the other hand, the demand for Filipino nurses in the United Kingdom has grown since 1999. The outflow to the United Kingdom was a little greater than six thousand persons, and the United Kingdom turned out to be the greatest destination for nurses to head for. By contrast, Saudi Arabia is a steady absorber of the Filipino nurses

¹⁰ The data after 2001 is not available, probably because of the reason described in a later part of the section. For information, the Department of Labor and Employment of the Philippines reported on December 16, 2004 that 4,119 Filipino nurses departed for abroad in the first half of 2004 (<http://www.dole.gov.ph/news/print.asp?id=N000001160>). This is the latest information to this author about the number of Filipino nurses leaving for abroad.

and continuously receives 4000-5000 nurses with little fluctuation. Saudi Arabia bolsters the demand for Filipino nurses working abroad, while those of other destination countries are more capricious.

Figure 3 confirms the significance of Saudi Arabia as a destination of medical personnel. The figure is derived from a sample survey conducted by the National Statistics Office (NSO) of the Philippines every year with overseas Filipinos, which reflects the stock of overseas Filipino workers while Figure 2 shows the flow of it every year. Figure 3 reveals that the Filipino living in Saudi Arabia made up a quarter of total number of overseas Filipino in 2002. The share of Saudi Arabia as the country to work is greater for “professionals”. Furthermore, the importance of the country as a destination is more accentuated for medical personnel defined as “life science and health professionals”. Twenty thousand Filipino medical personnel work in Saudi Arabia out of fifty-two thousand Filipino medical personnel working abroad. The share of Filipino medical personnel living in Saudi Arabia to total overseas Filipino medical personnel reaches 38.5%. This figure looks very impressive in comparison with the same share of USA of 11.5% (Figure 3).

Figure 3. Number of Overseas Filipinos by Destination, 2002 (Unit: thousand)
(Outer: Total; Middle: Professionals; Inner: Life Science and Health Professionals)



Source: National Statistics Office (NSO), 2002 *Survey on Overseas Filipinos*, Manila: NSO, 2003.

In the meantime, there has been a deep-seated concern that the tendency of Filipino nurses to seek employment opportunities abroad results in the shortage in medical personnel in hospitals in the Philippines and jeopardizes health of the Filipino. The concern is natural for such a country experiencing a massive outflow of medical personnel as the Philippines and common to any source countries of medical personnel in the world. There are many casual observations testifying the problem. One of the most impressive cautions in the problem was given by Jean Marc Olive, the country representative of the World Health Organization (WHO) in the Philippines in September 2005¹¹. He worried about the acceleration of the problem and cautioned the Philippines to take “a wide-ranging solution” for filling a gap in benefits for work between the Philippines and destination countries.

The shortage in medical personnel in the Philippines has been a hot issue. There was a symbolic exchange in views took place between the Philippine Nurse Association (PNA) and the Department of Labor and Employment (DOLE) of the Philippines in November 2003. PNA stated that “the country is facing a shortage of nurses in two years” and the Acting Secretary of DOLE immediately responded that “We have enough nurses for the health sector”.¹² Such exchanges in opinions and views have been repeated by now. As this debate was heated, the data of outflow of Filipino nurses became unavailable as widely as before. Therefore, it becomes harder to discuss this issue, based on exact figures of migrating Filipino nurses which were available in the past. This seems to testify how touchy this issue is in the Philippines.

3. South Africa: A Supplier Receiving Compensation

The shortage in medical personnel is most serious in sub-Saharan Africa as shown in the section 1. Therefore, there are lively discussions in order to find solutions to the problem (Physicians for Human Rights [2004], WHO [2004]). The country sending medical doctors, nurses and midwives the most in sub-Saharan Africa is South

¹¹ His statement was taken up by some Medias such as Balita in the Philippines (<http://ofw.balita.ph/html/article.php/20050921004055668>) and Mainichi Shimbun in Japan on September 21-22, 2005.

¹² See a news article by the DOLE on November 12, 2003 (<http://www.dole.gov.ph/news/print.asp?id=N000001030>).

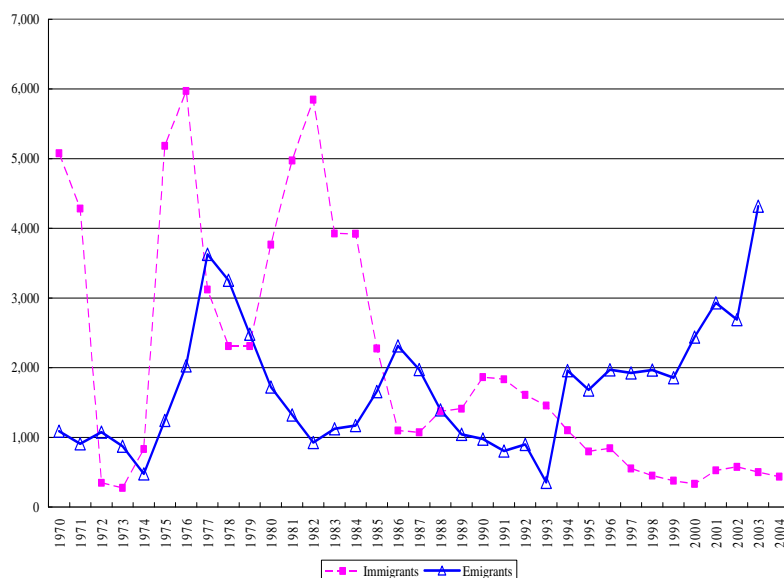
Africa (WHO [2006: 100]). Hence, the case of South Africa is reviewed in this section.

South Africa is known as a highly diversified society. The country is one of the most advanced countries in science and technology in the continent, while poverty is still a serious problem throughout the country as well as spread of HIV/AIDS. Workers with high technology participate in international labor markets where their skills are most effectively utilized and highly rewarded (*Economist* [2005], Kahn et al. [2004]). This tendency is applicable to medical personnel, too. As a result, high percentages of medical doctors, nurses and midwives trained in South Africa go abroad to work abroad and earn more income, as mentioned above. Hence skilled medical personnel are in short supply throughout the country, and this issue becomes very serious particularly in rural areas (Padarath, Ntuli and Berthiaume [2004], Paton [2006]). The shortage in skilled workers is recognized by the government of South Africa as a critical problem for the country to develop further, so that the government has launched the Joint Initiative for Priority Skills Acquisition (JIPSA) in 2006, and requests all stakeholders such as bilateral and multilateral donors to participate in this initiative. However, the first priority is placed on engineers and artisans to build infrastructure, and “high-level planning and management skills in the public health and education” are planned to be included in the second phase of JIPSA (Mantashe [2006]).

