
How Many Doctors Do We Need ?

By Ahmed Abdulla Ahmed*

The number of doctors in Bahrain has been increasing more rapidly than the growth in population. This has resulted in a decrease in the population to doctors ratio over time as follows :

<i>Year</i>	<i>Number of Doctors</i>	<i>Population</i>	<i>Population/Doctors Ratio</i>
1982	432	370973	858
1983	455	384221	848
1984	459	400280	872
1985	518	417210	805
1986	610	411660	675

Will this trend continue and the population to doctor ratio decrease further ? If the trend does continue, at what level and when will the ratio stabilize ? What is the optimum figure, if any, at which it should stabilize ? The answers to these questions have major implications for health manpower planners, and training and educational institutions as well as for policy and decision makers within the health care delivery systems.

Health care is costly. The budget of the Ministry of Health was BD. 2,265,000 in 1967. By 1986 it reached 32,939,165; a fifteen — fold increase over nineteen-year period.

The resources of any health system are manpower, facilities, capital equipment and materials. While each of these can be defined in monetary terms, the manpower component absorbs the major part of the health budget. In 1986 the total Ministry of Health budget was BD. 32,939,165 of which BD. 24,264,921 (74%) was paid as salaries to employees. The salaries paid to doctors added upto BD. 4,521,422 or 19% of total salaries to employees.

Delivery of health care today requires the joint efforts of doctors, nurses, doctors'—assistants and para medicals. Many tasks that have been traditionally performed by doctors, can be performed by non-doctors. The public may not accept such changes

*Chief of Medical Staff
Salmaniya Medical Centre
Ministry of Health
State of Bahrain

readily but the economics of health care and efficient utilization of available manpower will certainly necessitate changes in the mode of health care delivery in the future.

The projection of supply as opposed to demand is the other major factor in health manpower planning. Bahrain has been and still is dependent on expatriate doctors to man its health facilities. Expatriates account for 52% of all doctors in Bahrain. The contributions of the expatriate doctors are well recognized but there are problems that have to be dealt with. Doctors of high calibre are difficult to recruit. Specialities are rare. Financial as well as academic incentives have to be offered. The process of recruitment is difficult and takes considerable time. In addition, there could be language and cultural barriers that can hinder communication between the doctor and the patient or reduce the doctor's effectiveness while working within the Bahrain health system. Each year between 15–20 newly graduated Bahraini doctors join the Ministry of Health. Today the number can be easily absorbed in the workforce, however the supply will increase with time. Today complete and accurate information is not available on all doctors in the undergraduate programmes. These students attend several universities outside Bahrain. Many are studying on their own without the obligation to submit the required information on their fields of study.

The number of female doctors joining the workforce has been increasing. Today 32% of the doctors are females. The female doctors are mainly engaged in Obstetrics/Gynaecology, General and Family Practice, Dentistry, and Paediatrics. As the percentage of female doctors is expected to increase, their contribution has to be taken into consideration in order to calculate the available supply in terms of number and effort.

Any loss of doctors to the workforce due to health or retirement is minimal at this stage as the majority are "young". Migration to other countries is not a problem.

In 1986 there were 610 doctors in Bahrain. Assuming an average yearly income of BD. 10,000 for each doctor, the total cost to the State of Bahrain for doctors' services in both the public and private health sectors was BD. 6,100,000.

The education of doctors takes a long time and is expensive. On the average it takes at least eleven years after completing secondary school for the doctor to undergo undergraduate and postgraduate training in order to be able to practice independently. Assuming an average yearly cost of BD. 10,000 for training, it costs BD. 110,000 to train a single doctor.

The need for long term medical manpower planning is therefore evident. The details of such planning are complex because several factors are involved not all of which are accurately predictable. Any rational planning must be based on a supply and demand projection. Projection of demand depends on social and economic development and changes in educational level. It also depends on population growth and changes in its age and geographical distribution. Accurate and reliable data and information is available at the Central Statistics Organization regarding the factors that will affect demographic changes and determine the population profile. Major projections and change forecasts until the end of the century can therefore be made with fair accuracy. Other factors that

affect demand are changes in disease patterns and technology. Superspecialities such as neurosurgery and C.T. Scanning have been introduced in Bahrain with no appropriate manpower planning. Cardiac catheterization and surgery is being seriously considered for Bahrain. Have we prepared the necessary manpower from doctors to nurses and technicians to run such facilities ?

The delivery of the health care system has undergone rapid and major changes in the past few years. In the past the doctors were providing health care primarily through direct patient contact on a one-to-one basis. Today the majority of the doctor work in complex organizations that deliver primary, secondary as well as tertiary care through the practice of team or group medicine. Of the 610 doctors in Bahrain 566 (93%) work for health organizations such as hospitals and health centres.

Bahrain has expanded its health teaching and training facilities rapidly. The College of Medicine and Medical Sciences was opened in 1982. Postgraduate training in family practice as well as residency programmes in Surgery, Paediatrics, Medicine and Obstetrics and Gynaecology have also been introduced recently. The appropriate manpower have not been developed in sufficient number to carry out all these tasks. The available medical manpower therefore have to not only provide health care and treatment but must also participate in medical programme administration as well as teaching and training. All of these responsibilities must be taken into consideration in order to estimate the time available for direct service.

Several things in the growth of the medical manpower in Bahrain are evident. We know, that considering the average age of our workforce, the day is not too far off when the medical service will be almost totally staffed by Bahraini doctors. Indeed, we can even anticipate that there will be a day when Bahrain may be an exporter of medical manpower. In reaching this situation, however, we must rationally train and assign our doctors so that the medical service includes the right number of doctors in the right number of specialities or facilities to treat the health problems that will be faced by the population. For this reason, the need for appropriate medical manpower planning cannot be overemphasized. Only by systematically evaluating all of the appropriate information and then making the right managerial decisions can we accurately match the supply of doctors with the future demand for their services. This is a shared responsibility. The medical planners, health service managers and the suppliers of medical manpower must all shoulder the responsibility for ensuring that we meet that objective.