I am indeed grateful for the great honour the Singapore Medical Association has done me in inviting me to speak today, albeit as a stand-in at so very short notice. My colleague and old friend, the President of the Singapore Medical Association has been lavish in his remarks. Standing up here, before this very distinguished and erudite audience, and looking back at the distinguished line of SMA Lecturers that have preceded me, I must confess that I have feelings of misgivings for having so audaciously agreed to speak at the behest of both, the President of SMA and the Organising Chairman of this SMA Silver Jubilee Committee.

Almost all previous SMA Lecturers have dealt with medical ethics, philosophy, the progress of medicine and recently the doctor-patient relationship. Due to constraints of time — five nights to be exact — what I have to say is not the result of scholarly research, nor even of systematic reading. Today I shall attempt to delve on some of my personal thoughts on such topics as diseases of affluence, health and productivity, medical education and training, primary health care in Singapore, and even try to take a glimpse into the future.
During the Silver Jubilee Convention of the Singapore Medical Association we should pause to reflect on the history it has built — a history which is varied and exciting. The Singapore Medical Association was inaugurated on the 15th of September 1959 and became the legal successor in Singapore to the Malayan Branch of the British Medical Association. Although its objectives are known to most of you, it is on this occasion worthy of reiteration:

(i) to promote and maintain the honour of the medical profession
(ii) to foster and preserve the unity and aim of purpose of the profession
(iii) to voice its opinion and to acquaint the Government of the policy and attitudes of the profession
(iv) to support a higher standard of medical ethics and conduct
(v) to enlighten and direct public opinion on problems of health in Singapore

The Association has grown from year to year its membership increasing from 433 in 1959 to 1,649 in 1985, representing 67% of the total doctor population to-day. As the national body it has taken pride of place in assisting the profession to adapt itself to changing circumstances as well as the humanistic and liberal aspects of the philosophy of the practice of medicine. In the next two decades the Association should direct itself to a wide based programme of community health education so as to avoid the pitfalls in health that other more affluent countries have gone through. More and more members should be involved in the community they serve, not only in the curative aspects, but also in health preventive and promotional work, as well as, health education. I believe that as a national body, the Singapore Medical Association will be only as persuasive in the Councils of Government as our influence and prestige in the community. This should be the direction and no amount of time spent in the waiting rooms of Ministers and Permanent Secretaries is a substitute for the demanding work of relating ourselves to the interests and aspirations of our increasingly sophisticated community.

The Singapore Medical Association has over the years proved itself worthy of its members' confidence and support. In the years ahead it will be time for the members to show that they are deserving of the Singapore Medical Association — this means more active participation by members towards mobilising public opinion in health matters by activist leadership.

HEALTH PATTERNS AND ECONOMIC DEVELOPMENT

There is high probability that developing countries will follow the mistakes of developed countries in allowing their citizens to form habits that lead to "diseases of affluence". By being aware of this risk and by taking advantage of the lessons from others, we in Singapore can prevent needless human suffering, losses in manpower and productivity, premature death and disability as well as unnecessary financial drains.

As our industrialization proceeds, and followed by a lag period of a decade we find that "diseases of affluence" have begun to emerge. These diseases are largely cardiovascular, as well as cancers and pulmonary affictions related to the ready availability of fatty foods and processed foods, automobiles, alcohol and cigarettes. These goods are seen as symbols of affluence much to be sought after. The more educated and wealthier classes become the initial repository of these new illnesses. Within time, as affluence spreads throughout the population, diseases of modern culture spread into the bulk of the population. Government has made vigorous attempts through health education to bring disease prevention possibilities to the public. More and more people in our society are now trying to change and adopt the innovation of becoming healthy. The ironic situation now arises in which the less educated, less motivated and the less affluent segments in our society have become the repository of the so-called "diseases of affluence".

There are also some social factors that confer risk on society, namely: violence portrayed in the mass media, the availability of alcohol, cigarettes and drugs and its abuse.

The medical profession has a major role in the creation of awareness and consensus formation among our national leaders and policy-makers. With foresight, energy, determination and national will, considerable foreseeable human suffering and economic loss can be forestalled through intelligent planning and action.