A feature which distinguishes South Africa from other source countries of medical personnel is that the country is richer than neighboring countries so that the shortage in medical personnel is partly alleviated by inflow of medical personnel from lower income countries (*Economist* [2005]). This compensating inflow may deteriorate the shortage problem in medical personnel in neighboring countries. Thus, orderly recruitment becomes the norm of the government of South Africa. The country is a signatory of the Commonwealth Code of Practice for the International Recruitment of Health Workers (Padarath, Ntuli and Berthiaume [2004: 302], WHO [2006: 104-105]). Moreover, the country released the “Policy on Recruitment and Employment of Foreign Health Professionals in the Republic of South Africa” (National Department of Health [2006]). Thus, disorderly recruitment of foreign health workers is strongly discouraged by the government, though the policy penetrates to rural areas not as deeply as to urban areas in the country. The government maintains bilateral agreements with Cuba, Iran and

Tunisia for orderly recruitment of health workers from the three countries¹³. The agreement with Cuba has been maintained since 1996 (Mine [1996: 220]). In addition, there is another bilateral agreement with the United Kingdom on both outflow and inflow of medical personnel, which was concluded in 2003. An evaluation of this agreement was made in April 2006, and the evaluation was positive¹⁴.

Figure 4. Trends in immigration and emigration in South Africa (Unit: person)

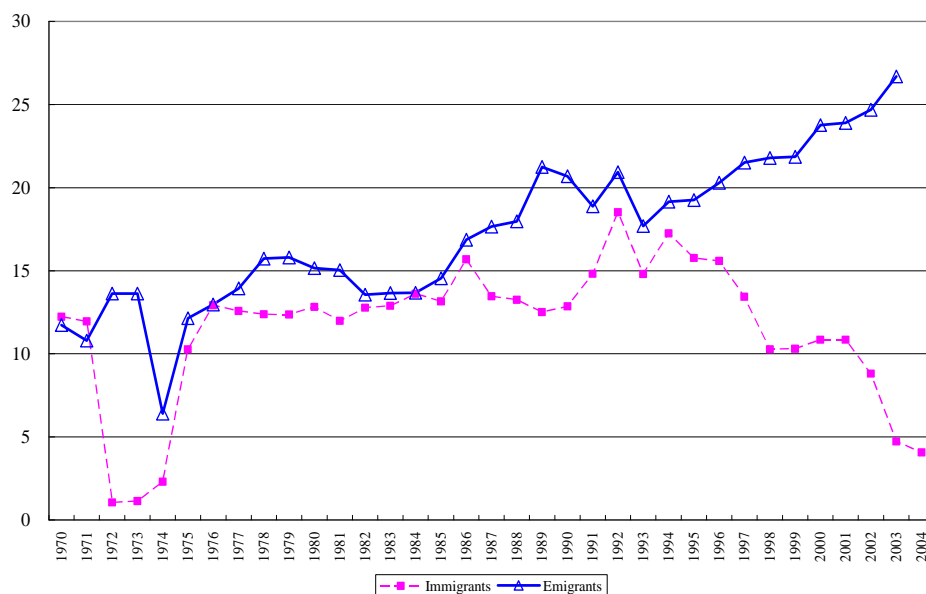


Source: Simelane [1999]; Statistics South Africa (SSA), *Documented Migration*, Pretoria: SSA, various issues; SSA, *Bulletin of Statistics*, Vol. 39, No. 4, December 2005.

¹³ This information was given by Ms. T. R. Mdlalose (Director, Human Resource Stakeholder Relations and Management, Department of Health) and Mrs. Gcinile Buthelezi (Director, Human Resource Policy Research and Planning, Department of Health) on December 12, 2006 at the Department of Health, Republic of South Africa.

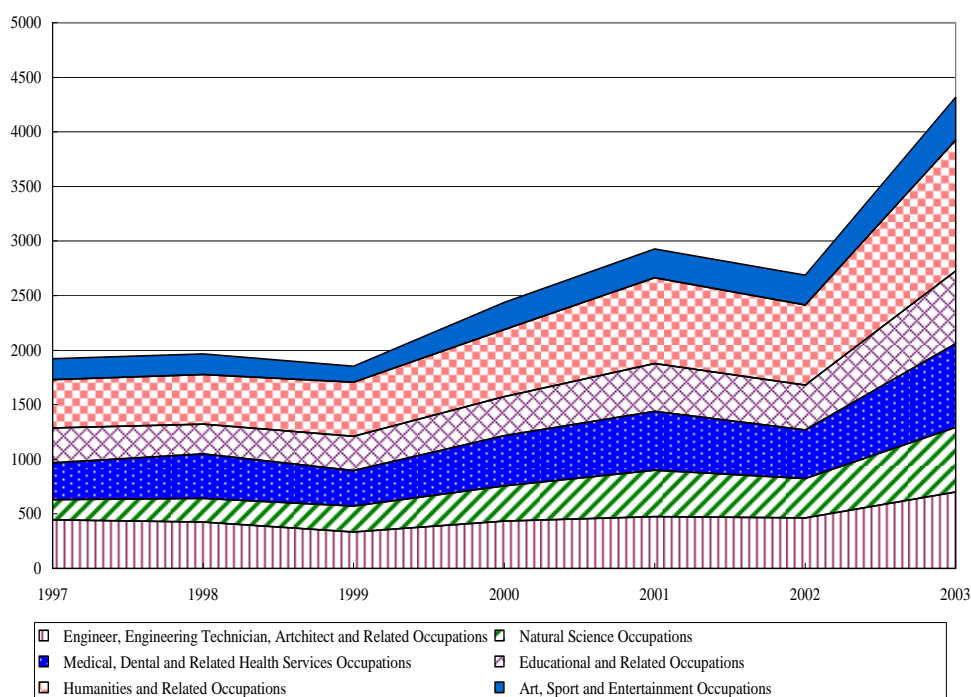
¹⁴ The source is the same as the previous footnote.

