

The Singapore Family Physician



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**The
College of General
Practitioners Singapore
Vol. VIII No. 4
October/December 1982**



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¹ Acta Paediatrica Scand. 1979; 68: 351-5, 441-2, 813-17.

² Codex Alimentarius Commission Joint FAO/WHO food standards programme. Recommended international standards for foods for infants and children. CAC/RS 72/74 - 1976. Rome, Secretariat of the joint FAO/WHO food standards programme, 1976.

³ American Academy of Pediatrics. Committee on Nutrition. Commentary on breast-feeding and infant formulas, including proposed standards for formulas. Pediatrics 1976; 57: 278-85.

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effective
with low incidence of
adverse effects in
sleep onset insomnia

References:

- 1 Priest, R.G. et al, ed. Sleep Research: Proceedings of the Northern European Symposium on Sleep Research, Basle, Sept. 26-27, 1978. MTP Press, Lancaster, England
- 2 Kales, A. et al, Rebound Insomnia: A New Clinical Syndrome, *Science*, 201: 1039-1040, 1978.
- 3 Greenblatt, D.J. et al, Toxicity of Nitrazepam in the Elderly: A Report from the Boston Collaborative Drug Surveillance Program, *Br. J. Clin. Pharmacol.* 5(5):407-413, 1978.
- 4 Data on file: Hoffmann-La Roche Limited, Vaudreuil, Québec, Canada
- 5 Marks, J., The Benzodiazepines: Use, Overuse, Misuse, Abuse. MTP Press, Lancaster, England, 1978
- 6 Garattini, S. et al, ed. *The Benzodiazepines*, Raven Press, New York, N.Y., 1973.

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'Mogadon' dosage guidelines

Standard
Hypnotic dose

10 mg → 5 mg ← 2.5 mg

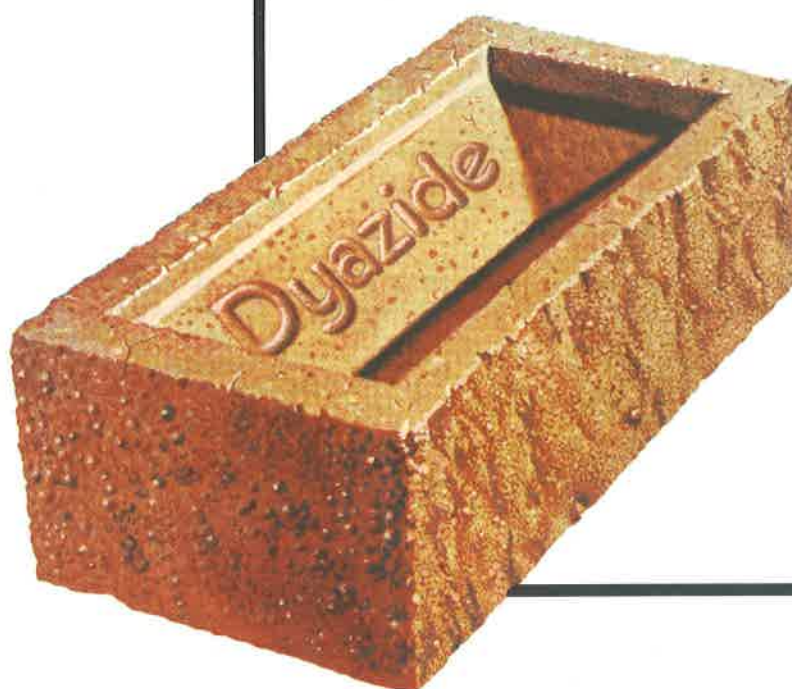
Adjust dose
downward
to minimize
intolerance or
unwanted reactions

Initial dose
for elderly
or debilitated
patients

Dosage may be
increased
to achieve
maximal hyp-
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antihypertensive therapy to build on.



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THE SINGAPORE FAMILY PHYSICIAN

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CONTENTS

	Page
The Eighth Council 1981/83	93
Editorial — Singapore's Medical Copartnership	94
President's Speech at the Eighth Convocation & Dinner and Fifth Sreenivasan Oration	97
The Fifth Sreenivasan Oration — The Making of a Family Physician	100
Dr Wesley E Fabb	
Patient Management in General Practice	107
Dr E K Koh	
Sleep Disturbance in Young Children	111
Dr Freda M Paul	
The General Intensive Therapy Unit	114
Dr N K N Iyer & Dr Peter H C Lim	
Diagnostic Ultrasound in Early Pregnancy	116
Dr P Chaudhuri	
The Undescended Testis — How and When to Treat It	119
Dr Adam E Groeneveld	
The Eighth Convocation & Dinner and Fifth Sreenivasan Oration	121
Dr E K Koh	
Book Review: Training for General Practice	122
News from the Council	123
Medical News	125

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4 to 8 weeks	6.0	150	8	First 4 weeks
8 to 12 weeks	7.5	180	8	First 4 weeks
12 to 16 weeks	9.0	210	8	First 4 weeks
16 to 20 weeks	10.5	240	8	First 4 weeks

Preparation of Feeds: 調奶方法:
Put water, bottle, heat and cap in water and boil for 5 minutes.
Boil water during water and cap in water and pour the water into the bottle (see feeding table).
To prepare one litre of LACTOGEN, add 100g of LACTOGEN to 1 litre of water.
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Infant formula with iron
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Professional Information

Component	g/100g	g/100kcal
Protein	18.0	1.8
Lactose	12.0	1.2
Glucose	1.0	0.1
Fructose	0.5	0.05
Starch	0.5	0.05
Carbohydrate	22.0	2.2
Energy	418	41.8

VITAMINS AND MINERALS

Component	g/100g	g/100kcal
Vitamin A	1000	100
Vitamin B1	0.5	0.05
Vitamin B2	0.5	0.05
Vitamin B6	0.5	0.05
Vitamin C	10	1.0
Vitamin E	0.5	0.05
Vitamin K	0.5	0.05
Vitamin P	0.5	0.05
Vitamin PP	0.5	0.05
Vitamin B12	0.5	0.05
Vitamin D	0.5	0.05
Vitamin H	0.5	0.05
Vitamin M	0.5	0.05
Vitamin N	0.5	0.05
Vitamin O	0.5	0.05
Vitamin Q	0.5	0.05
Vitamin R	0.5	0.05
Vitamin S	0.5	0.05
Vitamin T	0.5	0.05
Vitamin U	0.5	0.05
Vitamin V	0.5	0.05
Vitamin W	0.5	0.05
Vitamin X	0.5	0.05
Vitamin Y	0.5	0.05
Vitamin Z	0.5	0.05
Vitamin AA	0.5	0.05
Vitamin BB	0.5	0.05
Vitamin CC	0.5	0.05
Vitamin DD	0.5	0.05
Vitamin EE	0.5	0.05
Vitamin FF	0.5	0.05
Vitamin GG	0.5	0.05
Vitamin HH	0.5	0.05
Vitamin II	0.5	0.05
Vitamin JJ	0.5	0.05
Vitamin KK	0.5	0.05
Vitamin LL	0.5	0.05
Vitamin MM	0.5	0.05
Vitamin NN	0.5	0.05
Vitamin OO	0.5	0.05
Vitamin PP	0.5	0.05
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Vitamin SS	0.5	0.05
Vitamin TT	0.5	0.05
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Vitamin VV	0.5	0.05
Vitamin WW	0.5	0.05
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The vitamin, mineral and carbohydrate profiles have been further improved using breast milk as the model. Lactose is now the sole source of carbohydrates.

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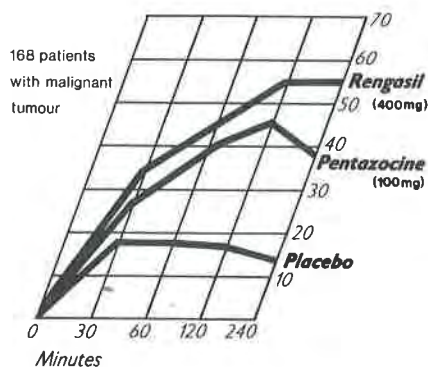
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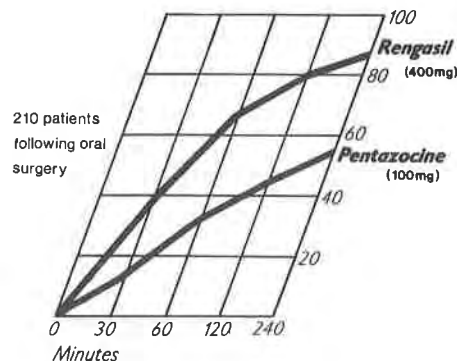
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Reduction in pain intensity in %



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- * efficacy and tolerability extensively evaluated in studies lasting from 2 weeks to 1 year

Rengasil ... outstanding pain relief right from the very first dose.



Further product information available on request **CIBA**

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EDITORIAL

Singapore's Medical Copartnership

The Economics of Medical Practice

The medical curriculum of undergraduates in the National University of Singapore leaves little room and time for studying the economics of medical practice. Nevertheless it is a very important aspect of medical education. It should not be thought that just because it has not found a niche in the medical course, the medical graduate can afford to be blissfully ignorant of its importance.

Many medical graduates especially those who have spent their entire lives working dedicatedly in "sheltered" public hospitals can and have been known to grow old without any passing acquaintance with the economics of medical practice. They have never had the need to look beyond the pay-pocket at the end of each passing month. Incremental pay is assured. Leave and pension are written in the medical scheme governed by a set of well tested General Orders — the "Bible" of public service. Everything enjoys a measure of order, conformity and assurance. If in doubt there is always the obliging administrator in the office who will patiently tell him all about it. As long as the take-home pay each month is not less than that of the previous month there is really little to bother his peace of mind. Such peace of mind is conducive to academic excellence and professional advancement and is indeed the strongest reason for preserving the "sheltered" environment. Only those who have to make decisions and given the responsibility of captaincy of the institutions have anything to do with the economics of medical practice.

The medical graduate who "weans" himself from the sheltered environment of a public institution cannot help but be overwhelmed by economic factors the moment he steps into the private world of medical practice. Since 80% of all medical graduates will sooner or later have to leave their shelter to face the economic world of realities in the private sector, it is perhaps on hindsight an oversight not to have had a more intimate knowledge of the economics of medical practice long before the "weaning" decision.

In the private world of medical practice, a doctor is in economic terms an entrepreneur. He is the person who is responsible for three im-

portant functions. Firstly, he is the developer of an idea (medical service); secondly, he is the coordinator or controller of the service enterprise and thirdly, he alone is the risk bearer. He acts as the link or middleman between the unorganised consumer and the unorganised factors of production, viz., money, capital goods (medical/surgical paraphernalia), man-power (labour) and raw materials (galenicals). He alone bears the risk that the service he provides may not satisfy the needs and requirements of the consumer.

The doctor on entry into the private sector must at the outset decide on the legal status of his professional practice. Is it to be a sole-proprietorship, a partnership or a company? He has to grapple with economic factors such as demand, supply price, wages, rent, money and so on. Private medical practices are not privileged or protected enterprises and they have to compete with subsidised medical/health care provided by the public sector. The fact that they survive is sufficient testimony to the cost-effectiveness of these practices. Has the public sector of medical/health care nothing at all to learn from them?

There was a time in history when the medical doctor's status was that of a slave. As a slave he had to look after his master's health and medical needs as well as those of his family. His payment was raiment over his body, enough to eat and a place to sleep. His status subsequently improved. He became an employee. The acme of his social elevation was when he became an independent professional earning his own keep. Unanimity has not been reached on this last point.

It is enigmatic to note that when a doctor in the public sector receives an increased emolument, accolades are heaped upon him and he is regarded as being worthy of every cent of the increment. However, a small elevation of his income by a doctor in the private sector by dint of hard work or increased expertise is regarded with dismay and deemed to be mercenary. Perhaps an employed doctor has a higher social status than the independent medical professional.

All doctors in the private sector have had the benefit of having worked in the public sector. The converse however is not true. Hence doctors in

the public sector have little or no inkling of what it is to work in the private sector. When it comes to work improvement in public institutions there is much that doctors in the private sector can contribute. The fact that no effort is made to tap this rich intellectual resource is of course not the fault of those who have not been asked. In a situation where there is everything to be gained and nothing to lose just by the mere asking it is again enigmatic that no one has yet been prudent enough to ask.

The National Productivity Movement

We are told that the Productivity Movement in Singapore concerns everyone. It is depicted pictorially in stamps with the emphasis on three themes:—

- Productivity is Everybody's Business,
- The Benefits of Productivity are shared and
- Teamwork is essential for Higher Productivity.

Since productivity is everybody's business then it is also the business of every doctor in the private sector. The benefits of productivity are to be shared. This makes doctors in the private sector copartners or cobeneficiaries of the movement. Lastly, higher productivity is said to be teamwork and doctors in the private sector are as much a part of the team as are doctors in the public sector. Hence elected leaders in the local medical bodies such as the College of General Practitioners, the Academy of Medicine, the Singapore Medical Association and the Association of Private Medical Practitioners of Singapore (APMPS) do represent responsible and organised professional views and opinions. In matters pertaining to medical/health care of Singapore their respective views and opinions should be sought and tapped rather than ignored and bypassed as of no consequence. The cynics say there is dissension in these organisations and question the usefulness of dissented views. Indeed there is and will always be dissenting views within the ranks of the membership but considered in its proper perspective, they are healthy signs of an enlightened membership seeking to meet problems in open debate in a spirit of give and take. Slanted unfavourably in the mass media, mole-hills often take on the appearance of colossal mountains.

What Does Confucius Say?

