ARQUIVOS DE MEDICINA, 12(4): 246-248
ISSN 0871-3413 • ©*ArquiMed*, 1998

PLANNING THE MEDICAL WORKFORCE

An Analysis of the Third Report of the Medical Workforce Standing Advisory Committee

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The third report of the Medical Workforce Standing Advisory Committee, entitled: "The Planning of the Medical Workforce" was published in December of 1997. It addresses a current imbalance between demand for doctors and the domestic supply.

The purpose of this article is to present the report to a Portuguese medical audience drawing attention to the methodology used and to the dimension of the problem. At a time when Portugal and the United Kingdom seem to have a similar problem with a shortage of doctors, but without unemployment, a rare situation in Europe, it is very important to learn the lessons from well conducted studies, despite the level of uncertainty always related with these projections.

The report is divided into seven chapters with the following titles: introduction; summary of evidence; factors influencing demand; supply; balancing supply and demand: resources and risks; increasing students numbers - options, costs and benefits; recommendations.

• The introduction starts by informing that the Committee, appointed in 1991 by the Secretary of State for Health, is an expert committee and not a representative one and that it is composed of members from medical, academic, National Health Service senior management, statistical, social and economic fields. It also states that the previous two reports, published respectively in 1992 and in 1995 recommended a moderate increase in the medical school intake which has already been achieved since the numbers of entrants in medical schools in the United Kingdom (UK) have risen from 4119 in 1993 to 4834 in 1997. In the present report the situation was reassessed relating the future demand for doctors with the medical school intake for the next century. Furthermore the Committee states that its role is to give advice to the authorities to: "secure an adequate supply of appropriately trained doctors for all sectors and specialists in the NHS and for other fields of medical employment, both private and public sectors". It is also very clearly emphasised that the Committee is not concerned with the regional distribution of doctors, nor its distribution between specialities or sectors. The approach of the Committee to the problem was based on considering likely health patterns and demands for health care in the future and by relating these with the possible responses of the medical workforce, as contrasted to those given by other non-medical health professionals. The Committee also took into account possible changes in the working patterns of doctors and in the overall health system admitting that there will be considerable uncertainty in the long-term. Concerning the methods of working the Committee took evidence by speaking and listening to a considerable number of organisations, by analysing data from health and other related official departments and also from the United Kingdom Medical Careers Research Group based at the University of Oxford.

• Chapter 2 starts by attempting to forecast some long-term demand for health and admits that it will grow faster than in the past because of the following reasons: increase the elderly population, new advances in medical diagnosis and treatment, higher expectations from the population and the society in general on the delivery and quality of medical care both at primary and secondary level. The relation between this increased growth and the demand for doctors, although obvious, needs to be tempered by other factors such as the changes in the patterns of work including those raised by the European Working Time Directive, which, when applied, will significantly increase the number of doctors needed to provide the same current services, since it points to a 48 hour/week limit for doctors in training. There are also other social factors that need to be taken into account such as the need for more shared responsibility by couples for child care, the demand for more leisure time and a plea for early retirement. Also the increasing involvement of senior staff in programmes of continuing medical education and training will create the need for doctors to replace their colleagues involved in these tasks. Concerning the supply of doctors the various bodies gave evidence indicating an imbalance between home supply and demand in the following areas: consultants posts in many specialities and trainees in general practice to levels of concern; this imbalance was accompanied by an increase in the number of non-UK medical doctors both in the hospitals and in the community.

Certain options were suggested, by the various bodies giving evidence, to overcome these problems:

a) changes in the selection procedures of medical students in order to attract people with wider skills and interests;
b) development of new medical curricula responding to more specific health needs;
c) accelerated undergraduate medical training of graduates from other fields;
d) introduction of flexible training and working schemes;
e) extension of schemes to re-train and encourage re-entry of doctors in the profession;
f) more flexible pension schemes to discourage early retirement.

Another important issue relates to the fact that half of the graduates from medical schools are women and that their career pattern is going to be different from the previous generations with a greater need to create part-time posts.

Concerning the provision of undergraduate medical education the opinion given was that there was additional capacity in the medical schools to increase the intake of medical students but it was also considered that this could not occur without additional funding including capital investment. This approach was given preference in comparison with the development of a new medical school. It was pointed out that these measures should be accompanied by those aiming to reduce the dropouts from the medical school and the medical profession. Concerning new models of training outside the hospitals it was

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also pointed out the need for more utilisation of general practice settings, particularly in the rural areas. Finally, it was stated that the current distribution of medical students in the UK does not reflect the distribution of the population by region and that measures should be taken to correct this imbalance.