Figure 5. Trends in ratio of professionals and semi-professionals to total migration
(Unit: %)



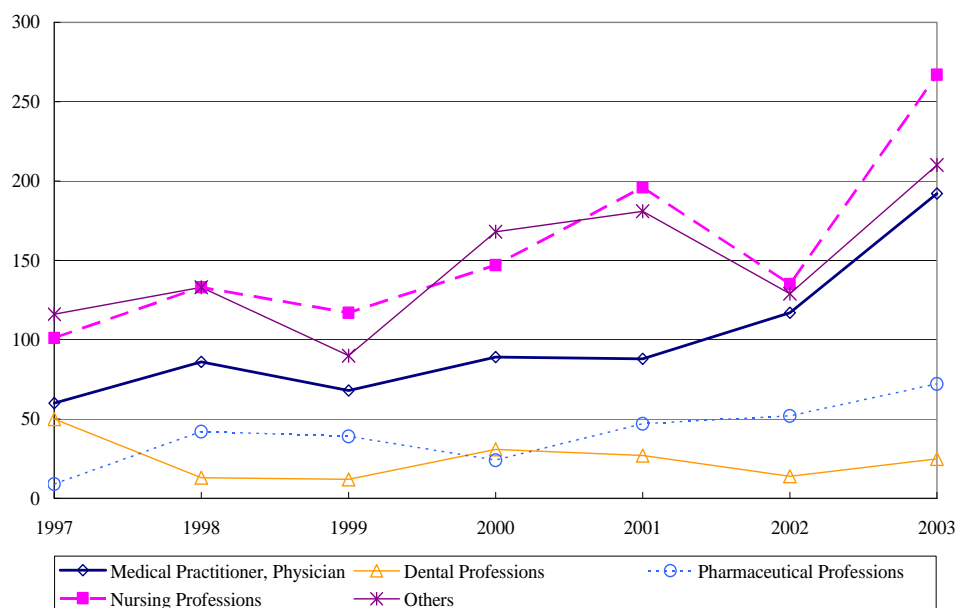
Source: Statistics South Africa (SSA), *Documented Migration*, Pretoria: SSA, various issues.

Figure 6. Structure of Emigrating “Professional and Semi-professional and Technical” Occupations (Unit:Person)



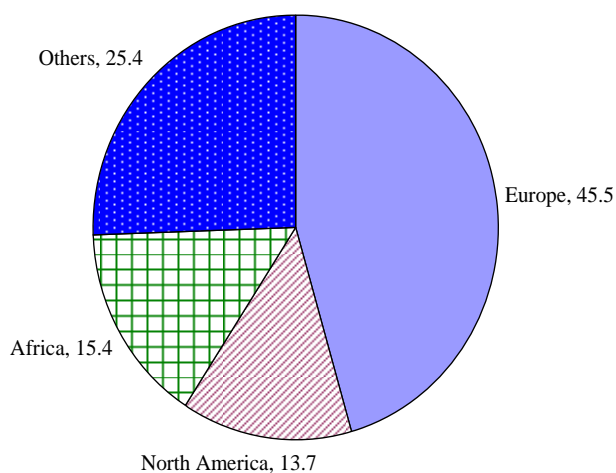
Source: The same as Figure 5.

Figure 7. Outflow of Medical Personnel from South Africa (Unit: person)



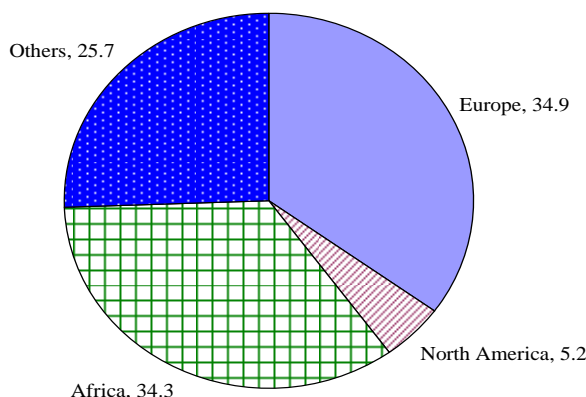
Source: The same as Figure 5.

Figure 8. Distribution in Outflow of Professional and Semi-professional and Technical Occupations by Destination in 2003 (Unit: %)



Source: Statistics South Africa (SSA), *Documented Migration, 2003*, Pretoria: SSA, 2005.

Figure 9. Distribution in Inflow of Professional and Semi-professional and Technical Occupations by Origin in 2003 (Unit: %)



Source: The same as Figure 8.

The data of emigration from and immigration to South Africa are collected by the Department of Home Affairs¹⁵. Figure 4 displays that immigration and emigration are negatively associated. There are an upward trend in emigration and a downward trend in immigration since the 1990s. It is noticeable that the share of “professionals and semi-professionals” in total emigration has increased during the same period (Figure 5).

As shown shortly, the distribution by destination in outflow of “professional and semi-professional and technical occupations” is available, while that for finer occupational categories is unavailable. Therefore, it is meaningful to study the structure in emigrants of sub-categories of “professional and semi-professional and technical occupations” by destination. As is apparent in Figure 6, the composition among sub-categories of occupations had been stable for 1997-2003¹⁶. Figure 7 demonstrates that the number of emigrating medical doctors and nurses has increased for 1997-2003.

Figures 8 and 9 display the distributions by region in the number of emigrating and immigrating “professional and semi-professional and technical occupations” in

¹⁵ It is believed that the data are seriously underestimated. See Brown, Kaplan and Meyer [2002].

¹⁶ The data has not been collected since 2003 till 2006 because of an institutional change, which was recovered in 2006. See Statistics South Africa [2004, 2006].

2003¹⁷, respectively. Those going to and returning from Europe are a majority among “professional and semi-professional and technical” migrants. Though quite a few skilled workers head for North America, only a moderate number of skilled workers come from North America. Meanwhile, South Africa receives as many African professionals and technical workers as those from Europe (Figure 9). Africa’s share of immigrating professionals and technical workers is disproportionately higher than Africa’s share of emigrating professionals and technical workers. This feature is harmonious with the casual observation that South Africa compensates emigrating medical personnel with incoming doctors and nurses from neighboring African countries.