One of the Confucian scholars from Harvard University has declared with remarkable candour and insight that as a scholar, he is perhaps hampered and restricted in his perspective of the wider implications and views on Confucianism in the local context and how it should be taught as a

subject in the local secondary classes. He used the term "educated ignorance" to describe his circumscribed perspective. Perhaps those who make decisions from the narrow perspective of institutional medical practice suffer from the same "educated ignorance". But the Confucian scholar was wise in humility and his recognition of his own shortcoming is in consonance with the best tradition and teaching of Confucius.

Are We Serious about Teamwork?

Under the aegis of the National Productivity Board there is a move to design and to maintain a course of instruction for private medical practitioners in industrial health diseases. Legislation is afoot to limit statutory medical examination of exposed employees to only designated factory doctors i.e. those who have successfully completed the course of instruction.

Is it productive to do so, noting the length of the course, the heavy dependence the diagnoses of industrial health diseases have on laboratory (pathological, radiological and physiological) results and measurements, the efficient preventive measures already taken to prevent these risks even before such health-risk industries were set up and consequently the rather poor yield of positively proven cases?

We seek answers to more questions.

What problems is the plan supposed to solve? What goals or objectives is it supposed to achieve?

It is extremely valuable to define precisely the problems to be tackled because subsequent work and the eventual plan depend on it. Definition of the problem does not mean just setting down one's ideas and intentions. It must include the identification of the problems on the ground and the measurement of their magnitude.

How did the problems arise? Are the present measures inadequate? Is the incidence of industrial health diseases on the rise? An understanding of the causes of the problem is useful in suggesting possible solutions.

Having measured, defined and explained the problems **there is still the need to forecast how it will develop in the future** e.g. in five, ten, twenty or thirty years hence. We need two reminders in forecasting. First, technology is never at a standstill. Second, the index of good industrial health is the elimination of industrial diseases. Against the backdrop of robotic technology, microcomputerization, increased awareness of industrial health by the workers themselves and a deliberate choice of clean and high-value added industries, contact between man and industrial contaminants is progressively minimised. The obsolescence of the

present course of instruction in the next 5 to 10 years time is a serious consideration.

Will the plan satisfy optimum achievement of agreed objectives subject to the inevitable constraints of time, money, energy and other resources?

Given the objectives and constraints, **what possible methods of achieving the results are available?** There is a need to formulate several alternative plans if only to compare all feasible alternatives. The final choice must be the best possible alternative rather than the absence of one. There is always the possibility that the best plan may have been overlooked bearing in mind the notion of "educated ignorance".

Perhaps the most important question is this: **Is it teamwork in the spirit of the National Productivity Movement?** The President of the APMPS asserts quite rightly when he writes:—

"... we regretfully note that the medical profession has not been involved in the planning of such a major move. With the scanty information provided thus far, our members are natural-

ly concerned and anxious. We once again appeal to the planners to allow us a chance to contribute to what may be a great step towards the standard of industrial health in Singapore."

That he has **to appeal for a chance to contribute** towards what is in reality a team effort speaks much for the lack of proper understanding of the concept of teamwork in the National Productivity Movement of Singapore.

It is indeed a pity that official letters bear no stamps when sent out to the private sector. Maybe it is time that decision makers or planners in the public sector be made to lick a few stamps which depict pictorially the spirit of productivity. They will then be able to savour the flavor and imbibe the essence of teamwork in productivity. The added bonus is that it reminds the sender visually what he has savoured and swallowed.

We claim a *medical copartnership* in the National Productivity Movement in Singapore. Productivity is *our business* and higher productivity is essentially *teamwork*.

VC

Views expressed in the editorial are not necessarily the official views of the College.

President's Address at The Eight Convocation & Dinner & Fifth Sreenivasan Oration

DR. V.L. FERNANDEZ MBBS, FCGPS

On behalf of the College of General Practitioners Singapore it is my pleasure and privilege to extend a warm-hearted welcome to all of you who have come here this evening. I have said it before and I say it again, that by your coming and by your presence here this evening, you have given us in the College a great deal of encouragement and inspiration to face the challenges that lie ahead, and I wish to thank you most sincerely.

Since its inception eleven years ago, the College has come a fairly long way. Many at that time felt that the foundation of such a College was something of an optimistic piece of idealism, doomed to death by disinterest. But it prospered and to-day we can reflect on some of the significant milestones that have been achieved:

- our continuing education programme directed primarily to equip the practising doctor in core-knowledge, clinical family medicine and current trends, has seen greater participation by general practitioners/family physicians and is now widely acknowledged to be one of the best that is provided for any profession in Singapore.
- Our problem-orientated diplomate examination in Family Medicine, reputed to be of a high standard and at least as demanding as any post-graduate examination in Singapore is recognised by the Singapore Medical Council as an additional registrable qualification.
- Our self-assessment/home-study and audio-visual programmes have gained acceptance.
- Our extensive library of general practice literature is available to all practitioners who wish to keep up with the growing literature on Family Medicine.
- Our Membership has increased and continues to increase.
- We have now a strong and efficient Secretariat to meet our ever-increasing needs.
- The opinion of the College is sought by a wide variety of people and agencies, including the Government, on matters relating to General Practice.
- On the international scene, the College has come of age. As hosts to the Tenth WONCA World Conference on Family Medicine, to be held in May next year, we have established

ties with Colleges and Academies of General Practice/Family Medicine throughout the world. Organisation of a Conference of this magnitude, with more than 2,000 delegates is a Herculean task that has been undertaken by the members of our College. This World Conference is being held in South East Asia for the first time and promises to be the largest medical conference to be ever held in Singapore. All our efforts would not be in vain, if the deliberations at this Conference would help establish Family Medicine as a distinct education discipline in Singapore and the neighbouring ASEAN countries.

But in spite of all that has been done, the College has still urgent work to do.

Singapore, like most other developed countries, is sensitive to social change within the framework of a system where free enterprise and Government institutions work in conjunction for the benefit of the community. The many social, economic and educational changes that have taken place in our Society in recent years have had a profound influence on the practice of medicine, but alas these changes are not apparent in General Family Practice.

Our ever-growing and aging population, living in high-rise flats, the upward trend of chronic degenerative diseases, industrialisation, and the maintenance of a military force have, in no small measure, brought about greater demands on our health services. The escalating costs of treatment-orientated hospital care, has placed greater emphasis on out-of-hospital ambulatory care and preventive medicine, as a means to better controlling the costs of health care delivery.

The doctor of first contact, namely the primary care doctor, both in the public and private sectors, today completely manages more than 90% of health problems, regardless of age and sex. This he does only with practical experience acquired over a period of time with no specific vocational training whatsoever, unlike his counterparts in the various specialities.

We in the College of General Practitioners Singapore believe that those entering General Family Practice should be trained by design to be compe-

tent and cost effective. We believe that the trained family physician uses costly medical facilities more effectively than his untrained counterpart and makes fewer referrals to specialists and hospitals, as well as the economic use of expensive investigations and drugs. We believe that the family doctor of today and tomorrow must be as well-trained in his field of practice as his counterpart in surgery, medicine, obstetrics and gynaecology and other disciplines. He must be a fully-trained professional, he must have an academic goal and the College must provide this academic stimulus. General Family Practice has now been defined in educational terms with its body of knowledge and skills, so that it can be taught as a distinct entity and not in bits and pieces of existing medical disciplines. General Practice/Family Medicine today should be organised and supported, for therein lies our hope for a healthy nation. Organisation and support for General Family Practice must come from the National University of Singapore in the undergraduate curriculum, immediate post-graduate training for Family Medicine should be the responsibility of the School of Postgraduate Medical Studies, while the College should be responsible for the appropriate provision of ongoing continued education. At all these levels the College is prepared to act as advisor and co-ordinator. Let us hope that our health planners and political leadership oversee the development of a proper career structure for our future family physicians/general practitioners and may they have sufficient depth of vision to bring this ideal to reality.

Trained by design to function as part of the health team, the family doctor today is acknowledged as having the responsibility of providing primary continuing and comprehensive care to any and all members of the family — using the available ancillary and consulting services to ensure exemplary care.

In Singapore, patients hop from doctor to doctor and specialist to specialist hoping to find the answer to their problems. It appears that the classical well-trying system when the family doctor was consulted for all illnesses has now been eroded. A senior consultant surgeon with years of experience in both the public and private sectors, who was the Past Director of the School of Postgraduate Medical Studies, the Past Chairman of the Singapore Medical Council and the Past President of the Singapore Medical Association, stated and I quote him, "The patient-general practitioner-specialist relationship has several advantages:—

1. The family doctor has continuous surveillance of the patient's medical history as well as his socio-economic background.
2. He is better able to assess the changes in the patient's or the family's situation over the years.
3. With this background he is better able to assess the need in any particular condition which requires a particular specialist opinion.
4. The patient can appeal to the family doctor for information on the conduct and rationale of the specialists' procedures.
5. For the specialist the family doctor becomes an important unit on whom the specialist can lean for advice on the patient's temperament, ability to withstand investigative and therapeutic procedures as well as his economic status.
6. At the end of specialists' surveillance the family doctor receives from the specialist a full report which should become a permanent record in the patients' file.
7. The family doctor then becomes the best man (knowing his patient as well as he) to explain to the patient what has actually transpired and to proceed with continuing treatment."

The family doctor's pivotal role, his **"middle-man's status"** is therefore, the all important factor in the **proper continuing medical care** of a patient. It is sad to say, that to-date, no special training programme is being provided for the young graduate entering general family practice.

Our incumbent Chairman of the School of Postgraduate Medical Studies, an acknowledged educator and renowned paediatrician has said, and I quote him, **"the General Practitioner in Singapore is in the front line of delivery of medical care to all patients. Being so, he is in a unique position to advise on health care, so that illnesses can be prevented in other members of the family. He has intimate knowledge of all members of the family who have selected him as their doctor. He knows their genetic traits and he knows their environmental influences, for good and for bad. He is in a unique position to advise on genetic counselling, or seek such advice on their behalf, and also is in a unique position to advise on the environment, manipulating it in such a way that all the members remain healthy — physically, mentally and psychologically."**

In most countries around the world, especially in developed countries the people want a well-trained family doctor as a manager of their family's health — trained in modern medicine but with the personal orientation that characterises the family doctor. Our Government should encourage the Singapore population to cultivate the practice of retaining a family doctor as it would do away

with the present tendency to doctor hop. Our Ministry of Health should make every effort to have this system enconced in the fibre of the community so that every Singapore family has his own family doctor, so that problems of seeking out proper medical aid from the right source at the right time can be resolved.

Tonight, we are honouring Prof Lim Pin, Vice-Chancellor of the National University of Singapore. Our College as an academic body, dedicated solely to learning and raising the standards of medical care, have from time to time, honoured men of outstanding academic merit and leadership in the field of education. A brilliant Queen's Scholar, Prof Lim Pin's achievements as a research worker, his clinical acumen and his leadership qualities in the field of tertiary education have been magnificent. He has excelled as a scholar, educator and leader, and we today confer on him the highest honour of our College — the Honorary Fellowship of the College of General Practitioners Singapore.

Two members of our College are being admitted to the Diplomate Membership. The College looks forward to their greater involvement in its educational programmes.

We have a few other awards to-night. The Albert Lim Award, designed to honour the memory of the late Dr Albert Lim, a very distinguished family physician, goes to Dr Frederick Tan Bock Yam, Senior Consultant Physician and Head, Department of Medicine, Alexandra Hospital, in appreciation of his untiring efforts and contribution to our training programmes and Diplomate Examination. Certificates of Appreciation are being awarded to:—

Mr Yahya Cohen

Dr Ho Gien Chiew

Dr James J Murugasu

Prof S S Ratnam

Mr Victor Yong Shee Heung

for their efforts and outstanding services to the College's educational programme.

The highlight of this evening's proceedings is the Fifth Sreenivasan Oration, designed to honour the memory of our Founder President, the late Dr B R Sreenivasan, as well as to honour the recipient invited to deliver the Oration. I am glad to announce that the proud recipient of the Fifth Sreenivasan Oration is Dr Wesley E Fabb, Director of the Family Medicine Programme in Australia. Dr Fabb is an Honorary Fellow of our College and has been our mentor and guide ever-willing to advise and help us. Dr Fabb, thank you for accepting our invitation and for coming such a long way to be with us tonight.

May I conclude, by thanking all our donors, teachers, examiners and the many others who have helped us during the past year, I would also like to thank all those members who have served the College in executive capacities, be they in Standing Committees or in Council. A lot of time some of them have given, a lot of time from busy lives. I would like to thank their wives for allowing them to give their time and supporting them. Medical wives as a class go largely unhonoured and unsung, we know as doctors their great difficulties and the many sacrifices that they have to endure. On behalf of the College of General Practitioners Singapore, I thank you all most sincerely.

Finally, I would like to thank Dr Moti Vaswani and his Committee for the splendid organisation of tonight's function.



The 1982 Sreenivasan Oration

The Making of A Family Physician

DR. W.E. FABB FRACGP, FCGPS.

Let me begin by saying how honoured I am that you should ask me to deliver the 1982 Sreenivasan Oration and to be the first non-resident of Singapore to do so. I welcome the opportunity not only to address you tonight, but to pay tribute to Dr. B.R. Sreenivasan, the founder President of this College.

I first met Sreeni in 1972 when I was invited, along with Dr. Richard Geaves, another Honorary Fellow of this College, to assist with the development of the Membership examination of the College. I got to know him well during this time. His vast knowledge of medicine, his deep understanding of human nature and his devotion to the care of his patients quickly endeared him to me. I respected too his scholarly interests, which extended well beyond medicine into the classics of the literary world.