HEALTH AND PRODUCTIVITY

Health like productivity is an investment in human capital. Although a person's health is an emotional and personal matter, it is also the concern of a nation. A healthy workforce contributes to productivity and output. Time lost through absenteeism and sickness would undoubtedly lower productivity. Therefore in our drive for more productivity in the years ahead, the subject of health care as well as its development and availability is of vital issue. A healthy population brings along bigger monetary gains for the family and nation.

A very rough indicator of the general health conditions in a country is reflected in the infant mortality rate. In Singapore it declined from 20.5 per 1,000 in 1970 to 10.8 per 1,000 in 1981. Another yardstick, the maternal mortality rate declined from 36.3 per 100,000 in 1972 to 4.7 per 100,000 in 1981. These figures show on an overall basis, the improvement in the general health status of our nation.

There are several questions that need analysis:

- What is the effect of health programmes on labour productivity.
- What contribution does better health make to the growth of the Gross National Product.
- Does increasing affluence contribute to changing health patterns, leading to new types of diseases.
- What strategy should we develop in the allocation of resources to achieve health for all.
- How many doctors, nurses, hospitals, etc do we need to-day, next year and towards the turn of the century.
- What effects do the methods of payment to doctors, nurses, etc have on their behaviour and attitudes.

All these questions and more need to be answered. However, health services account for 4.4 per cent of our total recurrent expenditure and it is axiomatic that not all can be done to give our people the full benefits of modern Medical Science. There are competing demands for our limited resources, such as housing, education and other public services that are required to meet the basic needs of our people, and which are equally essential to make the work force more productive.

In the light of the current economic situation, the medical authorities must be prepared to compete and
argue for available resource and to strike a balance with the demands of the Social and Welfare Services. Medicine would become part of our expensive social structure with which the health service would have to fight for the resources it needs in the years ahead. Patients should come first in the organization of patient service. The priorities are health education and preventive medicine, care of children, occupational health, care of the mentally ill and handicapped, and care of the aged and chronic sick.

EDUCATION AND TRAINING

Medicine to-day stands at a vantage point from which changes, both good and bad, can be surveyed. If I appear to dwell on the bad, that fact does not mean that I do not recognize and welcome the great benefits that have accrued to us.

The concentration on both medical care and medical education in the hospital has influenced whole generations of physicians in their concepts of health and disease. The hospital tends by its very nature to separate the disease from the man and the man from his environment. It is not surprising, therefore, that the medicine of this century has been the medicine of entities rather than the medicine of relations and that modern medicine has neglected etiology in its widest sense. It is for the physician to make medicine to become a technology — the benefits of which have been reappraised without steps taken to contain and control its negative effects.

The educationists in any medical school believe that every physician should be caring, compassionate and dedicated to patients — to keep them well and to help them when they are ill. Each should be committed to work, to learning, to rationality, to science and to serving the Society. Ethical sensitivity and moral integrity combined with equanimity, humility and self-knowledge are quintessential qualities of all physicians. They should now emphasize the acquisition and development of skills, values and attitudes and limit the amount of factual information the students are expected to memorize.

The physician uses a three kinds of knowledge — first, information, second, clinical craftsmanship which is a skill and third insight and awareness which is an integral part of the personality. These three kinds of knowledge are acquired in quite different ways. Information comes from observation, listening and reading; clinical skill, like other skills, comes from constant practice and the emulation of others; insight and awareness comes from human intercourse and deep reflection on the self and on experience. Excellence in one of these areas of knowledge does not in any way guarantee excellence in the other. One tends to think of poor physicians as badly informed physicians. But everyone has encountered superbly informed physicians, who can quote all the latest references, but are woefully lacking in clinical judgement, and also excellent clinicians who in their dealings with people are incredibly naive. Excellence in medicine requires a blend of all kinds of knowledge. Errors in medicine arise more often from a failure of skill or insight, than from a lack of information. A lack of information is most readily remedied by reference to a book or consultant. Defects of skill or insight are far more difficult to remedy — not least because the physician lacking self-knowledge cannot recognize his own failings. It is apparent the deepest and most vital knowledge — the knowledge that determines how information will be used — does not "explode" or "have a half-life of five years" as the catch words have it.

