# S.M.A. LECTURE 1973

# ON SPECIALISED MEDICINE : TRAINING AND CERTIFICATION

By C. S. Seah

## I. INTRODUCTION

President and Council Members of the Singapore Medical Association, I thank you for this high honour in electing me to this lectureship, the sixth of a series which commenced in the year 1963 when you, Sir, addressed a gathering on, "Advertisement and the Medical Profession." The second was by Dr. B. R. Sreenivasan in 1964 on, "Infamous Conduct in a Professional Aspect."; the third in 1969 was again by you, Sir, on, "Medical Education in Singapore—the Past and the Future."; the fourth was given by Mr. Y. Cohen whose address was entitled, "Association, Profession, Adaptation." And, last year, Professor Phoon Wai Onn spoke of "Priorities in Medicine."

When I was informed of your Council's decision to ask me to deliver this year's lecture, the immediate problem was to select a suitable subject for discussion. Obviously, I had to embark on reading all the previous lectures, both to seek inspiration as well as to avoid duplication. Taking cues from the last three lectures, I felt that it will not be out of place to speak to you on some aspects of Specialised Medicine.

In the early sixties, postgraduate and continuing medical education had its beginnings here, and in 1968, the School of Postgraduate Medical Studies was born. Interest in Specialised Medicine gathered momentum with the formation of the Committee (appointed by the Minister for Health) entrusted to study the development of the medical specialties in Singapore hospitals. The Report has been published. Then two years ago, the University granted its first degrees of Master of Medicine.

### Definitions

I must pause here for definitions. The specialties in Medicine include a group of broad specialties, like Internal Medicine, Surgery, Obstetrics and Gynaecology, Radiology, Pathology, Ophthalmology, Otolaryngology and Psychiatry. I do not intend to discuss these. Attention will be focussed on the second group which may be termed the specialties of Internal Medicine like Cardiology, Neurology, Endocrinology, Gastroenterology, Haematology and Nephrology.

How does a young doctor, wanting to specialise in any of these proceed? How should he be trained and has he got to take examinations?

Further, today, with the gradual metamorphosis of the old general practitioner, working single-handed and with an outworn medical bag to the present one equipped with a scientific basis for practice, and working more and more in groups, general practice has become a specialised vocation. In short, it has become a specialty. It is my intention also to draw attention to some of the thinking concerning the training and continuing education for this important group.

The definition of the word "Specialist" is reiterated here, according to a proposition made at a Symposium on Postgraduate Medical Education (Prague, October 1963) as "a doctor who, under established criteria and through a recognised system of assessment has acquired and maintained a high degree of knowledge and skill in a particular field of Medicine, and limit his work to that field."

## II. TRAINING FOR THE SPECIALIST

In the developed countries the thinking on the training of a doctor wishing to specialise is crystallising out after more than 10 years of study by specially-appointed committees and commissions.

### In the U. S.

In the U. S., as you are all aware, a doctor after his first intern year, does work in General Medicine for a year or two and then embarks on a training programme for the next five years. During this period, he attends lectures, seminars and spends different periods of time in different aspects of his chosen specialty. Thus, an embryo neurologist will have to attend X lectures, Y hours in electroneurophysiology, Z months of clinical clerkship, and so on. At the end of these, he sits for an examination by a specialist board and on passing, is certified. There will be no extra alphabets, however, after his name.

### In Britain

In Britain, a Royal Commission on Medical Education was appointed in 1965. It was because of two main reasons. The lack of education capable of preparing doctors for a life-time of changing

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Medicine had become increasingly obvious. Secondly, it was clear that contemporary Medicine needed a large number of personnel of many different kinds, working in a new and close relationship. The Commission's work resulted in the publication of the Todd Report in 1968. The section pertaining to Specialised Medicine recommended that the first three years of professional training should be of a general nature and thereafter, a period of two to three years in a specialty, this latter period being spent in an intensive training post. Completion of this should be followed by registration as a specialist and all registered specialists should be eligible for appointment as consultants. Note that no examination is necessary and the recognition is by certification following regular assessment.

**In Sweden**

In Sweden, up to 1968, training in the various specialties comprised about five years of "underlakare" (registrar, senior registrars) appointments in different teaching hospital departments. No formal teaching is provided during this time and no formal examination is required. After completion of the appointments stipulated for the individual specialties, the doctor is registered as a specialist by the National Board of Health.