I need not tell you of his many achievements and honours. You know that he was awarded Honorary Fellowship of the Royal College of General Practitioners, the Royal Australian College of General Practitioners, and the Royal College of Physicians, as well as this College, and that he was awarded a Doctor of Laws by the University of Malaya. You will remember that he was President of the Malayan Branch of the British Medical Association, the Singapore Medical Association and the Singapore Medical Council.

We all will remember him as an able administrator, an inspired teacher and a charismatic leader, but most of all he will be remembered and revered for the man that he was, and for his qualities as a family physician. The tribute to Sreeni in July 1977 issue of **The Singapore Family Physician** puts it this way: "Dr. Sreenivasan was a man of great humanity and sincerity, and was admired, respected, even worshipped by his patients, indeed by all who came into contact with him. He was the epitome of what we are nowadays coming to call the ideal "family physician" — one who knew not only all about his patients and their illnesses and problems, but also the whole background against which the latter were set; and not only did he know all this, but he applied the knowledge for

his patients' benefit."

What more would any of us wish for our epitaph.

I dedicate this address on **The Making of a Family Physician** to the memory of Dr. B.R. Sreenivasan.

All around the world, the family physician is recognised as the essential link in the health care system. He works at the interface between the community on the one hand and the health care system on the other. He is the doctor of first contact and provides primary care. And he provides continuing care for patients and families in their community setting. He is strategically placed to understand the health care needs of the community and how the health care system can meet them.

About 50% of the doctors in the world are family physicians. In Singapore, the figure is 60%. Yet it's only in recent times that any attention has been paid to the training of the family physician. In the past, he just grew, like Topsy. Today, it's recognised that this way of making a family physician is no longer acceptable. Exposure of the undergraduate to family medicine and specific postgraduate training is now regarded as essential if we are to make family physicians who can meet the current and emerging health care needs of the community.

Interest in training family physicians is running high here in Singapore. The need for training is recognised in College circles, by the Singapore Medical Association, by the Faculty of Medicine, and by the Government. Yet some may still shake their heads and ask, "What is family medicine?", "Why is it necessary to undergo such intense training to be a family physician; surely GPs don't need that much training?". Tonight I hope to answer these questions.

My purpose in this oration is:

- to sketch some of the problems family physicians face
- to outline the conceptual framework of family medicine
- to suggest how family physicians might be

trained.

I will do this by way of illustrative case histories in the belief that all clinicians, whatever their discipline, identify comfortably with the realities of the clinical situation.

Let's look first at Mrs. T.K.H., a 30 year-old housewife. Mrs. T. has brought her six month-old baby to see the family physician six times in the past three weeks. On each occasion, the child had a minor physical symptom, such as slight rhinorrhoea, slight regurgitation of food, a mild rash, a few loose stools. She also complained that the baby did not sleep well at nights. On this occasion, the baby had a mild napkin dermatitis. The family physician recommended treatment for this. After dressing the baby and sitting down again, Mrs. T. said, "Before I go, Doctor, would you please prescribe something for me to sleep at night?"

This situation raises some interesting questions. Who is the patient — the child?, her mother?, both?, someone else?, the family? Is there an illness present? The baby might be labelled as having mild respiratory, gastrointestinal or skin conditions, or suffering from insomnia. But is the baby the real reason for the mother coming, or is the mother the real patient? If the mother is the patient, does she have an illness? If so, what is the name of the illness? Would you find it in the index of a medical text?

Michael Balint's label to describe this phenomenon is "The child as the presenting symptom of the parent". The mother has the problem but uses the child, either consciously or unconsciously, to gain access to the doctor. But if the doctor is not trained to recognise this presentation, if he has never heard of the concept of "The child as the presenting symptom of the parent", he may focus his attention wholly on the child, investigating unnecessarily, and giving it quite inappropriately such things as decongestant nose drops, mixtures, vitamins, or whatever, whilst the mother and her problems go unrecognised.

But even if the doctor has been trained to recognise the phenomenon, is that enough? What will he do for or about the mother? What sort of illness label will he select — anxiety, depression, inability to cope, inadequate personality, inadequate education about child health, or some other label? If he selects anxiety or depression, what will he do? Prescribe psychotropics? Would that help?

Family physicians know that this sort of situation demands much more than a prescription. It demands a capacity to recognise that the mother has a problem, finely honed communication skills to elicit the nature of the problem, well develop-

ed counselling skills to explore the alternatives for action which both doctor and mother have, and skills in patient education when developing strategies for management. Without all of these skills, chances are that the mother will go away unrelieved, coming back again and again, or going from doctor to doctor seeking relief from her discomfort.

So what seems like a simple, even trivial problem, is not so simple. Yet without training, the doctor is likely to see it as such.

Let me give you another example.

Mrs. W.B.T. aged 40 presents complaining of headaches "like a tight band around her head" for three months. She's married, with three school-aged children. She lives in a small apartment in a high-rise building. She's new to the neighbourhood and has few friends and no outside interests. The family income is limited. Her husband works long hours, comes home tired and seems disinterested in her. Physical examination is negative.

How does the doctor manage this problem? He needs to have the skill to elicit all the data required to decide whether these headaches are the manifestation of organic disease or the result of psychosocial problems, or both. He needs to be able to explore the patient's feelings about her life situation — the frustration and boredom of high-rise living, the loneliness of daily living with children at school and husband at work, the emptiness which results from lack of interests and hobbies, and the pain of social deprivation and separation from friends. He needs to recognise her problem as a maladaptive response to her environment and life situation.

But suppose he does uncover the problem, what can he do? What solutions exist? The biomedical solution might be to reach for the prescription pad and write "Valium". That might relieve the tension which causes the headache. But will that suffice? The doctor knows he can't alter the socioeconomic situation of the patient, nor the social system in which she finds herself. But he **can** do more. Provided he's properly trained, he can explore with her strategies for making more of her life. He can help her to recognise the nature of her problem and the resources she has to manage it. If he's been trained in neurolinguistics — a brilliant new concept in communication — he will work on the premise that the patient already has the resources she needs to improve her situation, and will help her towards more productive behaviours. He will help her to manage her life so that she's more fulfilled and contented. He will help her alter her maladaptive responses to her environment. He will help her to change.

But if he chooses, through lack of training or understanding, to label her "psychosocial" or "functional" or "inadequate personality" — not my problem, what will become of her? Her misery will continue, her pain will remain, her dull, boring, unproductive life will go on as before.

I wonder if some of you are thinking — "But that's not the stuff real medicine is made of! Should doctors be concerned with such psychosocial problems — the so-called "soft" areas of health care?" Those of us in general family practice know that these problems of living are impossible to avoid. They are inextricably woven into the fabric of illness. They cannot be ignored. They will not go away. They are part and parcel of family medicine.

However, lest there be some who are still uneasy about what might be seen as the soft psychosocial underbellying of family medicine, consider this problem. Mr. K.H.S., a 40 year-old sales executive, presents complaining of tiredness. He's having difficulty maintaining product sales in the face of stiff competition. His blood pressure is 160/100, he's obese, smokes 40 cigarettes per day, and often drinks 100 grams of alcohol per day.

This man has a physical problem — moderate hypertension — which we know in all likelihood will respond to appropriate treatment, which will reduce his chances of target organ damage. So what does the family physician do? Prescribe a diuretic, a beta blocker, or some other anti-hypertensive agent? In all probability, he will. He will have read many articles on the management of hypertension and attended many symposia on this subject. He will investigate the patient appropriately and commence treatment. But is that enough?

How will he effect compliance with his therapeutic regime? The problem of long-term compliance is well known. The doctor's success in this case will depend heavily on his skills in patient education, his ability to establish a good relationship with the patient, and the efficiency of his follow-up procedures which detect the defaulters — all the product of good training.

But treating the hypertension will not suffice. The obesity, the smoking, the drinking, indeed this man's lifestyle needs consideration and his work environment needs assessment.

If the doctor did have the skills to unravel the strands of this man's problem, what would he do? Is there any way of helping people with lifestyle problems? The answer is "Yes". If he has learned the skills of behaviour modification and

has the time to apply them, the doctor can help the patient to lose weight, stop smoking, drink less, and respond more appropriately to the stress in the workplace. Many techniques exist — neurolinguistics, biofeedback, hypnosis and psychotherapy and some in common use. And they work.

Let's look at another sort of problem often faced by family physicians. Mrs. R.C.H., aged 28, presents complaining of marked weight loss. She now weighs only 40kg. She has had incessant diarrhoea for six weeks, but admits to taking excessive laxatives. On further exploration, she reveals that she wants to return to her former occupation as a model. As she talks to the doctor she begins to cry — she has a hyperactive child who has a learning disability, and she is upset that recently her husband has been overlooked for promotion.

What is the problem? Has she thyrotoxicosis, or a gastrointestinal condition? Or is there more to it? The well trained family physician would recognise that this is a family problem and that the players in the drama are interacting with each other, each affecting the other in a way which would make the treatment of Mrs. R.C.H. in isolation a less-than-efficient exercise. The family doctor needs the skill to tease out the interwoven strands of conflict in the family, and the ability to assist the family to weave a new fabric of family life. Family therapy is a growing discipline. It has the potential for relieving the tensions, frustrations and pain that families suffer and which often cause more discomfort and disruption to living than physical illness.

Family physicians in training need the opportunity to learn about the family — the life cycle of the family, the dynamics of family life, how they can become disturbed by illness, disability and social deprivation, and how to recognise and manage family problems. Without this knowledge and these skills, he'll be little more than a provider of episodic care isolated from family considerations — a periodic people-patcher.

The perspective of the family doctor extends though beyond the family. He needs a community orientation which focuses on the social and cultural environment as well as the economic and physical. He needs to know the health beliefs of his patients, the cultural mores which affect health care, the economic and social factors which affect health in his community, and the effects of the physical environment on community morbidity. He requires an ecological orientation — he needs to know *homo sapiens* in his natural environment.

Without this, he will miss or misunderstand many of the problems which unfold in his consulting room. As a highly respected member of the community, the family physician can influence the community environment. Living conditions, working conditions, recreational facilities and environmental pollution can be subject to his influence. But he won't exercise his influence if he has no understanding of community issues; if his attitude is that his job is to treat only true blue medical problems, if he has a reductionist biomedical approach to health problems. Effective training can provide the appropriate understanding, attitude and approach.

Let's return to the consulting room.

Betty W., aged 20, a student, presents saying, "Doctor, Mum said I should come for a check-up before I get married." Superficially a simple problem, but what a rich opportunity for patient education, preventive care and health promotion. Provided he's trained for the task, the family doctor can talk about the adjustments needed for a happy married life, the sexual aspects of marriage and how to avoid the problems which can arise, and the pros and cons of various contraceptive methods, and he can promote a healthy lifestyle for the couple which will benefit them and their children. He can establish a relationship which will enable him to advise and support the couple in the future. He can advise them on when to seek help from him and how to do it. His educational role is to the fore. He is a teacher — a true doctor. Teaching is not easy. It is a skill which needs to be learned. Proper training provides such learning opportunities.

Let's look at just one more clinical problem. Janet L., aged 12, has leukaemia. She was diagnosed two years ago and has undergone all the standard treatment with the best specialists. She had a remission for several months, but it is now clear she's terminally ill. She has devoted parents, a younger brother and two older sisters. Technology has little to offer her now; further hospitalisation is considered inappropriate. So what can the family doctor do?

Without training, he may feel inadequate even helpless. He may be threatened by Janet's inevitable death and the effects this will have on her family. He may feel quite unable to cope with the emotional trauma of the death of a child. Yet training can arm him with a wide range of strategies he can use. Training will confront him with the issue of death — his own mortality, the stages of the dying process, the fears of dying patients, the typical reactions of doctors to death, the reactions of relatives and the process of be-

reavement. He'll learn about himself, what a dying patient feels, what relatives feel. He'll know how to anticipate problems and will feel comfortable employing the helping strategies he's learned and mobilising the coping resources of the patient and the family. He can do more for the patient and her family in the days and weeks ahead, than can any hospital with its specialised care. He can be the anchor the family needs during its time of stress. He can make the dying process an uplifting one for all — provided he is trained — provided he has an understanding of the cultural and religious aspects of dying and death, provided he has the appropriate attitudes and skills.

The illustrations I've used are just a few from the vast range of problems faced by the family doctor, but they do reflect some of the significant needs of people in the community. Unless doctors are trained to meet these and the other needs of the community, such as, for example, the need for child care, care of the aged, the care of chronic illness and disability, to mention only a few, these needs will continue to be inadequately met and the disillusionment with traditional medicine, which is so widespread in the world today, will heighten.

Care of the aged deserves special mention. As the aged population of Singapore increases, so will the need for family physicians to care for their illnesses, and more importantly to maintain their health. Preventive care and the early detection of illness by the use of simple, cost-effective screening procedures will become an increasingly important part of the family physician's work. Care of the aged has been, and will remain his responsibility. There is simply no need for an army of geriatricians to do this job. Proper training of the family physician will equip him with the necessary knowledge and skills.

There are two important lessons here for medical educators. Training is necessary for the family physician to carry out his work in the community, and that training must be related to the needs and expectations of the community. Appropriate training for all entering general family practice has the potential for effecting important changes to the health care system. Ian Kennedy puts it eloquently in his 1980 Reith Lectures, **"If GPs were more adequately prepared for the real health needs of their patients, which are as much to do with social problems as with particular diseases, then the beginnings of a movement towards better health could emerge. Indeed the GP could well become an important focus for the sort of social reform necessary to produce the improvement in health we claim we desire. No one is better placed**

to gauge the social pressures and the problems of the day and pass the news up the line, and no one is better placed to act as an educator for better health and pass the word down the line."