In sum, South Africa is in the middle between extremely high income countries and low income countries. Though a part of medical personnel are taken by higher income countries, the country takes medical personnel back from lower income countries. Those unilateral flows in medical personnel from lower income countries to higher income countries are driven from market forces, but can be mitigated by government interventions such as through bilateral agreements and code of conducts.

4. Saudi Arabia: A Constant but Reluctant Absorber

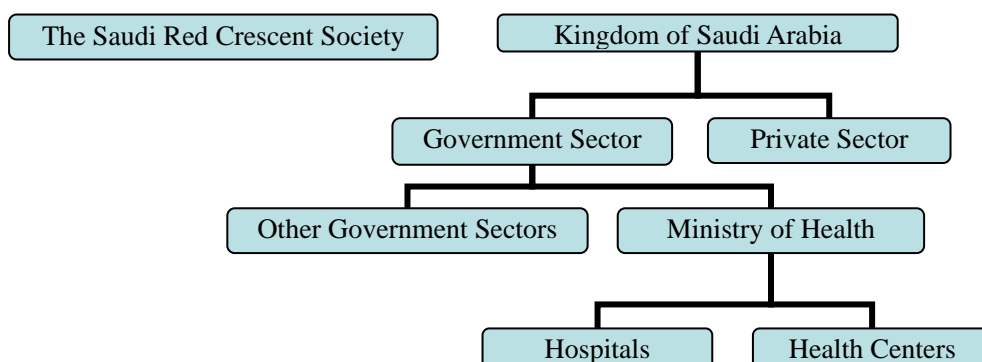
Saudi Arabia has been a favorite destination for Asian workers since large reserve of petroleum was discovered in the country. As a spacious and resource-rich, but labor-poor country Saudi Arabia has attracted a large number of contract workers except for the period of the Gulf War in 1991. Because of the small number of population and low labor participation ratio particularly for women, Saudi Arabia has generated steady labor demands for foreign workers¹⁸. Medical service is typical in terms of the country’s dependence on foreign manpower.

The data of medical personnel in Saudi Arabia are looked into in detail below. Before doing so, the structure of health institutions in Saudi Arabia is clarified according to Figure 10.

¹⁷ Features of the data in 2003 are generally applicable to the data for different years.

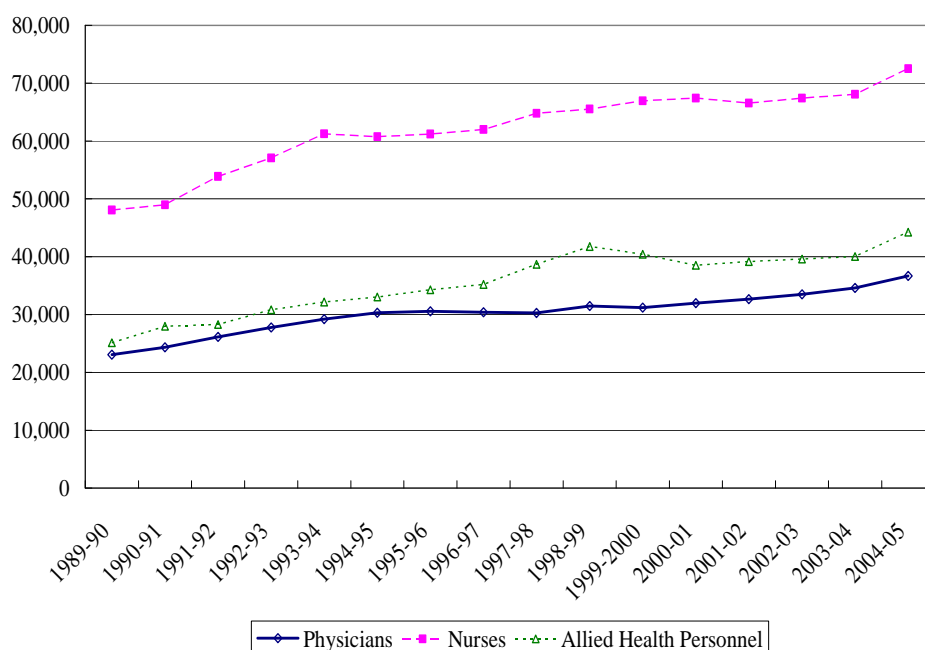
¹⁸ A counteracting factor is high fertility rate. The fertility rate defined as the number of infants per woman is 6.2 in Saudi Arabia, while the same figures are 4.1 for all Arab countries and 3.1 for all developing countries for 1995-2000 (Ramady [2005: 354]).

Figure 10. Structure of Health Related Institutions in Saudi Arabia



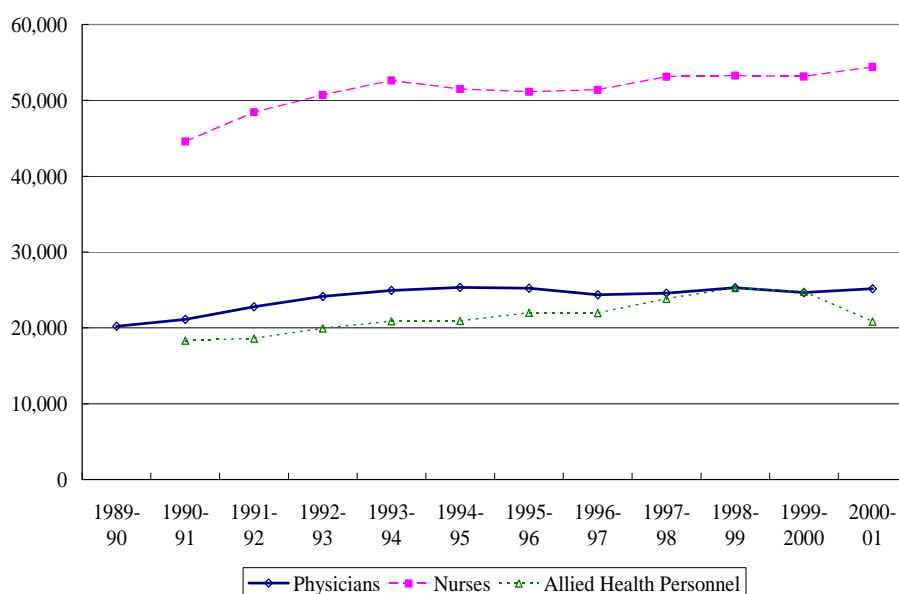
Note: This figure is drawn according to the description on the system of health related institutions in Chapter 4 of Kingdom of Saudi Arabia [2004].