• Chapter 3 addresses the issue of factors influencing the demand of doctors and starts by looking at the past trends and previous forecasts. In the last twenty years the average growth rate has been 1.8% per annum (2.6% in the hospitals and 1.4% in the general practice sector) and these figures have been underestimated leading to a shortage of national doctors and to an increase in the foreign contingent. All the various bodies giving evidence considered the need for funding additional health care activities for reasons already mentioned in Chapter 2 and added the need for more support for acute care and for changing ways of delivering care such as day-case surgery and short hospital stays. Concerning the quality of medical practice it was mentioned that the influence of research and development measures such as technological advances and that of evidence-based medicine and the medical audit have not yet been seen but must be taken into account in the future. As for the working hours of doctors, it was mentioned that the New Deal on Junior Doctors Working Hours has not yet been full implemented since it points to a 56 hours/week actual working hours target in acute specialities which will be difficult to achieve due to financial constraints.

This chapter also addressed the important issue of the evolving patterns of health care pointing to the need for more emphasis on local communities rather than institutions and home-care rather than hospitals with the following consequences for the medical workforce: the need to ensure a growing contingent of competent general practitioners capable of delivering services previously provided by specialist services in the hospitals including patients with complex disabilities, with chronic illness and those discharged from emergency units and elective admissions. This change may include the need for developing closer links between the specialists and the general practitioners and also with other members of the health care team. These new working patterns will create the need for more doctors and also for a different type of training and continuing education methods.

The effects on the demand created by doctors working outside the National Health System was considered not significant for the present report.

Taking all these factors into account it was admitted that there will be a need to raise the rate of growth in doctors numbers in the future particularly since, in 1990, the number of UK doctors per 1000 population was 1.5 in comparison with the OECD average excluding the UK of 2.6 (in Portugal the ratio was 2.7). So, three scenarios have been adopted: a) central case with an increase of 1.7%; b) lower case with an increase of 1.4%; c) higher case with an increase of 2%. In any case it is stated that an assessment must be made in the next two to three years concerning the value of these projections taking into account factors that will affect the demand for doctors such as: policy changes, demography, working patterns and economic factors.

• Chapter 4, dealing with the supply of doctors, starts by defining the various groups involved: a) UK doctors - UK nationals qualified from a national medical school; b) other EEA - a doctor with a primary qualification within the EEA but not in the UK; c) overseas - a doctor with a primary qualification outside the EEA; d) overseas nationals who qualified in the UK - graduates from UK medical schools but who may not have the right to residence in the UK. Concerning the present medical workforce it is stated that, in 1991, around 20% were not UK nationals and that in 1996 that figure rose to 24%. Also the number of female qualifiers is now similar to that of male qualifiers.

Starting with the supply of UK doctors, attention is drawn to the fact that there is a strong demand for application to UK medical schools suggesting that the intake could be increased. On the other hand, the dropout rate has been falling and is presently estimated at around 8%. As for those that do not take the Pre-registration House Officer Year immediately after graduation, this figure has been placed between 3 and 6%. As for the postgraduate medical training period there was a previous complaint that considered the career conservative, inflexible, arduous and constraining but recently, these opinions have been more favourable. The study performed by the Medical Careers Research Group also found that men were much less likely to enter general practice than women; a factor that must be taken into account in the shape of the future medical workforce.

The important issue of the retention of doctors was analysed based, amongst other data, on the Population Census of 1991 which estimated a 30 year economic working life for men and a 22 year for women. An equivalent study performed in 1995 estimated a value of 31.5 for men and 22 for women. From these figures it was estimated that the average for men and women would be around 27 to 28 years, with an annual wastage figure between 3.5% and 3.7%. This issue is related with the need to maximise effective career choices amongst doctors, with as much careers counselling as possible. There will also be the need for more part-time working hours although a survey of 1983 qualifiers performed in 1994 by the Medical Careers Research Group, revealed that about 3% of men and 45% of women already worked part-time. Besides this approach, flexibility should include job-sharing and shift work amongst other working patterns. Concerning the retirement patterns of doctors it was found a small increase in the level of early retirements although most doctors still perform medical related activities after retirement thus raising the possibility that arrangements can be made for more flexible working schemes within the same speciality or in some different fields such as medical-legal work, management, training and consultancy.