How relevant are these words to the situation in Singapore? Professor Edward Tock, in his address to the Singapore Medical Association earlier this year, had this to say, **"There is no doubt that, in Singapore, as in most countries, primary medical care constitutes the major portion of health care delivery to the country. A survey done recently by the Curriculum Review Sub-Committee of the Faculty of Medicine showed that about 60% of medical practitioners working full-time are either engaged in non-specialist private general practice or working in government outpatient clinics, that is involved in primary medical care type of work. This situation also reflects that the major component of the health needs of the country is in primary care or general practice."**

What then is needed if we are to produce the sort of family doctor that can meet the community's needs, that can forge a new shape for health care in the future? Can the medical education currently available produce doctors with the necessary orientation, attitudes, knowledge and skills to meet the needs of the Singaporean community? For an answer to this question, I again quote from Professor Tock's address, **"The training in most medical schools tends to propel students towards careers in specialty, and even sub-specialty medicine, and away from careers in primary care. There is a tendency, although not intended, in most medical schools to convey the erroneous message to students that the real glory is in the sub-specialties — that primary care is somehow second-class. Such a system will produce medical graduates with inadequate knowledge and preparation for work in primary care, which the majority of them will take up as their life-long career. The training is therefore unsuited to the needs of first-contact care, where patients present with a mass of uncategorised symptoms and signs. There is also undue concentration on disease, rather than on people and their problems, so that the day to day problems of primary care are a surprise to the newly qualified doctor."**

So what needs to be done? Professor Tock points the way. **"Our medical school has been increasingly aware of this universal flow in medical education, and is currently involved in modifying and restructuring the curriculum and methods of teaching to put greater emphasis on preparing the students for future general practice or family medicine,"** and again, **"The existing teaching of general practice in our curriculum is inadequate,**

and needs to be improved on in quantum and structure." He goes on to talk about the possibility of creating a department of family medicine in the Faculty of Medicine of the National University of Singapore.

Experience the world over supports the view that if we are to train family doctors who can meet the community's needs, there needs to be initial exposure to the orientation, concepts and philosophy of family medicine at an undergraduate level, followed by specific vocational training for general family practice at a postgraduate level. To achieve this, undergraduate departments of family medicine and a postgraduate programme of training are needed.

A strong undergraduate department will put students in touch with the conceptual basis of family medicine, the family and community orientation of the family physician, the philosophy of general family practice, its unique process of continuing care of patients and families in their community environment, and its special emphasis on prevention, health promotion and health education. These elements are not generally well known or understood by other disciplines. Specialist disciplines have different concepts, a different orientation, a different philosophy, and a different process of care. They use almost exclusively the biomedical model of disease, whilst family physicians use the biopsychosocial model, considering simultaneously physical, psychological, social and environmental factors in assessing health and illness in their patients.

So an essential step in the process of providing for the health care needs of the Singaporean people would seem to be the establishment of an undergraduate department of family medicine. Because of the differences I've just talked about, it would be most appropriate for it to be established independent of other departments. The head will need to be thoroughly familiar with the concepts and philosophy of family medicine, a first-class clinician, an educator of repute, a skilled diplomat, and have the charisma needed to imbue undergraduates with the excitement of family medicine. The department would need to be well staffed so that its impact can be really felt.

Because the curriculum is already crowded, the main function of such a department would be to sensitise undergraduates to the challenges of family medicine and to familiarise them with its concepts, philosophy, orientation and approach to patients' problems. It would also very appropriately be involved in topic teaching, especially if an integrated curriculum is adopted or if a problem solving approach is instituted, such as is used

at McMaster University. The department could not be expected to teach undergraduates all they need to know about family medicine — that is a postgraduate exercise.

I want now to turn your attention to the need for postgraduate training of family physicians. Training programmes have been established in many countries and there are many models: from the two year programme of training in Canada (which is generally regarded as inadequate in duration) through the three year programmes in the United States and the United Kingdom to the four year programme of the Australian College, the Family Medicine Programme, to even longer programmes in some European countries. The programme proposed by the Singapore College is an excellent one, including as it does a year of training in a special training centre in a modified polyclinic and a second year in an accredited general family practice.

During the training period, the trainee would attend a comprehensive educational programme and undertake personal study. At the end would be some sort of certifying procedure, such as an examination to assess competence in general family practice. Particular emphasis needs to be given to the wide variety of problems and conditions encountered in practice, to the prevention of illness, to health promotion and health education, to the development of communication and interpersonal skills, and to the acquisition of helping skills using a variety of counselling techniques, such as psychotherapy and behaviour modification, as well as the traditional therapeutic and procedural skills used in general family practice.

The College of General Practitioners Singapore has made a submission along these lines to the Ministry for Health and hopes for a positive response. There seems no doubt from experience gained all around the world that specific comprehensive training for general family practice is needed. A superficial approach will not produce the goods; only an academically demanding programme will produce the sort of family physician who can meet the contemporary and emerging health care needs of the people of Singapore at a cost the community can afford.

The political reality, both here and in every other country of the world, is that funds for health care are insufficient to meet the needs. Governments need to be convinced that investing money in training family physicians is worthwhile on **economic** grounds. The evidence now accumulating from many countries is that funding such training is a wise investment for govern-

ments.

Let me briefly review the evidence for this and the arguments which flow from it:

- At least 80% of health care expenditure is initiated by doctors.
- Family physicians provide over 90% of the community's health care.
- Family physicians are therefore the gate keepers to almost every other service.
- Their management decisions have important economic consequences for both patients and governments.
- Inappropriate expenditure results from:
 - overprescribing
 - unnecessary investigations
 - unnecessary referrals
 - unnecessary hospitalisation
 - iatrogenic disease.
- Greater emphasis on preventive care, health promotion, patient education, psychosocial problems and non-hospital care, such as is provided by family physicians, will reduce this inappropriate expenditure.
- There is substantial evidence that vocational training can modify doctor behaviour in this direction and reduce unnecessary expenditure.
- As governments need to contain health care costs and since training can achieve cost effective practice, governments have a legitimate interest in investing in training at an undergraduate and postgraduate level.
- Cost effective practice is unlikely to be achieved without such training.

This evidence supports the widely held view that since the family physician is the cornerstone of any good health care system, his proper education is of the utmost importance to governments and the community on the dual grounds of economics and quality of care. To fail to invest in such training is to invite a continuation of the escalation of health care costs.

Moreover, vocational training needs to be followed by a regular programme of continuing medical education to maintain and enhance the knowledge, skills and attitudes acquired during training. The College has had such a programme for some years, and is steadily expanding it to meet the needs of the family physicians of Singapore. The efforts of the College in continuing education deserve the highest commendation, and the experience so gained will enable the College to give appropriate advice on the establishment of a department of family medicine and postgraduate training for general family practice.

The purpose of my address tonight has been to focus the spotlight on the conceptual frame-

work of family medicine by way of case histories drawn from practice, to show that these illustrate some of the health care needs of the community, to argue that if these needs are to be met now and in the future, undergraduate exposure to family medicine and specific postgraduate training of family physicians will be necessary, and finally to put the case that to achieve this an undergraduate department of family medicine and a postgraduate training programme will be needed.

The College recognises this need, the Faculty of

Medicine is aware of it, and the Ministry of Health has been appraised of the situation. As an Honorary Fellow of this College and as one most interested in Singapore and its health care system, I wish all involved success in the cooperative endeavour which will be needed to achieve these outcomes. I wish you every success in the making of family physicians for the community of Singapore. So long as concern for the welfare of the people of Singapore remains the pre-eminent objective, the outcome will not be in doubt.

Hippocratic Oath

(470-360 B.C.)

I swear by Apollo the physician, and Aesculapius, and Hygeia, and Panacea and all the gods and goddesses, that, according to my ability and judgement, I will keep this Oath and this stipulation — to reckon him who taught me this art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look upon his offspring on the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation, and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the art to my own sons, and those of my teachers, and to disciples bound by stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgement, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and holiness I will pass my life and practise my art. I will not cut persons labouring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and further, from the seduction of females or males, of freemen and slaves. Whatever, in connection with my professional practice, or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all times! But should I trespass and violate this Oath, may the reverse be my lot!

Patient Management in General Practice

DR E K KOH, FRCGP FCGPS

Many doctors hold the belief that once the diagnosis of the ailment of a patient has been made, management of the patient should be a relatively simple matter. Unfortunately in many cases this is far from the truth and this is especially so where there is no specific therapy or cure for the disease like in cancer or chronic nephritis. M.E. Herford says that many doctors still think that "once a diagnosis is made any fool can give treatment — after a fashion — by simply applying remedies or nostrums that are professionally and socially acceptable for whatever condition comes under a particular label."

Too little attention has been placed on the proper management of the patient in the medical curriculum, and even if this was taught it would often be centred around therapeutic management in the hospital. Yet the importance of correct patient management cannot be over-emphasized as in many cases it makes the difference between success and failure in the treatment of the patient. Core knowledge of the doctor alone would not do much good if it cannot be sensibly and effectively applied.

The medical profession should take a leaf out of the book from the engineering profession. No major construction project these days is ever undertaken without being first appraised by a systems engineer. The project is viewed critically from all facets, engineering problems, social architectural difficulties, and economic viability. Only when the problem has been thoroughly studied would the relevant engineers — the civil, mechanical and electrical engineers, be called in to start work on the project.

In a similar fashion the general practitioner is the 'systems physician' of the medical profession. He may or may not undertake to "do the job" himself, but in the patient's interests he has to evaluate fully the management patterns of the case, the socio-economic consequences of the line of management he has chosen, and the suitability and competence of the specialist practitioners whose help he may have enlisted.

Patient feed-back

Proper management of a patient depends a

great deal on the type of feed-back a patient gives to his doctor. Where the patient is intelligent or observant, the feed-back is extremely useful and will help the general practitioner decide the further course of management. Where the patient has not been so, the feed-back can still be useful, only this time some time will have to be taken to sort out the wheat from the chaff.

Where the diagnosis of the illness has been made, the pathway of management of the patient usually follows that of pattern in flow-chart 1. Treatment is instituted and following on this the patient's response is noted. The feed-back given by the patient may make it necessary to modify the pattern of management. This feed-back takes the form of physical response to the specific drug therapy, drug idiosyncrasies, acceptability of type of treatment, mental and social response, and patient compliance.

Guided by the feed-back, the general practitioner charts the course of management which leads to relief of the patient, alleviation of the symptoms, and more often than not, to the cure of the ailment. Not all cases even where the diagnosis is known will lead inevitably to a cure. In cases like hypertension, diabetes or neoplastic growth, cure is frequently not possible, but correct management may often bring about a remission of the disease process, or stop it from getting worse.

Where the diagnosis cannot be firmly established, and probably the majority of the general practitioner's cases come under this group, management of the patient is invariably a much more complex matter as can be seen in Flow Chart 2. Many doctors, especially those practising in hospitals become very upset when they can't put a diagnostic tag to a patient. In general practice it is often not possible to put a diagnostic tag to a patient's illness. Headache or stomach-ache for instance are not diagnoses. They describe the discomfort felt by the patient. Hypertensive encephalopathy and duodenal ulcer are diagnoses, but in patients with early signs, it might be difficult to establish the diagnosis.

When the diagnosis is only tentative or an educated guess, the general practitioner has to treat a patient symptomatically. Specific treatment will

have to await the establishment of the aetiology of the illness. From the patient's response to the symptomatic treatment, the general practitioner obtains feedback which tells him whether he is in fact on the right path to a diagnosis. When this has been confirmed, the management of the patient then follows a path similar to Flow-chart 1, as seen in "Path A" of Flow-chart 2.

If a diagnosis has not been arrived at then the management will continue along Path B" in Flow-chart 2. Because the treatment given is symptomatic and not specific, cure is not possible, but a balance can often be reached and the situation prevented from further deterioration by heeding the feed-back given by the patient.

By comparing the two flow-charts it should be quite obvious that managing a patient where only a provisional diagnosis can be made, will not be easy. Some general practitioners find this to be a challenge while others who are easily disheartened may find it a frustrating experience fighting an unknown adversary in the dark. The lines of management described in the two flow-charts may appear to be perfectly obvious and simple to many, the difficulties lie in that the decisions required have usually have to be made in a few seconds and the doctor's brain has to work like a computer evaluating and computing all the facts fed to it and coming up with all the answers.

The fact that treatment without the establishment of a diagnosis is often regarded as "unscientific", prevents many doctors from thinking clearly on the management. Most of us are creatures of habit and we would be much happier following established lines of medical management rather than tread, warily into the unknown in pursuit of a "hunch". Marshall Marinker says there is nothing unscientific about following a "hunch" in general practice. What characterizes clinical thinking is informed guesswork and the general practitioner does not delay in making a provisional diagnosis until all the pieces of the jig-saw puzzle have been assembled by him. Science is the process of examining the way in which the world is put together by both guessing and testing.

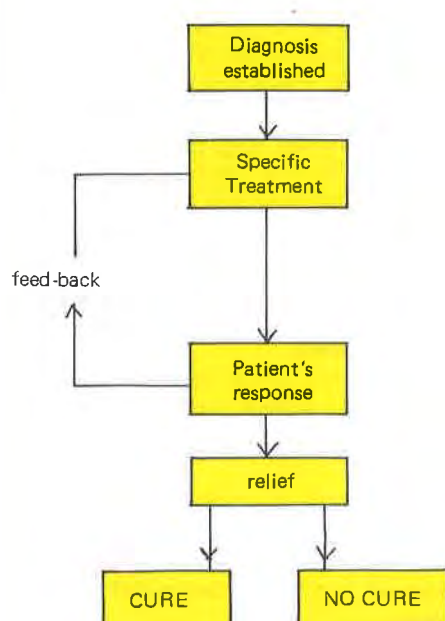
Implementation of Management

The most difficult part in the management of a patient lies not in the planning but in the implementation. The best laid plans will often come to naught if the doctor is unable or unwilling to see through the implementation of the management to its successful conclusion.