Figure 11. Trends in Number of Medical Personnel Working for the Kingdom of Saudi Arabia (Unit: person)



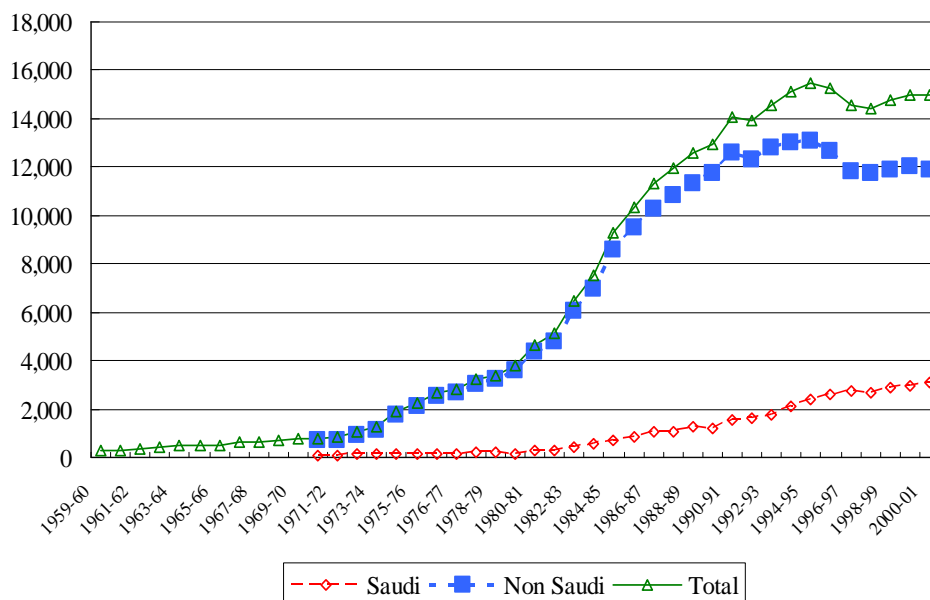
Source: (1989/90-2000/01) Kingdom of Saudi Arabia, Ministry of Economy and Planning, Central Department of Statistics, *Statistical Yearbook*, Various years; (2001/02-2004/05) SAMA [2005].

Figure 12. Trends in Number of Non-Saudi Medical Personnel Working for the Kingdom of Saudi Arabia (Unit: person)



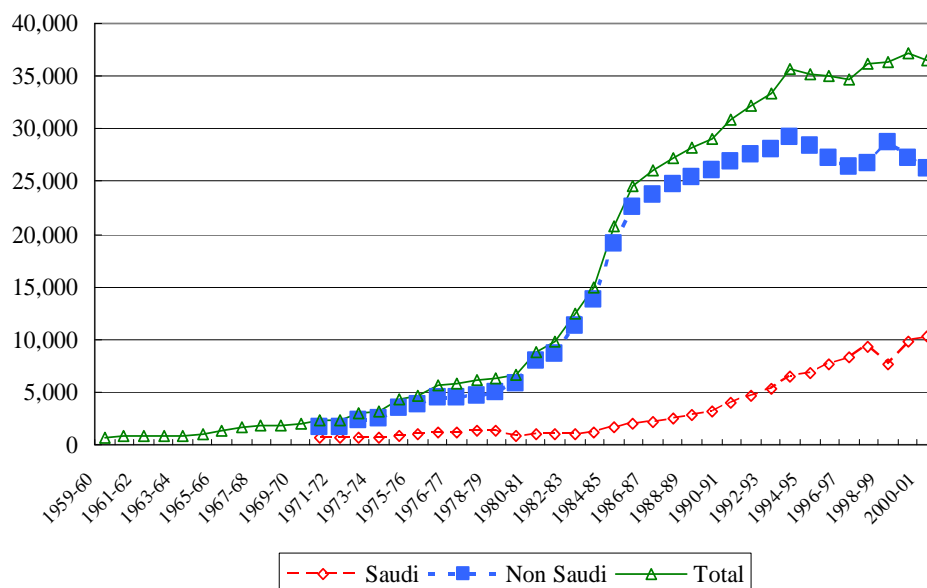
Source: Kingdom of Saudi Arabia, Ministry of Economy and Planning, Central Department of Statistics, *Statistical Yearbook*, Various years

Figure 13. Trends in the Number of Physicians Working under the Ministry of Health (Unit: person)



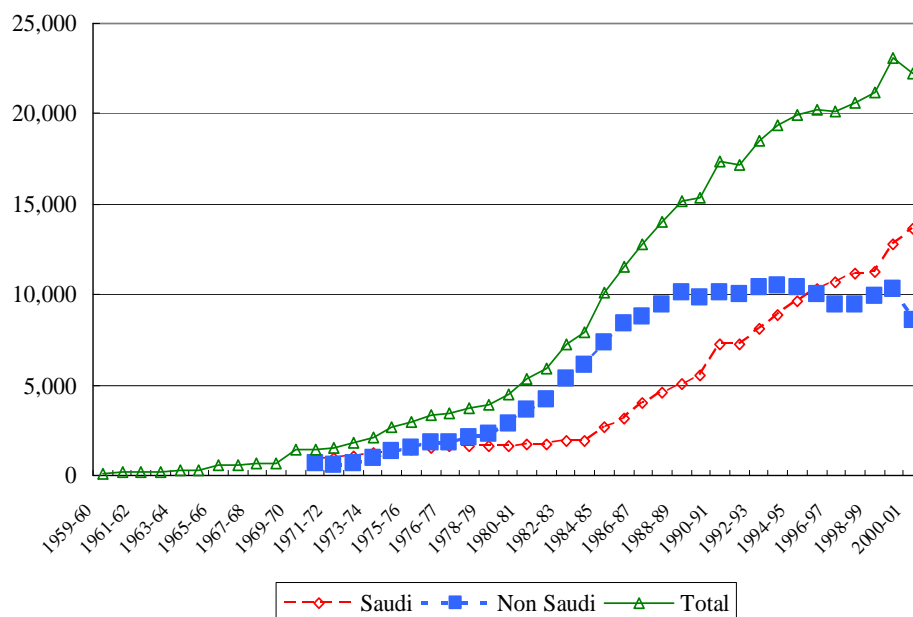
Source: The same as Figure 12.