It is also assumed that consultants will be appointed at an early age which means that they will benefit from more time in the grade and that they may be encouraged to stay in their jobs but to change to less stressful duties as they grow older.

Since the demand for doctors will continue to exceed the UK supply it was considered important to address the issue of the non-UK supply and the conclusion was to rely mainly upon UK doctors without aiming at a medical workforce composed only of UK doctors. It was also stated that a balance should be achieved between responding to the UK needs by increasing the numbers of UK doctors and offering training to overseas doctors, while not depriving their countries of their services in the long-term.

• Chapter 5 compares the demand projections with the supply pictures. The balance between supply and demand was analysed using a simple model aiming to forecast the future of the medical workforce in the UK until 2020 which used assumptions concerning the following issues: medical intake and wastage from medical schools; wastage and retirement from home doctors; flows in and out of all the other doctors. The analysis showed that, in order to achieve a total of 155000 doctors in the UK, of whom 76% UK-qualified, it was necessary to increase the medical student's intake of 1000 per annum. In the short to medium term the range of measures to close the gap between supply and demand should involve the following areas:

a) increasing supply: measures to improve retention of home doctors (flexible working and training schemes and motivation for not leaving or early retirement); training more doctors both at undergraduate and postgraduate level;
b) tempering demand: measures to improve productivity and also to reduce and reconfigure certain patient services together with the review of certain medical workforce policies.

Even though these measures will reduce the gap between supply and demand, the problem will only be solved by a substantial increase in the medical school intake.

• Chapter 6 discusses the implications of increasing students numbers including the costs and benefits of such measures. In the beginning it is clearly stated that such expansion would require further revenue and capital funding. Several options were pointed out to achieve the expansion:

a) increasing the intake in the existing medical schools, provided that quality is not compromised;
b) establishing a partnership between an existing medical school and other university and expanding teaching units within hospitals belonging to the National Health Service located in the area;
c) using an already existing postgraduate medical school and linking with an undergraduate medical school;
d) recruiting graduates from other areas and giving them faster undergraduate medical training;
e) establishing at least one new medical school.

Furthermore, it was pointed out that for any increase in student intake there would be the need for qualified staff, particularly an increase in clinical academic staff and an appropriate number of patients.

The implications for the National Health Service were also analysed particularly since there would be a growing need to provide clinical placements both at district hospital and general practice level to provide clinical training. An increase in the number of students would also have an effect on the financial contribution of the National Health System to the clinical teaching through the Service Increment for Teaching (SIFT).

The costs of expanding the medical student intake of 1000 per annum were broadly estimated by the Committee to an estimated value of gross recurrent costs up to 200 million pounds per annum. This figure would cover NHS and education costs, including the training of junior hospital doctors. In addition there would be the need capital funding depending upon location, existing versus new facilities and changes in the curriculum. Finally, the Committee expressed the wish that the Government and the other parties concerned should aim at maximum cost-effectiveness and quality, involving both the undergraduate period and the initial postgraduate training of doctors.

• The final recommendations are stated in Chapter 7:

a) Medical school intake - an increase in the annual intake of 1000 as soon as possible and in the most cost-effective manner.
b) Medical education - develop shortened courses for graduates in other areas and minimise the level of wastage.
c) Overseas students - keep their level constant in UK medical schools.
d) Recruitment and retention - improvements in training, career planning and counselling and increase use of flexible working patterns.
e) Information and analysis - stimulate better information and research in those factors that affect supply and demand to assist future planning and monitoring of the medical workforce.

Conclusions

1. The main concern of the recommendations was not to respond to short-term political issues but to present sound technical proposals to solve, in the medium and long-term, the imbalance between demand for doctors and home supply in the United Kingdom.
2. The recommended increase in intake of 1000 students per annum has potentially substantial funding implications and must be achieved as cost-effectively as possible. Presently, the UK medical schools are submitting their proposals to the Government in order to obtain financial support.
3. Throughout the report particular attention has been paid to the medical careers and very clear suggestions were made concerning changes in training schemes and in more flexible working patterns.
4. Besides taking into account the recent and very important technological advances and their influence on medical practices, particular attention was paid to the need for expansion and strengthening of primary care.
5. Concerning the role of the medical schools in increasing the medical workforce the Committee presented a very broad range of recommendations which will encourage new and exciting developments in medical education.