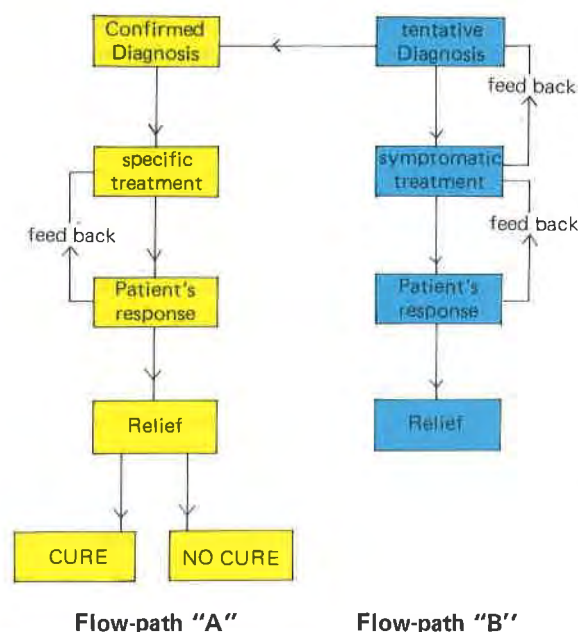
To do this well the full co-operation of the patient has to be first obtained. All the marvels of modern medicine will be of no avail if the patient cannot be persuaded that it is to his best interests to heed the doctor's advice. This refusal

FLOW-CHART OF PATIENT MANAGEMENT

Flow-chart No. 1.
Diagnosis established



Flow-chart No. 2
Tentative Diagnosis



to accept treatment is often not without good reason. The cure must not be worse than the disease itself, and cytotoxic drugs and radiation therapy in patients with cancer are often uncomfortable and discouraging. With other diseases like diabetes or myocardial infarction, a change in the patient's life style may often be necessary. This too may not meet with his ready approval or whole-hearted response.

In the management of a patient, two lines of management have always to be borne in mind.

1. Disease management

A great deal of the effectiveness of management will depend upon how successfully the treatment of the disease itself has been achieved. If the patient fails to find relief or cure, his confidence in the doctor will be seriously eroded. This in turn will make the further management of the patient himself that much more difficult.

2. Personal management.

Behind every sick patient there is an anxious human being. The ailment itself may be simple and straightforward like a simple laceration of the hand or an uncomplicated cough. Yet even in these simple cases there is often a strong emotional overlay, and the management of the patient as a person requires the doctor to require a good knowledge of emotional and behavioural patterns, and also social and religious connotations with the condition.

In such cases treatment of the cause of the ailment alone may not be sufficient, treatment of the person within the patient is often necessary. An example of this may be seen in the treatment of a young girl with pruritis vulvae. An exhaustive treatment of all the possible causes of the condition will still not provide a satisfactory response unless the patient is assured that it is not venereal in origin.

Plan of management

In planning the management of the patient there are four factors that have to be considered.

1. Assessment of the situation.

An honest appraisal by the doctor is necessary before starting treatment. The management of long term disorders like diabetes, petit mal and hypertension often requires a life-long commitment of the patient to drug therapy. It is therefore important to assess first the patient's likely response to prolonged therapy or change of life styles.

2. What is possible in the situation?

Having done this then the doctor has to decide the best and most convenient means of accomplishing this.

The cost to the patient, the time he spends making regular trips to the clinic will all have to be considered. Without fore-thought on such simple matters, patient compliance will be poor.

3. Drugs and facilities available.

One important axiom to remember is that "What is right may not always be what is best." Hospital trained doctors tend to manage patients in an "approved" fashion and do not take kindly to unorthodox measures which some family physicians find necessary. In managing the patient, the doctor has to be pragmatic and work with whatever resources that are available, or are acceptable to the patient. Needless to add, the simpler the therapeutic measures the greater the likelihood of acceptance by the patient, and the higher the rate of success.

On this James Hutchinson has this to say of some of the doctors from third world countries studying for the M.R.C.P., "They learn to discuss learnedly on such advanced matters as the diagnostic uses of radionuclides and gamma cameras, chromosome abnormalities ... the uses of radio-immunoassay in the measurement of blood levels of hormones and drugs ... At home they will find few of the facilities upon which we have trained them to rely ... Indeed, I have had the impression that their experience of modern British medicine may sometimes have hindered rather than helped our younger overseas colleagues to meet their own problems."

4. Is it fair to the others in the family?

It must not be forgotten that an illness does not strike a patient alone, it hits his close relatives too. In the case of the terminally ill or those with chronic incurable illness, long term treatment is taxing on the rest of the family both from the financial as well as the emotional aspects.

In the management of a patient, the family physician can help to ease the pain and suffering not only of the patient but the family as well.

Problems in Management.

There are many things that can go wrong with the management of a patient, the most important of which are:

1. Wrong diagnosis.

Intellectual honesty is something which doctor must have and if the treatment given has not produced the expected results, the doctor must always be prepared to take a second and closer look at the diagnosis.

2. Intensitivity to feed-back.

There is unfortunately a tendency by some doctors to adopt what John Fry calls the A.L.G. Syndrome (Act like God). The doctor feels he is omniscient and omnipotent, and feed-back from the patient which is not complimentary is brushed aside.

3. Meddlesome management.

The old adage to leave well enough alone should always be heeded. Iatrogenic disease is becoming a major problem in many countries these days. Many patients are being over-investigated, over-treated but little understood.

4. Emotional involvement with a patient.

Proper management requires the doctor to be able to view a problem in an objective fashion. Emotional involvement with a patient tends to cloud this.

5. Lack of rapport.

Without proper rapport and empathy with the patient, the battle in management is lost even before it has begun.

6. Correct appraisal of patient.

The patient's expectation from the management of his illness may not be exactly that of the doctor's. The doctor should be aware of the hierarchy of expectation of the patient. Some patients may put relief from pain and discomfort before cure. Others may feel cure is more important, and discomfort from therapy a tolerable burden to this end. Most patients feel a need to ventilate their feelings, wish to return to work, need to be understood and desire to change environment and lifestyles. All these needs may not necessarily be expressed in this order. The family doctor has to recognise what the patient wants in order to elicit his co-operation in the management.

Conclusion:

The management of a patient requires more than therapeutic management of his illness. It is

often not easy to persuade a patient to follow the line of management given by his doctor. Patients who disagree with their doctors are more inclined to indulge in "doctor-hopping". Establishment of empathy and rapport with a patient is a sine-qua-non for the successful management of his problems. In this respect the family physician is at an advantage over specialist physicians who may only get to see the patient during periods of crisis.

Although some doctors believe that a patient's problems can often be solved by the exercise of common sense, or a rule of the thumb method, it is better for the family physician to be aware of the complexities that can follow. To be forewarned is to be fore-armed, and thought spent on planning the proper management of a patient is never time wasted. It is difficult sometimes to be able to cure a patient, but fore-thinking on the management while it may not always bring about the desired success, may hopefully prevent a bad situation from deteriorating further by complications from non-medical factors.

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Sleep Disturbances in Young Children

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General Practitioners are frequently consulted about sleep problems in young children but often feel uncertain about what advice to offer, or find that it seems difficult for parents to follow advice when it is given. Drugs are not usually a feasible alternative treatment, since they are unacceptable to many parents and in any case they are often ineffective or only temporarily effective.

There is a clear need to find acceptable methods of treatment for sleep disturbances and this paper describes management of sleep problems using approaches derived from behavioural and developmental theory. Children one to five years are often referred because of inability to sleep.

A basic concept of behavioural management is that behaviour is influenced by surrounding events and this treatment approach assumes that, by their responses to the child, parents are unwittingly maintaining the unwanted sleep patterns. The aim of treatment is to determine and then alter the events maintaining the sleep problem; it is not considered essential to know the original cause of the problem, but to aid agreement between the parents on a reasonable night time procedure and support them in establishing this.

Assessments. Both parents are encouraged to attend the initial diagnostic session together. Treatment begins by taking a history about the child's general behaviour, possible stresses within the family and the exact events surrounding bedtime and sleep disruptions. The diagnostic history ensures that the doctor is not missing other behaviour or family problems which might make a simple management approach inappropriate. It is important to know in detail what happens at night and a sleep diary kept and completed for two weeks by the parents is an invaluable information source.

The diary provides information on settling in the evening, the time and number of wakings during the night, the parents' actions, and daytime naps. Parents' perceptions of what happens during the night may be distorted and the diary helps them to see the situation more objectively and recognise particular patterns of waking. For instance

some children sleep better if they have a daytime nap; others do not settle if they have a late afternoon nap. The diary also helps the family to feel they are beginning to be in control of the situation.

No advice is given at the initial session but the parents are asked to keep the sleep diary for two more weeks and this provides time for them to reevaluate the situation and may also reveal whether discussion of the problem has already affected their management.

At the first treatment session it is suggested to the parents that their child has not learnt to settle to sleep without their presence and that the aim of treatment is to help the child to settle independently. It should be stressed to the parents that treatment sessions at intervals of two or more weeks are essential and to keep the sleep diary throughout treatment. A treatment sheet is used.

TYPES OF PROBLEMS AND THEIR TREATMENT

1) The Child who wakes frequently in the night.

During the night adults and children pass through several sleep cycles of deep to light sleep and back again, and most people probably wake during the night at some time. What distinguishes wakeful children is that they do not settle back to sleep again on their own and the aim of treatment is to help them do so. Essentially this is done by a gradual reduction of parental attention but the specific approach will depend on the child's age and the parents' preference. A common response is for the child to be taken into the parent's bed and this will be discussed in a later section.

The parents are encouraged to settle the child with as short a contact as possible and to eliminate the stimulating range of activities like cuddling or changing nappies which they have been using. It may be sufficient for the parent to tell the child to go to sleep calmly, tuck him in or briefly touch him and then leave the room. Repeated 5 minutes visits to provide reassurance are recommended if the child does not settle.

It may be very helpful if the parent who does not usually go to the child begins to deal with the problem as this helps to break the established pattern of response between parent and child.

Where this reduction of attention seems too sudden the level of physical contact can be gradually reduced according to the parents wishes. Carrying the child round the room can be changed to cuddling him whilst still in the cot and then holding his hand while he is lying down. Lying on the bed with the child can change to sitting by the bed and then moving the chair gradually further away.

If the child has bottles during the night the quantity and concentration of the milk or juice can be gradually reduced and the parents reassured that the child no longer needs the nourishment during the night and that water is sufficient if he is genuinely thirsty. If it is practicable a bottle can be left within reach, perhaps with a night light on, and he can be encouraged to play quietly in his cot.

Some children use the breast as a comforter during the night wakings and this can be very disruptive to the mother's sleep, although she enjoys the close contact with the child. This needs careful discussion with the mother since it may be difficult to continue breast feeding and yet find alternative comforts to aid settling. If it is decided to wean the child it may be helpful to start by dropping the evening feed and finding other comforters when the child is put to bed.

Cues for settling indicate to the child that it is time to sleep and can also act as comforters, for instance holding a cuddly toy or winding up a musical box. A pattern similar to that used at bedtime can be encouraged if this is successful earlier in the evening. However there are often bedtime difficulties as well and if so these should be dealt with concurrently as discussed in a later section, or even first before the waking at night is tackled.

An additional approach for the older child is a direct reinforcement method in which the child is given privileges or rewards for not waking his parents during the night. These can be a tangible treat given the following morning or the more abstract form of star chart. Reliance on external rewards can be gradually reduced as success is achieved. For example, there needs to be two or three undisturbed nights before receiving the reward rather than one night, as at the beginning of treatment. Some parents object to this particular method saying that it is bribery or rewarding the child for being naughty.

In fact the process is a positive one in that the parents learn to set limits for the child and yet

praise him for appropriate behaviour rather than feeling irritable and angry at the repeated night disturbance. Parents should be encouraged to point out the gain of not disturbing them rather than the loss if the child doesn't comply. The child becomes proud of his more grown up behaviour and the parents increased relaxation during the day makes life generally more pleasant.

2. The child who sleeps in the parents' bed

Some parents find they cannot sleep with a child in their bed, and prefer the child to be able to sleep on his own. The child may creep in during the night and wake up the parents, or never go into his own bed at all but demand to be put straight into the parents' bed.

The first step is gaining agreement from both parents that they want this to stop, and then to set a date from which the child will no longer be allowed into their bed. The approach involves taking the child repeatedly back to his own bed, no matter how many times he gets out. His own bed can be moved into the parents' room initially if the first step of being alone in his own room is too difficult. The child should be reassured and calmly taken back to bed, tucked in and kissed. His own room and bed should be made as attractive and comfortable as possible. In some instances a few practical changes can be made. For example, some parents don't know when the child comes in as he creeps in the side of the heaviest sleeper. In such cases the parents' bed can be moved against a wall so the child will always wake the lightest sleeper! It is often helpful if the parent usually not involved can take the child back. This helps to break the pattern, and this parent, often the father, may be firmer and more consistent.

The procedure of taking the child back to bed can be exhausting for the first night or so, and so holiday time or weekends are recommended to commence it. Again staying in bed or going back to bed quietly can be reinforced by praise, using start charts or a chart on which animals or other pictures can be stuck. In the morning the parents can bring the child into their own bed for a cuddle as a reward for an undisturbed night, but it must be clear that it is the parents, not the child, who decide on this.