(i) Training of Specialists

Specialization means drawing a boundary or limiting a field. It can be depicted as a V-shaped wedge cut into the body of knowledge — the deeper the cut, or deeper the specialization, the better it is with more benefit for the patient. Our operation surgeons function better than surgeons who do that operation occasionally. Specialization, therefore, implies depth, with vertical and horizontal specializations. They have formal postgraduate programmes to become specialists. The structure of the specialities, the discipline acquired over years of study in well organized medical units, professional practice carried out in a well organized way, working in a group with periodic attendance at seminars and congresses for updating knowledge, all contribute to self-control. When the specialties control themselves strictly, e.g. the surgeons safeguarding the standards of surgery, and the pathologists pathology, then Parliament, Government, the Singapore Medical Council and the public accept and endorse the solution. During the past 25 years hundreds of our capable young doctors have obtained higher degrees, first overseas and later locally through the Postgraduate Medical School of the National University of Singapore in conjunction with the Academy of Medicine. In the next 25 years Singapore should establish itself as a major international medical centre. This should be in tandem with the growth of Singapore, which I envisage, would be one of the world's most advanced centres of industry, manufacturing, commerce, finance and technology.

(ii) Training of Family Physicians

The educational changes that have influenced the General Practitioner/Family Physician in developed countries during the past decade have been described as revolutionary. From a position during the sixties, when little if any, attention was paid to the specific training of the General Practitioner/Family Physician at either the undergraduate or graduate levels of medical education, training programmes in family medicine are now in the educational "limelight" — the in-thing in medical education. Great progress has been made to establish family medicine as a distinct educational discipline. Most medical schools in developed countries have University Department of Family Medicine providing training programmes in Family Medicine with teaching responsibilities at both the undergraduate and graduate levels of medical education.

It must be understood that training in a medical specialty — as it is known to-day — cannot be applied "in toto" to the experience of being a family doctor. Learning to be a family doctor requires a change of perspective that can only take place where the perspective is dominant. It will also be apparent that attempts to produce a family doctor by putting together a conventional training in paediatrics and internal medicine — and adding some psychiatry — are doomed to failure. "The whole is different from the sum of its parts". Family doctors may emerge in this way, as I did, but they will do so by the arduous route of rising above their training from their experience.

For many years now, we have talked about the establishment of a Department of Family Medicine in the National University of Singapore. Its role we have felt should not be just to expose undergraduates to general practice — then it has no right to exist at all. Its role should be to advance knowledge of general practice and to feed this into both undergraduate and postgraduate education in the discipline — and dare I say, to set standards in patient care. Its function would be involvement in patient care, at the highest possible standard, furtherance of the subject by research and teaching with the twin purposes of encouraging a spirit of enquiry amongst undergraduates.
and of providing for the training and postgraduate development of future academic practitioners of the subject. This is the role of academic departments in all other subjects. The time has arrived for the establish-ment of a Department of Family Medicine in the National University of Singapore. As we design programmes suitable for the educa-tion of family doctors in Singapore, our educators must have a clear conception of the type of person they would like their students to become. The students should have deep commitment to people and obtain their greatest fulfillment to use technology with skill, but to make it always subservient to the interests of persons. We want doctors who can think analytically when analysis is required but whose usual mode of thought is multi-dimensional and holistic. We want doctors to be concerned with aetiology in the broadest sense and to be ever mindful of the need to teach their patients how to attain and maintain health; doctors who know themselves and can throughout their career recognize their defects, learn from experience and continue to grow as people and as doctors.

I am of the opinion that a doctor who has committed himself to a group of people and attained fulfillment by doing so, undergoes a gradual evolution of a sense of vocation — first, as a technical expert, a dealer in crises and emergencies, and then gradually beginning to perceive his role in terms of the human relations that has been established. My observation from meeting large numbers of family doctors from all over the world is that the source of their fulfillment is the experience in human relations that medicine has given them.