Figure 14. Trends in the Number of Nurses Working under the Ministry of Health
(Unit: person)



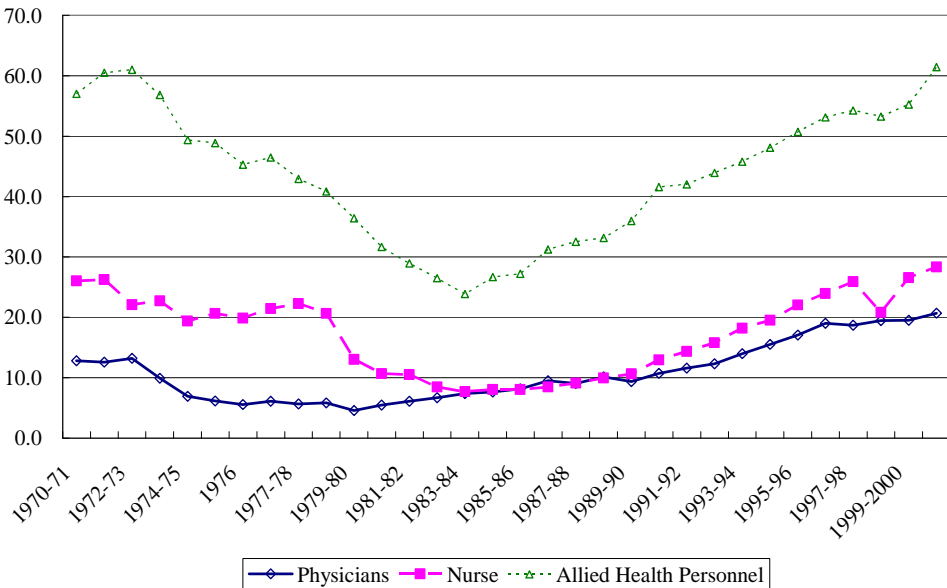
Source: The same as Figure 12.

Figure 15. Trends in the Number of Allied Health Personnel Working under the Ministry of Health (Unit: person)



Source: The same as Figure 12.

Figure 16. Ratios of Saudi Personnel Working under the Ministry of Health (Unit: %)



Source: The same as Figure 12.

Both the government and private sectors supply for health services in the Kingdom of Saudi Arabia. Besides them the Saudi Red Crescent Society provides medical services to pilgrims coming from all over the world and going to Mecca. The scale of private sector is not great in the field of medicine in Saudi Arabia. The main body taking charge of health service for Saudis in the government sector is the Ministry of Health. The ministry supervises hospitals and health centers.

Figure 11 displays gentle upward trends in total number of medical personnel working for the kingdom throughout the 1990s. The trends symbolize a steady but moderate growth in demand for medical personnel. In the meantime, the growth in foreign physicians, nurses and other health personnel is far moderate, as shown in Figure 12. Then, it is obvious that Saudi's share of medical personnel working in the kingdom increases. This is a result of policies placing a high priority on employment of the Saudi over the non-Saudi, which are known as "Saudization."

The Saudization policies date back in 1970 (Ramady [2005: 355]). However, they had been fruitless till the mid-1980s as long as medical personnel were concerned. Even though there was a good progress in Saudization in the late 1990s, Saudi's share of medical personnel is still not high at all. The ratio was 21.3 percent for physicians

working in the kingdom in 2000-01¹⁹, while they were 19.3 percent and 45.9 percent for nurses and allied health personnel, respectively. Series running for longer period are available if the medical personnel are limited to those working under the Ministry of Health (see Figure 10). Since the ministry is the central body for health service in the kingdom and since medical personnel working under the ministry make up roughly a half of total medical personnel working in the kingdom irrespective of year and occupation, the investigation in the data of medical personnel under the ministry is meaningful.

The time series of the number of medical personnel under the Ministry of Health became available in the year 1959/60 (Figures 13-15). The number of physicians had grown geometrically until the mid-1980s since when the growth rate has visibly declined towards almost zero by the beginning of the new millennium (Figure 13). The data of the number by nationality became available only in 1970/71. In the beginning most of physicians were foreigners, and the non-Saudi physicians have been replaced by the Saudi only gradually, which was contrary to the Saudization policy. The Saudi's share of physicians under the ministry was just 20.7 percent in 2000/01.

The overall tendencies of trend in the number of nurses under the ministry are qualitatively the same with those of physicians (Figure 14). The rapid growth of nurses came to the end in the middle of the 1980s, and the growth rate has diminished towards zero by 2000/01. During the period between 1970/71 and 1983/84 most of the increment in the number of nurses had been attributed to the non-Saudi, again contrary to the Saudization policy. Since the mid-1980s Saudi's share of nurses under the Ministry of Health has increased, and reached 28.3 percent in 2000/01.

Allied health personnel have grown more steadily throughout the sample period than physicians and nurses (Figure 15). Allied health personnel incorporate the rest of medical personnel besides physicians and nurses. New occupational categories in medical services such as therapists and psychiatrists seem to have been added so that the rapider growth in the number of allied health personnel sounds reasonable. The Saudization has worked for this category of health personnel and the number of

¹⁹ All the statistics referred to Saudi Arabia in this paper are based on the Hegira calendar. The hegira calendar starts on the day that the Prophet Mohammed migrated from Mecca to Medina. The Hegira year has 354 days divided to 12 lunar months (Kingdom of Saudi Arabia [2004: 15]).