**In Australia**

Changes are envisaged in Australia by 1975, when the last examination for the M.R.A.C.P. diploma will be held. From thence, the doctor, wishing to specialise, spends the first three years in General Medicine (work in clinical laboratories accepted) following which the F.R.A.C.P. Part 1 examination can be taken. On successful passage through this, he is deemed suitable for specialist training. The time taken varies for different specialties and three years is the average. In training, the doctor is regularly assessed and reports are made at the end of each attachment. After completion, he appears before a Board and if satisfactory, is certified. He is allowed to put the alphabets F.R.A.C.P. after his name.

Thus, it can be seen that there is a dwindling of higher degree examinations for the specialties which, I am sure, will lower the incidence of doctors suffering from "multiple diplomatosis." In Britain, there has just been published the First Report (1972) by the Joint (of four Royal Colleges of Physicians) Committee on Higher Medical Training. This Committee, in its work, was assisted by a number of advisory committees, one for each specialty. This publication spells out programmes for specialist training and should be consulted by all who are interested. In principle, it did not deviate from the Todd Report but stated that "physicians should not specialise until they have demonstrated their competence in clinical methods and basic knowledge of Medicine by obtaining the M.R.C.P." Also, the higher specialist training should be in posts approved by accreditation committees. In most specialties, certification of completed training will not involve any further examination.

The Lancet (1972) in an editorial commenting on this Report, stated that "certain principles are clearly stated, and should command general approbation. The Committee does not intend to lay down rigid descriptions for the training of specialists and Part 2 of the Report consists of synopses of recommended training programmes. Further, it is the recognition of training posts which gives the Committee full purpose. For the first time, the physicians demonstrate their intent to maintain a list of approved posts, through the specialist advisory committees. The visiting teams must search vigorously if they are to find out the truth, and they must not be afraid of exposing skeletons in some distinguished respectable cupboards."

**In Singapore**

What about us in Singapore? I think we have made laudable beginnings. The attainment of M.Med. covers the general professional training as envisaged elsewhere. The second period of vocational training in Internal Medicine itself can be done at home. But deficiencies in the other specialties are obvious and therefore, of necessity, further specialist training will have to be undertaken abroad. At present, there are the nuclei for departments in neurology, cardiology, endocrinology and gastroenterology. Partial training in these specialties, at home, are available.

It behoves us, therefore, that we must rapidly develop the facilities for the practice of the medical specialties, taking into account as well that pari passu, an accelerated growth in personnel both of specialists and laboratory technicians, will have to be catered for.

**Specialist Units**

The planning and development of the physical growth of specialist units will be both interesting as well as challenging. There are some who will plead for separate specialist departments in a hospital and there will be others pointing to the advantages of different specialties within a department of General Medicine.

A specialty practised in an autonomous department of its own favours more rapid growth and since rapid development is necessary for us in Singapore, it may be the better plan. Research is also enhanced. However, experience, particularly in the United States, has shown up some of the disadvantages for the care of patients and teaching in an ever-growing number of specialised fields, existing as separate units.

There is a good case for putting specialties which require autonomy in separate departments, chiefly because of the requirements of working in terms of systems and also the fact that physicians, surgeons, radiologists and others need to work alongside one another, for example, cardiology, neurology and gastroenterology.

A proponent of specialties within a department of General Medicine is Professor Witts, and he sets about giving important reasons most ably for such a situation in his Harveian Oration of 1971, and I quote:—

"Workers in these new specialties (clinical endocrinology, clinical haematology, clinical pharmacology, gastroenterology, nephrology and rheumatology) should remain under the banner of Internal Medicine and should be capable of practising, teaching, and examining in General Medicine. There are sound reasons for drawing chest diseases, dermatology, venereology and neurology back under the same banner."

For Singapore, cardiology, neurology and gastroenterology (including diseases of the liver) had best be developed into separate departments, for each of these specialties require personnel from different disciplines to work together. The other specialties like nephrology, haematology and endocrinology may be housed in a department of General Medicine for specialists in these fields need more than the other specialties, skill in General Medicine as well.