3. The child who refuses to go to bed.

This type of difficulty includes children who only fall asleep on parents' laps or on the sofa. Others, once put to bed, keep on getting up and returning to the living-room on different pretexts, in some cases staying up until their parents go to bed. It is assumed that the child has not learnt a bed-time settling routine, and that to some child-

dren the difference between day and night time is not sufficiently clear. The child will persevere with staying-up tactics as long as he has experience that they may eventually work.

A starting point is the establishment of a definite bed-time routine, in which the child is encouraged to fall asleep only when in his own bed. The child can be bathed, potted, changed and given a drink in a regular sequence before being put to bed. The night-time ritual ending with a kiss, tucking in teddy, a drink or a story, is a cue to staying in bed and settling to sleep, and once this has occurred the child will know that a different stage of the day has been reached. Other cues to settling are playing a music-box or having a night-light. The child who cries or tries to get out of bed at this stage can be reassured, tucked in and encouraged to stay in bed for five minutes. Continued upset can be managed by a parent going to the child at five-minute intervals and telling the child quietly but firmly to settle down and go to sleep. Initially a brief kiss or physical contact can calm the child, and this can gradually be reduced until just the parent's appearance or voice has a similar effect. If a child goes to bed at a very late hour it may be helpful to 'shape' going to bed at progressively earlier times. This entails the parents agreeing on a bedtime of initially say 10.30 p.m., when the child usually stays up until 11.00 p.m., if they feel that they can manage this reduction. At that point the above procedure of tucking the child in bed and telling him to go to bed is commenced. When success is reached at 10.30 p.m. then an earlier bedtime is set, perhaps 10.00 p.m. Bedtimes are made progressively earlier until an agreed time is reached that the parents find acceptable. This gradual process, by setting targets with a high prospect of success helps parents to feel confident. The reinforcement of star charts can also be used to help the child settle or stay in his room at the designated time.

4. The child who will not settle alone

This problem may entail a parent staying with a child for several hours before he falls asleep, totally disrupting the evening and often results in the parent falling asleep on or in the child's bed. Some infants immediately awake whenever the parent tries to move away. The most useful technique for this difficulty is again a variant of 'shaping'. The parent in step-wise progression moves a little further away from the child every

few nights.

Targets which the parents feel are reasonable are specified at each treatment session. The child may demand that the parent lie down on the bed, so initially the parent sits on the bed holding hands and gradually reducing physical contact moves to a chair at the bedside. The chair can be moved further away from the bed to the door, and eventually outside the door and back into the living room. At each stage the parents should be reassuring but firm in decision, and of course consistent.

Discussion.

As can be seen behavioural methods do not consist merely of being firm and leaving the child to cry but a more gradual approach is advocated. The treatments suggested here are not new and success may depend as much on the consistency of the parents management as on the specific advice given. The approach links behaviour to events occurring in the environment, and seems to relieve parents of guilt about having caused the problem or about rejecting their child at night, since it concentrates on helping the child to settle himself in a mature way without parental help. By making a careful behavioural analysis, the doctor clarifies the nature of the problem with the parents and aids them in negotiating together the targets they would like to reach, both for each treatment session and at the end of treatment. Parents are then actively involved in treatment and monitor change through keeping the diary. Sufficient time is given for the parents to consider what is feasible for them. It is unhelpful to give advice indiscriminately as parents may unwittingly make the problem worse by trying half-heartedly and then giving up. If a child is taken back to his own bed at night six times and then allowed to stay in his parents' bed, he will have effectively learnt that after six tries he is allowed what he wants.

The speed of change and the agreed tasks are tailored to the specific needs of the child and family, who must receive consistent support for their efforts. Essential supportive measures are precise target-setting, regular treatment sessions and monitoring treatment by keeping diaries.

These methods are successful in treating sleep disturbance in children aged one to five. The approach can probably be used by general practitioners and more resistant cases be referred to a specialist unit. ■

The General Intensive Therapy Unit

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INTRODUCTION:

Safa has defined intensive care as the "continuous intensive monitoring, provision of life support, as well as the definitive therapy of patients with critical and acutely life threatening illness or injury". As new medical specialities developed, each discipline has tried to provide its own "special therapy unit" named according to the special service they offered: respiratory units for ventilation, renal units for dialysis and coronary units for cardiac monitoring are familiar examples. However, because there are many similarities in the care of critical disorders irrespective of the nature of the primary illness, they can all be effectively managed in a single general intensive therapy unit (ITU). It was with the realization that it is unnecessary and uneconomic to have a multiplicity of such specialized units that the ITU of Changi Hospital was developed in 1978 so that it could best serve the Departments of Surgery, Internal Medicine, Paediatrics and Accident and Emergency Service. This paper includes a brief review of our early experience gained over a 3 year period (1978 - 1980) since its inception.

PLANNING & ORGANISATION:

A plan was designed so that the following criteria could be met:

- (1) Centralisation so that nurses & ancillary staff could be maximally utilised,
- (2) Centralisation of all equipment so that maintenance & upkeep become practical,
- (3) Easy accessibility from the A & E Dept and General Wards,
- (4) Proximity to the Operating Theatre & Recovery Rooms,
- (5) Light, spacious area with adjustable lighting & sufficient electrical sockets at each bed head,
- (6) Beds with detachable head & foot board and nearby outlets for oxygen, compressed air and tracheal suction.

Figure 1 is a plan of the Changi Hospital ITU admission policy.

SPECIAL EQUIPMENT:

In equipping an ITU, the following basic instruments have to be included:

(A) MONITORS:

- (1) Continuous ECG, Heart Rate Meter & Alarms,
- (2) Manual/Electronic Blood Pressure sets,
- (3) Central Venous Pressure saline manometer,
- (4) Blood Gas Analyser.

(B) VENTILATORS:

- (1) Respirators,
- (2) Equipment for Oxygen therapy,
- (3) Equipment for humidification & suction.

(C) RESUSCITATORS:

- (1) Equipment for defibrillation, hand ventilation and intubation.

(D) RENAL DIALYSIS SYSTEM:

STAFFING & POLICIES:

(A) DOCTORS:

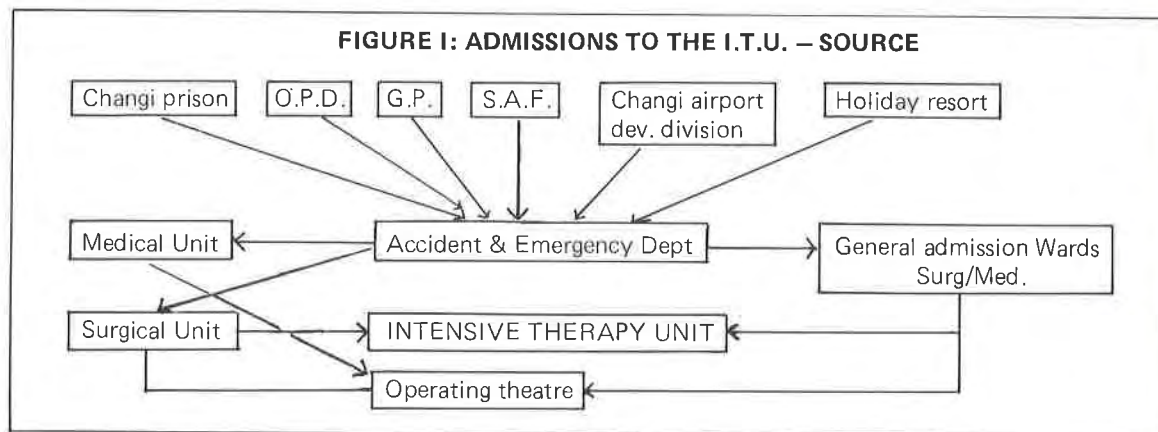
- (1) Administrative Head is the Anaesthetic Head and all Clinical Heads work in association with the anaesthetist,
- (2) Cases can be admitted to the ITU only by the Clinical Heads or his Registrar and each Dept has to provide patient care to its own cases.

(B) NURSES:

- (1) The sister-in-charge of the surgical ward is appointed in charge of the ITU,
- (2) The more experienced staff nurses and those with post-basic ITU qualifications are sent to the ITU.

(C) OTHERS:

These include Physiotherapists, Laboratory



Technicians — all of whom are part of the total ITU Care Team.

SELECTION OF PATIENTS FOR ADMISSION:

It is difficult to be dogmatic regarding indications for admission to the ITU. However, a practical scheme would be one in which the admission criteria might be:

- (1) Acute resuscitative problems,
- (2) Post-operative patients requiring support of respiration & circulation,
- (3) Therapeutic problems requiring special monitoring,
- (4) Cardiac patients with high risk of cardiac arrest,
- (5) Airway and respiratory problems,
- (6) Severely ill patients as yet undiagnosed,
- (7) Renal Failure,
- (8) Overdosage of Drugs and Drowning,
- (9) Tetanus,
- (10) Septicaemia,
- (11) All cases of multiple system injuries or organ failure.

RESULTS:

As indicated in Figure II the statistics of 1978

FIGURE II: RESULTS

	1978	1979	1980
Medical	4	30	53
Surgical	30	77	52
total :	34	107	105
Discharge	2	99	97
Death	2	8	8
On respirator	5	12	14
On cardiac monitor	2	24	48
Peritoneal dialysis	1	3	3

(year of inception) may not be representative of the present picture. Data from 1979 and 1980 can be taken as more indicative of the current situation. When averaged, the ITU admits about 106 patients a year. The mortality of 10% is comparable to most other ITU's elsewhere.

DISCUSSION & CONCLUSION:

The rationale (& therefore the success) of an ITU is based on the need to concentrate nursing & medical expertise in one area providing a high staff: patient ratio in the overall management of the critically ill. This and to a much lesser extent, the amount of equipment used is expensive. The cost per patient has been estimated to be 4 or 5 times that of a patient in a general ward. Is such concentration of resources on a relatively small number of patients therefore justified? Unquestionably, the saving of many lives has proved that the investment of such resources has had a profound effect on patient care and survival. Human lives also should never be measured in terms of dollars and cents.

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Diagnostic Ultrasound in Early Pregnancy

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The application of ultrasound imaging has enormously improved the management of pregnancy. Its application in the first trimester may unmask a host of conditions so that timely steps can be taken to deal with an existing anomaly. The technique is easy, noninvasive and characterised by a high degree of accuracy. Its usefulness has been proved beyond doubt and in many centres it is done as a routine procedure in all cases in the first trimester or pregnancy. Useful baseline information can be obtained at this stage against which further data can be applied subsequently should any abnormality arise in the course of gestation.

The later inclusion of realtime and grey scale imaging has greatly enhanced the accuracy of conventional A-scan and B-scan. A wealth of information is now available about the normal ultrasonic appearance of pelvic anatomy and products of conception, so that any deviation from the norm can be readily identified in the vast majority of cases.

Ultrasonic investigation is helpful for the diagnosis of pregnancy, confirmation or otherwise of fetal life and determination of gestational age. It has a useful role in the management of induced and spontaneous abortions.

The existence of a **pelvic mass, uterine anomaly** and **abnormal gestation** can be readily detected in the first trimester by diagnostic ultrasound. This procedure is, of course, a must prior to prenatal diagnostic amniocentesis for the detection of an abnormal fetus.

The **gestation sac** is visible ultrasonically as early as four weeks of gestation and reliably found by six weeks.¹ This is more accurate than the conventional immunological pregnancy test since the latter has a 15 per cent incidence of false positive or false negative result.² Another advantage of ultrasound over the immunological pregnancy test is that it also confirms whether or not the fetus in a given pregnancy is alive. Detection of HCG in the urine is not reliable in this respect as

this may be present for quite sometime after intrauterine fetal demise. Fetal heart can be detected with 100 per cent accuracy from 12 weeks onwards using an abdominal transducer. Jouppila (1971) has been able to detect fetal heart action from 10 weeks onwards using a vaginal transducer.³ But such method has not gained popularity because of the obvious inconveniences and technical difficulties. Robinson (1980) has been able to detect fetal cardiac activity in all of their few thousands of cases using their method of "labelling" the fetus ultrasonically and displaying the cardiac activity on an expanded A-scan system.⁴

The **determination of the duration of pregnancy** is an uncompromisable necessity in the proper management of any gestation. This is particularly important in "high risk" pregnancies such as those complicated by diabetes, rhesus isoimmunisation, preeclampsia, intrauterine growth retardation etc. In these cases the pregnancy may need to be terminated before term and an error in the estimation of fetal age may produce a frail premature infant or a dead fetus. The traditional method of estimating the duration of pregnancy is not fully protective against these disasters. The "dates" given by the patient may be wrong or she may interpret an implantation bleeding as her menstrual period. This problem of uncertain dates poses considerable difficulty in women with irregular periods and in those who conceive in a phase of amenorrhoea. In clinical practice this problem is overcome to a limited extent by taking into consideration the uterine size in early pregnancy. But such estimation is at the best an approximation and at the worst useless as in cases of obese women. Beazley and Underhill (1970) had shown that clinical estimation of the gestational age might be at variance from the menstrual age by two or more weeks.⁵ Other parameters such as quickening, onset of symptoms of pregnancy and the time of first positive pregnancy test are even less reliable. This is where the place of diag-

nistic ultrasound in the first trimester is unique and its capacity of estimating the gestational age with a high degree of accuracy is undisputable.

The procedures normally followed for the estimation of gestational age in early pregnancy are measurement of gestation sac, crown-rump and biparietal diameter.