PRIMARY MEDICAL CARE IN SINGAPORE

In a modern environment like Singapore, with its high rise satellite towns and industrial centres, primary medical care should evolve an advanced system of health care and bring to bear advanced technology and skills to the health problems of the community. The approach should be family-based and community-oriented — especially when the three-tiered family is being encouraged and closer neighbour-hood ties are being promoted by the Government. It does not promise to be a cheap solution to safeguarding the health of a community, but it will certainly be the most cost effective, representing the most efficient way to utilise health resources.

The great majority of people seeking treatment for health problems are seen and treated without admission into a hospital. This has given an impetus to the search for improved management of disease through early diagnosis, management and treatment, so that as far as possible the individuals under care remain economically and socially active. The understanding of the cause of disease, the identification of controlable risk factors, the development of strategies to control these factors and the great advances of modern medicine in the last three decades have made possible the ambulatory care of a great many diseases for which there has been no effective treatment even in hospitals until a few years ago. The psychotropic drugs, the newer antibiotics, the steroids for systemic and dermatological use, beta blockers, beta-2 stimulants, home dialysis and effective immunization are a few examples of new developments that have transformed the prospects of primary medical care.

In order to take advantage of the great new possibilities in medicine, it is necessary to train a new type of general practitioner whose training will combine therapy with the new concept of prevention and continuity of care that have become the hallmarks of family medicine.

Primary medical care must be the central axis on which the health services of a nation revolve. In 1980, according to the Ministry of Health Survey, fourteen million consultations were carried out at the primary care level of which about 70 per cent (approximately ten million) were conducted by the private sector. Only a very small proportion of all sick people (less than 10 per cent) needed the expensive technology of the hospitals, a fraction that can and must diminish with effective care at the primary level. This will enable the most effective utilisation of expensive hospital beds.

Our specialist colleagues in hospitals also need competent generalists in the community whom they can trust, so that they are not off loaded with unnecessary referrals. An important achievement of specialist medicine has been the shortening of hospital admission times, but early discharge depends on the consultants’ ability to refer the patient back to a competent primary care doctor.

As health care becomes increasingly complex and fragmented it is vital that the patient has direct access to a doctor of first contact who is continually involved in his care, and who can share with the patient the responsibility for the maintenance of his health. The most appropriate person for this role is the family doctor whom the community expects to be knowledgeable, skillful, understanding and readily available. It is this community demand that will ensure the future of family medicine. The challenge to-day is to provide good clinical care on average in our discipline as the consultants do in theirs.

Medical educators around the world have also acknowledged that it is just as essential for the family doctor to have comprehensive vocational training and to participate in continuing education as it is for the physician or surgeon. Without this he cannot fulfill his proper role in community health care. Indeed no doctor should engage in clinical practice unless he has had training appropriate to his responsibilities and unless he maintains and enhances his skills through regular assessment and continuing medical education.

INTEGRATED CARE

In the years ahead we should raise the standard of care of our patients through integrating the natural with the behavioural sciences. I appeal to the profession to set aside its guild mentality where trade rivalries threaten to overwhelm our concern for the patients’ welfare. Ours is a noble profession, but it will not stay noble unless its members are individually seen to be noble in their aspirations and endeavours. We must find a way in which the family physician as well as the consultant specialist have an appropriate plan for in-patient care and can work together in a collegiate spirit. Every physician must expect to specialise, and as the hospital specialities divide into more concentrated and narrow areas of expertise, the greater will be the need for the integrated skills of the primary physician providing continuing care.

The Singapore Medical Association has come of age. During this, its Silver Jubilee Year, we as members of a single profession, should rally around and support the national body to succeed in the task that lies ahead.

Ladies and gentlemen, I have expressed some of my personal feelings and observations after thirty years of practice, both in institutional and private practice. Never in the short history of our Island have the prospects been so bright and the challenges so great. May I urge you, therefore, to take heed of the wise words of the Bard...
"There is a tide in the affairs of man,
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries.
On such a full sea are we now afloat,
And we must take the current when it serves
Or lose our ventures."

Shakespeare

*Julius Caesar*