### A Unit of Epidemiology

The Cinderella specialty in Singapore is epidemiology. Yet, it is in this field, with Singapore's multi-racial population, where opportunities abound. The epidemiology of coronary heart disease, hypertension and cerebral vascular disease, cancer and peptic ulcer are yet to be studied. Although publications from initial studies of the epidemiological features of these conditions in hospital patients are available, there is still the wealth of untapped information concerning such patients outside hospitals. Such data, when available, will have medical, economical and even political significance. There is, therefore, an urgent need for setting up such a department. Readily available are a number of doctors who have skills to run such a department but more will have to be trained and, as soon as possible.

## III. ACCREDITATION OF TRAINING POSTS; CERTIFICATION AND REGISTRATION OF SPECIALISTS

I call for the setting up of a committee with members drawn from the Ministry of Health, University, Board of Postgraduate Medical Studies, Academy of Medicine, and the Association to look into the matter of accrediting training posts available here. This wide representation is in keeping with the practice elsewhere and with unity of purpose, sectional interests can lie in subsidence.

To regard any hospital job as a training post will be an error. The quality of these posts must be constantly under review. The selected posts should be used for intensive training. The training must not be overloaded with routine service elements. The trainee will require time and space for study, and to undertake research.

A number of specialties will be involved and no doubt, a few will achieve full accreditation. But since some of the specialties here, though sturdy in growth, are as yet not fully developed, the committee will have to decide on the extent of accreditation. With the number of training posts determined and the future needs known, an orderly scheme of training specialists can be embarked upon.

The next objective of this Committee will be to recommend the different programmes of training for the different specialties. It may be that in the "shortage specialties" training programmes will have to be accelerated but realistically, and consultants created earlier than usually expected.

The third objective for the committee will be to study the matter of certification of specialist training. The question of whether specialist examinations and diplomas are necessary will have to be answered. However, the pitfall of having too many postgraduate medical diplomas needs to be avoided Thus, an editorial in the Lancet (1967) noted that one estimate was that Britain had more than a hundred postgraduate medical diplomas and it was sorrowful to "enumerate its baleful effects on the young doctor aspiring to be a specialist."

The fourth function will be to decide on creating a Specialist Register. Present opinion on this is rather divided. Some contend that this Register might serve as an advertisement for expertise but this fear can be ameliorated if the responsibility of registration is put in the hands of the Singapore

Medical Council. Some think that this move is premature, there being too few specialists. However, the Singaporean is seeking more and more specialised attention. The availability of such a Register will serve this need.

Also, it is true that "pure specialists" (as defined at Prague) are not many. We are in a very interesting situation of having increasing numbers of doctors, skilled in General Medicine and yet possessing interest and with good knowledge of a particular specialty. He is, for practical purposes, a dual specialist. How should he be registered? It is interesting to note that in Sweden, a specialist can be registered for two related specialties, but not more, for example, General Medicine and Cardiology; Otorhinolaryngology and Audiology, etc. (Thyresson, 1968). I think for us, this method can be adopted for the time being.

Fifthly, since there does not exist a consultant qualification, how then, does a man or a woman become a consultant. The new committee will have to look into this perplexing question. An editorial in the Lancet (1963) noted that "possession of degrees from the Royal Colleges and university degrees of Doctor of Medicine, Master of Surgery and even the Specialist Diplomas, whether awarded by University or by the Conjoint Board are designed to show a special competence in a subject, but not expertness at a consultant level."

The foregoing are important matters requiring study and resolution by this new body which may be termed the Joint Committee on Specialised Medicine.

## IV. TRAINING FOR THE GENERAL PRACTITIONER

Of the total number of doctors registered to practise Medicine in Singapore in 1970, the largest percentage (50%) was formed by those in the private sector, and the majority were in general practice. This fact alone makes it incumbent on us to re-think on the training of doctors in this type of practice for they form the backbone of medical care for the general population. This branch of the profession does differ from the others, even if it overlaps all of them. It has its special features—generality and breadth of scope above all.

In Britain, the Todd Report (1968) recommended that a would-be general practitioner received three years of general professional training in a hospital after registration and thereafter, two years as an assistant in an accredited practice. Vocational training programmes for general practice, following this, are proliferating rapidly. The Royal College of General Practitioners and the Council for Postgraduate Medical Education have both recommended that all doctors entering general practice should undertake at least three years training after full registration before appointment as a principal.