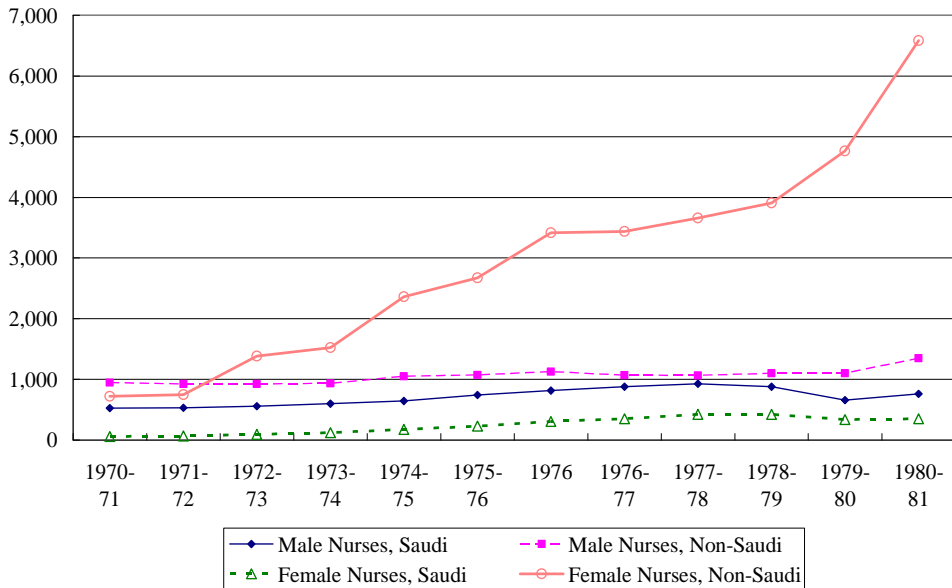
non-Saudi allied health personnel has been stable since the end of the 1980s at the value of ten thousand persons. In the meantime the number of Saudi allied health personnel has steadily grown, and the Saudi's share of allied health personnel barely exceeds 50 percent in the late 1990s²⁰.

Historically speaking, there is a long swing in the Saudi's share of medical personnel (Figure 16). In terms of the Saudi's ratio for physicians, the swing is shallow and the bottom took place in 1979/80. In 1970/71 only 12.8 percent of physicians working in the kingdom were Saudi. The percentage declined further probably because of enhanced affordability of foreign professionals due to affluent financial resources accumulated through the oil price hike. Since 1979/80 the Saudization ratio has increased monotonically and amounted to 20.7 percent in 2000/01. However, it is notable that, roughly speaking, four out of five doctors working for the Kingdom of Saudi Arabia were still foreigners. The Saudization ratios for nurses and allied health personnel also show initial medium-run decreases and following medium-run increases, though the level of the rate of each category is distinct each other.

Another kind of structural changes is incorporated into the long-run trend in the Saudization ratio of nurses. Female nurses have increased in the 1970s and a majority of them came from abroad. In the early 1960s males were as many as females as nurses working under the Ministry of Health according to *Statistical Yearbook* published by the Central Department of Statistics, Kingdom of Saudi Arabia. In the late 1960s the number of male nurses was twice greater than that of female nurses.

²⁰ Note that the Saudization was more easily imposed to the government sector than to the private sector (Ramady [2005: 358]). In general, the Saudi's share of workers is lower in the private sector.

Figure 17. Number of Nurses Working under the Ministry of Health by Sex and Nationality (Unit: person)



Source: The same as Figure 12.

The structural change in the composition of nurses took place in the 1970s, which is demonstrated in Figure 17. The figure displays the number of nurses by sex and origin²¹. In 1970/71 the number of Saudi female nurses was as small as sixty persons, and the number of non-Saudi female nurses was smaller than that of non-Saudi male nurses. Throughout the 1970s the number of male nurses, irrespective of origin, was stable at around a thousand persons, and the Saudi female nurses increased slightly. By contrast the number of non-Saudi female nurses increased dramatically. The number of non-Saudi female nurses has grown by more than 800 percent between 1970/71 and 1980/81. That is, the feminization of nurses went on in order to expand medical services in Saudi Arabia in the 1970s.

To sum up, the oil price hike in 1973 enabled Saudi Arabia to hire more workers from abroad than before. Medical doctors and female nurses were introduced massively and the medical personnel in the country were almost dominated by foreigners in the 1980s. Since then the Saudization has gradually come into effect, and Saudi's share of

²¹ The data of the number of nurses by sex and origin is available only for 1970/71-1980/81 in the *Statistical Yearbook*. Precisely speaking, "female nurses" include midwives and their

medical personnel has increased, though a great majority of physicians and nurses are still non-Saudi. In any event, Saudi Arabia had its own reasons to manipulate the number of medical personnel, and requested source countries to adjust to Saudi Arabia's policy changes.

5. United Kingdom: An Ethical and Deliberate Employer

The United Kingdom has a structural problem to secure a sufficient number of medical personnel irrespective of job category. The problem is structural in the sense that it stems from the population pyramid skewed for elder people in the kingdom. Spread of nuclear family is another tendency to generate demand for medical services in hospital. These factors have facilitated international recruitment of medical personnel. A substantial wage gap between the United Kingdom and low income countries has caused a massive flow of medical personnel from developing countries to the kingdom (Bach [2003: 21-24], Yamada [2004]).

In 1997 Nelson Mandela criticized the United Kingdom for recruiting a number of nurses from South Africa, because that act might cause a shortage in nurses and jeopardize health of South African nationals. Since then, the Department of Health of the kingdom has taken two approaches to address the criticism. The one is to establish codes of conduct for employers and agents to keep ethical standards, and the other is to conclude bilateral agreements with the governments of the source countries (Bach [2003]).

Responding Mandela's criticism among others, in 1999 the Department of Health issued guidelines to employers in the public sector for not "actively" recruiting nurses from developing countries which suffer from a shortage in nurses. South Africa and the Caribbean were listed as the countries from which recruitment should be avoided. In this terminology, "activeness" rules out employment of unsolicited applicants (Bach [2003: 22]). Thus, as long as employers did not actively solicit immigration and recruited nurses from unlisted countries, the employers were not blamed. In addition, it is notable that the private sector was outside the scope of these guidelines.

In 2001 a new code of practice was issued by the department. The new code

assistants, too.

suggests that employers should not target developing countries for recruitment of medical personnel. A difference between the guidelines issued in 1999 and 2001 is that employers in the private sector were also strongly encouraged to sign the code.