The gestation sac can be accurately measured from six to ten weeks of pregnancy. Earlier workers experienced difficulty in the 11 and 12-week period because of the apparent ultrasonic "dissolution" of gestational sac. But the contemporary ultrasonists have overcome this difficulty with the availability of more sensitive scanning systems.⁶ The fetal head is visible from 12 weeks onwards and its measurement and concomitant accuracy outweighs the need for measurement of gestation sac at this stage and beyond. The crown-rump length is the longest demonstrable length of the fetus and its measurement is extremely useful in the estimation of gestational age in early pregnancy. Statistically, the expected date of delivery can be correctly predicted within ± 4.7 days in 95 per cent of cases.⁷

Ultrasound imaging has been proved to be of help in the **management of various kinds of abortions**. The patients usually present with bleeding per vaginum with or without abdominal pain. A firm clinical diagnosis is not always possible unless the case is one of inevitable abortion. The crucial point which often determines the line of management is confirmation of sign of fetal life. This can be unequivocally determined by Doppler ultrasound, time-position mode and real time scanning which seek fetal cardiac activity as well as fetal movements. It is pointless and frustrating to treat a patient conservatively when the fetal demise had already taken place. This taxes patient's moral, costs physician's time and wastes precious hospital bed. Many of these cases may be identified ultrasonically as those of complete abortions. There is a straight line of echoes in the uterine cavity or no echoes at all in these cases. Such cases can be safely be discharged without the customary curettage. In the cases of an incomplete abortion scattered echoes are visible on the screen without any evidence of well defined gestation sac or normal fetal structure.

Ultrasonic diagnosis of missed abortion and blighted ovum requires expertise. The gestation sac may be fragmented and smaller than date. It fails to grow when serial examinations are performed. The fetal cardiac activity and movement are absent. Absence of fetal echo within the gestation sac confirms the diagnosis of blighted ovum.

Ultrasonic investigation is also helpful in the management of induced abortions, particularly in the borderline cases between 12 and 14 weeks of gestation. The contents of the uterus can be clearly visualised, its volume measured and appropriate decision can be taken as to the choice of the safest procedure. In areas where molar pregnancy is not uncommon, routine scanning will unmask a number of these cases and will save many undesirable and unnecessary midtrimester abortion procedures. A simple suction curettage is all that is necessary in such cases.

Abnormal gestations can be identified early in pregnancy by routine use of ultrasound. No difficulty should be experienced in diagnosing multiple pregnancy. The typical "snow storm" appearance of molar pregnancy can hardly escape notice. Pseudocyesis is diagnosed when the uterus is empty and of normal size.

The uterus may appear large for dates when a pelvic mass coexists with an early pregnancy. The commonest are ovarian tumours and fibromyoma. Clinically, it is often difficult to clinch a firm and correct diagnosis, particularly in obese women. On the other hand, it is absolutely essential to determine the nature of the tumour as the management in the case of an ovarian tumour complicating pregnancy is entirely different from that of a fibromyoma.

The single variety of corpus luteal cyst usually resolves as the pregnancy progresses. Serial ultrasound can confidently assure the physician about its involution. If such involution fails to take place or the cyst continues to grow, the physician can then revise his initial diagnosis.

With the enormous advancements in the frontiers of biochemical and genetic sciences in the recent years, an increasing number of patients are undergoing **prenatal diagnostic amniocentesis** around 16 weeks of gestation to detect various kinds of fetal anomalies which call for termination of pregnancy. Ultrasonic scanning is a must prior to diagnostic amniocentesis in these cases. A clear pool of liquor away from the fetus and the placenta can be marked out and the amniotic fluid tapped or move safely the needle can be introduced under "ultrasonic guidance", thereby increasing the safety of this potentially lethal procedure.

The concept of fetal medicine is no longer in the woods and ultrasound imaging is an inseparable part of this science. In day to day practice of obstetrics it is not prudent to restrict the use of ultrasound in the second and third trimesters and when faced with an abnormality but it should be recognised that the first trimester is an ideal time for this investigation since the individual biologi-

cal variation is minimal at this stage. It should be employed routinely in all cases in the first trimester, whenever the facilities permit. An existing anomaly, hitherto unknown, would be unmasked for timely management and in the case of a normal gestation, the data obtained will prove to be extremely useful when a given gestation deviates from the norm in the course of its progress.

ACKNOWLEDGEMENT:

I owe a deep sense of gratitude to my former colleague Professor J W Wladimirrof of the Institute of Obstetrics and Gynaecology, Erasmus University, Rotterdam, The Netherlands, for the time and trouble he took in expertly guiding my first hesitant steps in the earlier years of my practice of diagnostic ultrasound in obstetrics and gynaecology.

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The Undescended Testis — How and When to Treat It

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INTRODUCTION

The management of the undescended testis remains a controversial subject. Opinions vary widely on matters such as whether to treat surgically or with hormones, the risk of malignant change, the best timing of surgery, the influence on fertility, the chances of spontaneous descent after the age of one year etc.

EMBRYOLOGY

The gonads originate in the urogenital ridge which develops around the fifth week of foetal life on either side of the midline on the posterior abdominal wall. The collecting system is formed from the duct of the primitive kidney when this structure degenerates. As the foetus grows the gonads, which are suspended from the posterior abdominal wall by a fold of peritoneum called mesorchium, come to lie low in the peritoneal cavity. The inguinal canal is then formed in the abdominal wall and through this canal a column of mesenchyme extends into the future scrotum. This is the gubernacular mesenchyme. The gonadal descent through the inguinal canal into the scrotum is achieved by the processus vaginalis. This is an outpouching of the peritoneal epithelium growing down into the gubernacular mesenchyme and surrounding it ventrally. One other important factor is the relative shortening and widening of the gubernaculum during this process. The processus vaginalis communicates with the peritoneal cavity but usually obliterates in the first few days after birth. Faulty obliteration results in various forms of inguinal hernia and undescended is very often associated with a patent processus vaginalis. Gonadal descent is induced by foetal androgens, produced by the testes under the influence of maternal gonadotrophins.

VARIETIES OF INCOMPLETE DESCENT

The incompletely descended testes can be divided into three groups:

- I Retractable testis
- II Ectopic testis
- III True undescended testis

I Retractable testis. Muscular tissue derived from the layers of the abdominal wall surrounds the cord and the testis. It forms the cremaster musculature. Involuntary cremasteric contraction, caused by cold and other external stimuli, can cause the testis to move up into the inguinal canal where it becomes impalpable. These cases sometimes need repeated examination under reassuring conditions to establish the diagnosis. Once diagnosed the patient is observed and no surgery is indicated. The testis will eventually take up its position low in the scrotum.

II Ectopic testis. An ectopic testis is located outside the normal path of descent and is unable to reach the scrotum. It often ends up in the superficial inguinal pouch. Occasionally it is found at the base of the penis, in the perineal area or in the femoral region. Ectopy is caused by a failure of the scrotal opening to develop. The spermatic cord in most cases is normal in length.

III True undescended testis. The true undescended testis has been held up along its normal path of descent, that is somewhere between the posterior abdominal wall and the bottom of the scrotum. It is usually situated:

- a. abdominally. In this case it can not be localized by palpation. When found on surgical exploration it often is poorly developed and smaller than a normal testis.
- b. in the inguinal canal. A testis in the inguinal canal is usually associated with a hernia. It may or may not be palpable and is also often poorly developed. An inguinal testis just about to leave the external inguinal ring is called an emergent testis.
- c. in the scrotal neck. This testis too is usually smaller and softer than the contralateral one. It can easily be palpated but not brought down deeper into the scrotum.

INCIDENCE

Although the undescended testis is one of the

most common congenital abnormalities in males, the exact incidence is difficult to establish because retractility is so hard to exclude. From large series however it is clear that in premature babies the incidence is about 20%. In full term babies the percentage is around 2% and this gradually comes down to 0.3% after puberty. This means that the vast majority of undescended testes that do come down spontaneously, will do so in the very early stages of extrauterine life. The opinion that late spontaneous descent does occur is now slowly disappearing in favour of those who state that spontaneous descent after the age of one year is extremely uncommon. In premature babies with undescended about three quarters of the cases are bilateral. In adult patients the condition is bilateral in only about 20%. Unilateral cases are more common on the right side than on the left side.

COMPLICATIONS

The undescended testis may lead to three important complications.

1. Infertility. Spermanalysis in patients with bilateral undescended shows azoospermia in nearly all cases. In unilateral undescended sperm counts are usually below normal, suggesting poor function of the scrotal testis as well. There is also histological evidence of this phenomenon which is as yet not clearly understood. The hormone output of undescended testes appears to be unaffected.
2. Malignancy. The association between undescended testes and testicular cancer was first noticed by Pott in 1779 and has since been confirmed in many series. It is now a well known fact that the malignancy rate of the undescended testis is about 35 times that of the normal testis, regardless of surgical correction.
3. Trauma and torsion. An inguinal testis is more prone to trauma than a testis in the mobile scrotum. Intravaginal torsion can easily occur due to the lack of attachments of testis and spermatic cord in an open processus vaginalis.

MANAGEMENT: SURGERY VERSUS HORMONAL TREATMENT

Since the most frequent complication of undescended testis is infertility, the main aim of the treatment is to ensure the best possible spermatogenesis. Studies have shown that before the age of five years the undescended testis and the scrotal testis are histologically identical. After this time the undescended testis shows signs of atrophy and degeneration affecting the potential for spermatogenesis. It is obvious that the undescend-

ed testis should be in the scrotum by the age of five years.

Surgical treatment: orchidopexy and orchidectomy. A testis brought down into the scrotum surgically becomes accessible to palpation. In view of the increased malignancy rate regular examinations must be done after orchidopexy to detect any change at an early stage. The risk of torsion and trauma is smaller when a testis is in the scrotum. Some boys experience psychological problems when half their scrotum is empty. At surgery every testis should be preserved unless it is grossly abnormal or atrophic. In the latter case it should be removed, provided the contralateral testis seems normal. If a unilateral abdominal testis is difficult to bring down it should be removed since orchidectomy is preferable to an incomplete orchidopexy. In bilateral cases a staged procedure may be done. Surgical treatment carries a certain risk of damage to the blood supply of testis, epididymis and vas deferens.

Hormonal treatment: gonadotrophines. Hormonal treatment aims at bringing puberty at an earlier age. There is no point in treating the unilaterally undescended testis with hormones because hormonal stimulation has already resulted in the descent of a testis and there is no reason to assume that hormones would influence the two testes differently. A proportion of bilaterally undescended testes will be induced to come down with this treatment. Those testes that respond are probably retractile testes that would have come down permanently anyway. In view of the histological changes gonadotrophines should have been tried by the age of five years. They must not be given after puberty. Gonadotrophine treatment is not entirely without the danger of early closure of epiphyses, early sexual development and atrophy of the undescended testis or even the normal testis. Hormonal treatment means a course of painful and expensive injection of which the outcome is uncertain. It may have to be followed by an operation in case of failure.

CONCLUSION

Undescended testis is one of the most frequent congenital abnormalities in the male. Infertility, malignancy, trauma and torsion are the main complications. Although there may be an occasional indication for the administration of gonadotrophines in the bilateral case, orchidopexy not later than the age of five is the treatment of choice. ■

Eighth Convocation and Dinner and Fifth Sreenivasan Oration

The ballroom in the Mandarin Hotel on the night of 15th November 1982 was impressive, and so were the people gathered there to attend the Eighth Convocation and Dinner of the College, and to hear the Fifth Sreenivasan Oration.

A Convocation can be a long and dreary business, but the night's affairs were conducted with dignity and aplomb that made it a pleasure to watch the proceedings. After the President's address it was time to honour those who have helped the College. The honorary Fellowship of the College was conferred upon Prof Lim Pin, Vice-Chancellor of the National University. No one was more worthy of the honour, nor more popular. Despite his youthful looks Prof Lim Pin is held in high esteem by all those with an interest in medical education.

Next came the conferment of diplomate membership on those who were successful at the last MCGP exam, and Dr Tirburtius Fernandez and Dr Foong Chan Keong were the proud recipients of the diploma.

For his good work in helping with the postgrad courses, Dr Frederick Tan Bock Yam the Senior Physician of Alexandra Hospital was presented with the Albert Lim Award. Mr Yahya Cohen, Dr Ho Gien Chiew, Mr James J Murugasu, Prof S S Ratnam and Mr Victor Yong Shee Heung were given Certificates of Appreciation for their contribution to our on-going medical education.

Mr Toh Kian Chui received a special gift of appreciation for his continued support of the College's finances.

The book prizes for top medical students at this year's general practice examination went to,

Mr Marc Tay Tse Hsin 1st place

Miss Agnes Tay Hou Ngee 2nd place

Mr Michael Lim Chun Leng 3rd place

If it is difficult to give an after-dinner speech, it is infinitely much more difficult to give a pre-dinner talk. One has to contend with a gathering waiting eagerly to indulge in gustatory delights. That he was successful in doing so, speaks volumes for the orator of the Fifth Sreenivasan Oration, Dr Wesley E Fabb.

A naturally gifted speaker Dr Fabb soon had the audience forgetting about food for the stomach by giving them all much food for thought. His subject on the "Making of a Family Physician" stressed why family doctors must be specially trained for the job instead of being "periodic people patchers". And he was very convincing too. His talk was very well received and it is hoped that the Vice Chancellor of the University would soon prove sympathetic to the setting up of a Department of General Practice in the University. Another VIP who was present was Dr Chew Chin Hin, Deputy Director of Medical Services (Hospitals), and stronger bonds of co-operation and friendship should be forged between the College and the Ministry of Health.

The dinner lived up to our usual expectations. No grouses were heard about the succulent fare served during the evening. The Peking duck proved to be extremely popular.

In all occasions of this kind, there is always a team of hard-working faceless individuals behind the scenes, and the bouquet this time belongs to Drs Moti Vaswani, Goh Lee Gan, Lim Kim Leong and the President of the College, Dr V L Fernandez.