Some of the results of vocational training for general practice are now available. An interesting one was published last year (Drinkwater, 1972). The report noted the views of 89 vocational trainees and 45 doctors concerned with schemes of training. Both groups differed in opinion on the desirability of compulsory vocational training: 42 (51%) of the trainees thought this to be desirable compared with 35 (72%) of the teachers. The scheme favoured by both trainees and teachers offers an initial period in general practice together with an organised course of seminars throughout the training period. Only one trainee regretted joining a training scheme.

Further, a working party of the Royal College of General Practitioners has published what is, in effect, a syllabus for general practice last year, (The Future General Practitioner: Learning and Teaching). In each of the five areas of learning suggested,—namely health and disease, human development, human behaviour, Medicine and Society, and "the practice"—teaching methods are proposed, detailed objectives in terms of trainee's desired performance and attributes suggested.

These new developments are important. And for us, in Singapore, the problem will be on how best to organise vocational training and persuade young doctors to enter such training. A great many at present are still entering general practice immediately or soon after registration.

If we are to accept the necessity for vocational training, the next step is to examine the areas in general practice available and to ascertain standards. It also may well mean that, again for Singapore, the content and period of training may have to be different from that elsewhere. Although in the past decade, there have been good reasons for increased confidence in the quality of general practice, the whole situation may have to be reviewed if vocational training in practices is to be adopted. An editorial in the Lancet (1972), commenting on this, inter alia, had this to say, "Of the many reports which have examined the study of general practice in the past 25 years, the most critical have done the most good."

### Institute of General Practice

The general practitioners in Singapore, last year, took a significant step forward when they formed the College of General Practitioners with the dual objectives of maintaining high standards of practice as well as to provide for a continuing

education. It also held the first examination, leading to its membership diploma. This is a move in the right direction. I suggest that the Association together with the College can now, with advantage, look into the matter of forming an Institute of General Practice.

A vocational structure as suggested in the foregoing will require an academic structure. The creation of such an Institute will serve a number of useful functions. Staffed at the centre by a Director, two or three other general practitioners, a statistician, a sociologist and part-time service of active practitioners, this could contribute significantly both to teaching and to research. It can also establish and co-ordinate epidemiological and clinical data and conduct operational studies of the type and on scales required but which have not been undertaken. Further, the Institute can initiate studies on what is the best training for the general practitioner of the future, regardless of whether or not the ideals can yet be achieved.

With a proper graduate training, "there is no doubt," as Sir Robert Platt (1964) says, "that the whole status of general practice would improve and the public will have direct access to a higher quality of medical care."

## V. CONCLUSION

Previously, the young Singapore doctor who sought to become a specialist, wandered his own way around through the years of postgraduate training. Of course, he was encouraged but a planned career structure was often not catered for. He was not moulded; he emerged. Today, it is clearly important that training for the future specialist or general practitioner will have to be carefully planned though not too rigidly.

It is recommended that a study for future training schemes be made by the proposed Committee on Specialised Medicine. The College of General Practitioners and the Association should meet to discuss similar plans for the training of the general practitioners, bearing in mind the formation of the Institute of General Practice.

Specialist vocational training is important. Young doctors the world over, no matter how much the elders and betters may wish otherwise, demand a period of training in which they can acquire competence in current Medicine by practice under supervision.

Specialised Medicine is a necessity of the day. The danger of over-specialisation, of course, is also real; each ant or bee, whether worker, drone or queen can now perform only a limited task. The hive is a highly effective organisation, with specialised members. One must not forget, however, the fact that the patient is an individual and is all-important. The principle of all good practice, "Primum non nocere", shall not be cast to the winds. There is nothing old-fashioned about this. First, let us not cause hurt.

The future patient of a hospital may well be cared for by a fairly large group—"a ministry of all the talents," (Fox, 1965). He continued: "But, even so, the group will have to delegate its responsibility to one person; and that person ought to be someone of wider range than most specialists, and in closer contact with the patient—someone capable of looking after the patient's interests in hospital just as comprehensively (and comprehensibly) as the general practitioner should look after them at home."

The patient may well be safer with a physician who is naturally wise than with one who is artificially learned for, "something human is dearer to me," said the dwarf in a fairy tale.

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