In July 2006 the United Kingdom released a similar policy to the issue of code of practice in 2001, however, with a different goal. The government decided not to issue work permits to newly qualified foreign nurses unless they are employed for some specific jobs which are hard to be fulfilled by nurses trained in the European Economic Area or the United Kingdom. The main purpose of this policy change is not to address a shortage in medical personnel in developing countries, but to favor homegrown nurses to get a job. The only 20 percent of newly graduating nurses in the United Kingdom found jobs in summer 2006 (Hall [2006]).

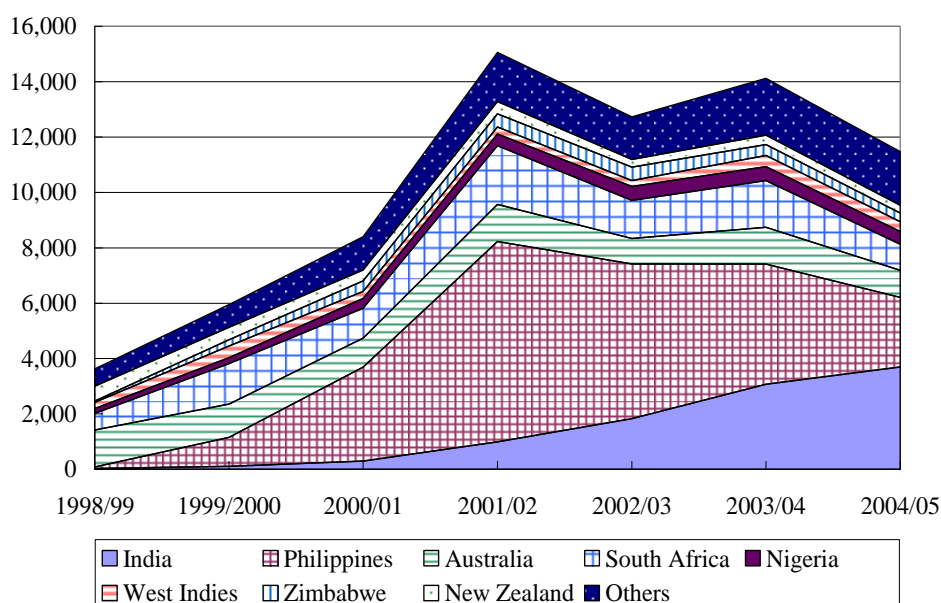
The second approach to address the criticism is the bilateral agreement with developing countries from which a number of medical personnel emigrate to the United Kingdom. The kingdom has concluded agreements with Egypt, India, the Philippines, Spain, South Africa, and so on (Bach [2003: 23], WHO [2006: 104]). The one with the Philippines was concluded between the Department of Health of the kingdom and the Philippine Overseas Employment Administration (POEA) in 2002. In the agreement, standard rates of various fees, such as cost of initial application for registration of a nurse in the United Kingdom, entry visa application cost, a processing fee for employers to pay the POEA, and contribution to the Workers' Welfare Fund are stipulated, so that unscrupulous charges of costs are less likely to be imposed to immigrant Filipino workers (Bach [2003: 23-24]).

UK's bilateral agreement with South Africa signed in 2003 incorporates a feature of South Africa such that not only outflow but also inflow of medical personnel is substantial in South Africa. Thus, the agreement stresses the necessity of mutual exchange of information and expertise, so that the agreement can handle UK's health professionals immigrating to South Africa, even though the scale of them is far less than the opposite flow. Training and study for a health professional of one country to undertake in the other country are also incorporated in the agreement. A notion behind this scheme is that after the exchange period, the professional returns to her/his home country, and her/his post is kept open for her/his to comfortably come back (WHO [2006: 104]). As mentioned in the section on South Africa, the effectiveness of this

agreement was evaluated by the two countries in April 2006, and both countries' evaluations were favorable to the implementation of the agreement.

As a result of policy changes of the United Kingdom, the composition of medical personnel by source country changes substantially. Figure 18 displays the number of nurses coming abroad by origin. It is apparent that since South Africa and West Indies were included in the list of source countries from which active recruitment of medical personnel should be avoided, inflow from the Philippines and India has grown instead. After the conclusion of the bilateral agreement between the kingdom and the Philippines in 2002, the number of nurses coming from the Philippines seemed to be managed tightly and it decreases to date.

Figure 18. Inflow of Nurses into the United Kingdom by Origin (Unit: person)



Source: The Nursing and Midwifery Council (NMC), *Statistical Analysis of the Register*, 1 April 2004 to 31 March 2005, London: NMC, August 2005.

Concluding Remarks

All four countries taken up for case studies in this paper are ambivalent about international migration of medical personnel. Source countries such as the Philippines and South Africa are pleased with incoming substantial amount of earnings raised by overseas medical professionals in terms of foreign currency. At the same time both countries are worrying about devastation of the national system of health service due to the outflow. Meanwhile, the host countries are not perfectly happy with foreign professionals becoming dominant in the health sector which is very crucial for welfare of their nationals. However, they desperately need a help from abroad to sustain and to make the health sector work.

This intrinsic ambivalence makes both source and destination countries stagger from one policy to another. At present, however, source countries seem to be more vulnerable to such alteration of policy of their counterparts, partly because their average per capita income is lower than that of destination countries. Because there are only a few high income countries which actively recruit medical personnel from abroad, and because there are potentially many developing countries whose doctors and nurses are willing to work abroad even if their qualifications are not applicable in the destination country, and even if they have to accept lower qualifications than what they have in their home countries.

As described in the main text, destination countries change policies from time to time. Lenient and open policies may be quickly followed by restrictive policies according to destination countries' economic and political situation. The United Kingdom is typical among them as detailed above. Saudi Arabia is eclectic in immigration policy on health professionals because of its high dependence on foreign medical professionals and nationalization policy which is to correct the dependence but is materialized very slowly. In most cases the bargaining power of source countries is so weak that they need to adjust to changes in demand for medical personnel generated in destination countries. As a result even the Philippines, one of the greatest suppliers of medical personnel in the world, faces lumpy demands timewise. Ordinary source countries can not behave as boldly to destination countries as South Africa. The general tendency is that demands generated in major destination countries determine

international allocation of medical personnel at least in the short run, and source countries are to respond to it accordingly.

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