E.K.

Book Review: Training for General Practice

D.J. Pereira Gray
MacDonald and Evans, 1982

After reading this book, the first thought that comes to mind is why hasn't someone else written a book like this one before. The answer might not be perfectly obvious but one of the main reasons must certainly be that there must be very few people who are as knowledgeable as the author Dr Pereira Gray on the subject.

As a long time editor of the Journal of the Royal College of General Practitioners and now the Senior Lecturer of the Department of General Practice in the Postgraduate Medical School of the University of Exeter, Dr Pereira Gray brings his immense wealth of experience to those who seek light and elucidation in a hitherto neglected field of medical education.

There is much in the book which is not only of interest to us in Singapore, but of immense instructive value as well. In the United Kingdom the National Health Service Vocational Training Act was passed in 1976 making it mandatory for doctors aspiring to be principals in general practice after August 1982 to first undergo a three year programme of vocational training. Dr Pereira Gray traces the course of events which led to this move in Parliament and gives three reasons for the need of such an act. The main reason was the desire to protect patients from incompetent practitioners, the next was to provide better post-graduate education for doctors, and the final was to protect the Government from rising medical costs since the well-trained primary physician was less likely to refer cases to hospital for expensive in-patient care.

The last reason should appeal to those who have to plan for medical facilities in this country, and a postgraduate vocational training scheme in general practice could well prove its worth. The difficulty in Singapore is how to get it started. With the National Health Service in U.K. the Government pays not only the trainers in the scheme but the salaries of the trainees as well. It is unlikely that this idea will be acceptable to our Ministry of Health but if a vocational training scheme is to be feasible in this country, the financial aspects must first be worked out so that no one has to make great sacrifices by

participating in it.

One of the confusing things about the renaissance of general practice in the past few decades is the delineation of the work of the general practitioner. Dr Pereira Gray gives a clear picture as to what it is all about. General practice he says is "not a specialty in the sense of a discipline in a clearly defined and limited field. It is, however a specialty within the alternative definition of 'a branch of medicine in its own right'." It encompasses six forms of medical care — primary care, family care, domiciliary care, continuity of care, preventive care, and personal or holistic care. In Singapore we can also add care of workers in industry.

With any training programme it is important that the trainers themselves are first adequately trained to do the job. The book deals with the selection of trainers and the methods used in training. There is also an interesting chapter on the feedback on training programmes given by the trainees themselves.

If we are to move towards vocational training for general practitioners, as we must do in order to improve the standards of primary medical care in this country, then Dr Pereira Gray's thoughts and comments on the subject are not only worth reading but digesting as well. It might even be useful to send some of our doctors to observe the Nuffield Course on training teachers or something on similar lines.

Sir James Mackenzie said in 1919, "The teacher of practical matters must be one who experiences what he teaches. We all recognise that the best teacher for one who wants to be a shoemaker is the man who is in the habit of making shoes. Unfortunately this commonsense idea is rarely applied to medical education."

Unfortunately too, little has been done in this country since the time of Sir James Mackenzie to correct the picture. Dr Pereira Gray with his book sets all of us who have chosen general practice as our life vocation, thinking about the present state and future outlook of a profession which should and could prove to be as challenging as any other branch in medicine.

E.K.

NEWS FROM THE COUNCIL

The College Examination

The Tenth College Examination for Diplomate Membership was held on October 24 and 31, 1982 and the following were successful:

Dr Tiburtius Fernandez

Dr Foong Chan Keong

Our congratulations to the two new Diplomates of the College.

College Convocation

At the Eighth College Convocation held at the Mandarin Hotel, Singapore, on Monday, 15 November 1982:

- Prof Lim Pin MA, MD, FRCP, FRACP, FACP
Vice-Chancellor

National University of Singapore
was conferred the Honorary Fellowship of the College.

- Dr Tiburtius Fernandez
Dr Foong Chan Keong
were conferred the Diplomate Membership of the College.

- Dr Frederick Tan Bock Yam FRCPE
Senior Consultant Physician and Head,
Department of Medicine
Alexandra Hospital
was presented the Albert Lim Award for 1982.

- Certificates of Appreciation were awarded to:
Mr Yahya Cohen FRCS, FRCSE, FRACS,
FACS

Dr Ho Gien Chiew MBBS, MCGP(S)

Mr James J Murugasu FRACS

Prof S S Ratnam MD, FRCS, FRCSE, FRCSG,
FRACS, FACS, FRCOG

Mr Victor Yong Shee Heung FRCS

- Gift of Appreciation was presented to:
Mr Toh Kian Chui
for his outstanding and consistent support to the College.

- Book Prizes to Top Medical Students at the General Practice Examination, 1982 were awarded to:

1st Place — Mr Marc Tay Tze-Hsin

2nd Place — Miss Agnes Tay Hou Ngee

3rd Place — Mr Michael Lim Chun Leng

The Fifth Sreenivasan Oration

The Fifth Sreenivasan Oration was held at the Mandarin Hotel, Singapore on Monday, 15 November 1982. The Oration was delivered by Dr Wesley E Fabb, FRACGP, FCGPS, Director, Family Medicine Programme, Royal Australian College of General Practitioners and Honorary Secretary/Treasurer of WONCA. He spoke on "The Making of a Family Physician".

In-Depth Course in Paediatrics:

The Continuing Education Unit of the College is organising an In-Depth Course in Paediatrics,

commencing on January 9, 1983. The programme is as follows:

THEORY SESSIONS: Friday evenings, from 9.00 p.m. to 10.30 p.m.
SUNDAY MORNINGS, from 7.30 a.m. to 9.00 a.m.
 at the Academy of Medicine Lecture Theatre,
 Alumni Medical Centre, 4A College Road, Singapore — 0316.

Day:	Date:	Topic:	Lecturer:
SUNDAY	9.1.83	Introduction to Genetics and practical Genetics.	Prof Wong Hock Boon FRCP(E), FRCP(G), FRACP, FICP, DCH (Lond), PJG, PPA
Friday	14.1.83	PUO in infancy and childhood.	Dr Tan Cheng Lim FRACP
Friday	21.1.83	Abdominal pain and vomiting in childhood.	Dr Quak Seng Hock M Med(Paed)
Friday	28.1.83	Childhood skin problems	Dr Giam Yoke Chin M Med (Paed)
SUNDAY	30.1.83	Neonatal jaundice, neonatal hepatitis.	Prof Wong Hock Boon FRCP(E), FRCP(G), FRACP, FICP, DCH(Lond), PJG, PPA
Friday	4.2.83	Common paediatric endocrine problems.	Dr Tan Siok Hoon M Med(Paed)
Friday	11.2.83)	NO SESSIONS:	
Friday	18.2.83)		
Friday	25.2.83)		
Friday	4.3.83	Nephritides in childhood.	Dr Yap Hui Kim M Med (Paed)
Friday	4.3.83	Congenital heart disease — the role of the family physician in diagnosis and management.	Prof John Tay M Med(Paed), MD, FRACP, BD(Lond)
Friday	11.3.83	Childhood seizures.	Dr Low Poh Sim M Med(Paed)
Friday	18.3.83	The child with pallor.	Dr William Yip M Med(Paed), MRCP, DCH(Lond)
Friday	25.3.83	Childhood medical emergencies.	Dr Joseph Teo M Med(Paed)
Friday	1.4.83	NO SESSION:	
Friday	8.4.83	The child with cough, breathlessness.	Dr K Vellayappan M Med(Paed), FRACP

CLINICAL SESSIONS: Sunday afternoons, from 2.30 p.m. to 5.00 p.m.
 Paediatric Unit (Mistri Wing), Sing. Gen. Hospital.

Date:	Topic:	Convenor:
23.1.83	Common practical office procedures.	Dr Han Ping FRACP, FRCPA, PhD(Anu)
6.2.83	Oncology.	Dr Quah Thuan Chong M Med(Paed)
27.2.83	Endocrine diseases	Dr Lee Bee Wah M Med (Paed)
6.3.83	Cardiology	Prof John Tay M Med(Paed), MD, FRACP, BD(Lond)
20.3.83	Genetic diseases	Dr William Yip M Med (Paed), MRCP, DCH(Lond)

MEDICAL NEWS

Diabetic retinopathy is under-diagnosed

The serious under-diagnosis and misdiagnosis of diabetic retinopathy is condemning many people to unnecessary blindness, according to American doctors who tested the diagnostic capabilities of different grades of medical personnel.

The most serious retinopathy is the proliferative type (untreated, 50 per cent of those affected become blind), yet proliferative diabetic retinopathy can be readily treated with laser photocoagulation — if it is detected early enough.

Because of the potentially disastrous consequences of missing the diagnosis, Drs Sussman, Tsiras and Soper of Philadelphia organised a trial of diagnostic capabilities. Eleven patients with a variety of common types of diabetic retinal diseases were selected.

The definitive diagnoses were decided upon by a panel of three retinal specialists who had access to stereo photographs of fundi and fluorescein angiograms.

Twenty-three physicians (10 internists, four senior medical residents, two diabetic specialists, four general ophthalmologists and three retinal specialists) took part in the trial. Each patient was placed in optimal conditions — individual examination rooms and with pupils dilated — and each physician was asked to examine the fundi of each patient, noting a diagnosis for each eye separately.

Out of a possible 483 eye examinations, 438 were actually performed. The possible diagnoses were: background retinopathy, diabetic maculopathy, proliferative retinopathy, normal or other.

Missing the diagnosis of proliferative retinopathy (i.e. confusing it with normal, background or non-diabetic) was defined as a serious error.

Internists, senior medical residents and diabetic specialists had correct diagnosis rates of 27 per cent, 31 per cent and 36 per cent, respectively. General ophthalmologists and retinal specialists had correct diagnosis rates of 52 per cent and 70 per cent, respectively.

Serious errors were very common. Internists missed 52 per cent of the diagnoses of proliferative retinopathy, senior medical residents 50 per cent, diabetic specialists 33 per cent, and general ophthalmologists 9 per cent; retinal specialists, however, missed none. However, most diabetics will never be examined by a specialist retinal physician, and the overall misdiagnosis rate of 60 per

cent (and this in the best possible conditions) by those doctors who are responsible for most patient care is very disturbing.

The Philadelphia group urged that a greater emphasis be placed on the teaching of ophthalmic diagnosis during graduate and post-graduate training, but say that, in the meantime, only a higher rate of referral to specialist physicians will prevent missing a vital diagnosis.

(JAMA 1982, June 18, p. 3231).

Space invader's wrist

Video games can be bad for the muscles and hands, according to Dr Gary E. Myerson of the division of rheumatology and immunology, Emory University School of Medicine, Atlanta, U.S.A.

In a survey of 142 people who played such games as "Space invaders" and "Centipede," 65 per cent of the players experienced medical problems ranging from blisters and calluses to tennis elbow.

Injuries occur during video game playing because of the rapid repetition of action required — button pressing, paddle twisting, joystick pushing, sphere rolling or a combination of these.

The people in Dr Myerson's study played video games in an arcade for two days a week, two hours at a time. Myerson said the games are addictive, and that the intensity and anxiety exhibited by people who play often lead to injury.

An especially troublesome injury reported by the video players in the study was pain and swelling in the wrist, a syndrome that's been called "Space invader's wrist."

Dr Myerson believes manufacturers of video games could make adaptations in the machines to reduce the chance of muscular and skin injuries. For instance, he said, buttons could be covered with a soft material instead of hard plastic to prevent blisters, and the machine platforms could be placed at an angle to reduce stress on the wrist.

He said that like any sport, video game playing may need special equipment. "Maybe we'll have an arcade glove," he predicted. "Or, perhaps, a shin guard for people who kick the table."

'Dark warrior' epilepsy

A 17-year-old girl who played video games for two hours per day (her father was employed

as a maintenance engineer for these machines), lost consciousness and had clonic contractions of her limbs on the second occasion that she played "Dark warrior." She had played "Space invaders," "Asteroids" and "Lunar rescue" on many previous occasions with no untoward effects.

The machine involved was shown to be working normally and there was nothing to suggest that she had been electrocuted.

After she came round, she was noted to be confused but made an otherwise uneventful recovery, and she has apparently played many more of these video games (though avoiding the "Dark warrior") without further episodes.

An EEG showed a pattern considered to be typical of photoconvulsive epilepsy.

The original name for this condition, "Space invader epilepsy," is in fact a misnomer. There are no recorded cases related to use of "Space invaders," the original description being of epilepsy due to "Astro fighter."

With the addition of this case, the more precise classification of "electronic space war video game epilepsy" is suggested. (BMJ 1982 June 12 p. 1752).

A call for holistic approach

The "personal and emotional factors in therapy," on which Greek medicine was based, should be "re-examined and made contemporary" by doctors, according to the Prince of Wales.

The contribution of "chemistry" to medicine today, he says, should not be underestimated. But, he added: "It can never deal with the sickness of the spirit proliferating with horrific swiftness all around us."

Prince Charles' message to the British Medical Association, on his installation as BMA President on July 7, posed this question:

"What is the modern physician's response to the stricken spirit who comes to him with his sick soul disguised as an ailment of the body? Does he allow the faith in him to reawaken the faith in the patient; to join his chemistry for the total recovery of body and spirit?"

"Members of the medical profession," he says, "should be reminded occasionally that the words 'healing' and 'holly' come from the same original idea of 'making whole'."

"It seems to me," he says, "that the lack of psychological insight — into the unconscious being of man — is possibly one of the saddest neglects of modern medicine."

Prince Charles' message appears in a special 150th anniversary number of the BMJ.

Routine use of postcoital Pill advocated

By Jane Feinmann

London — Almost all of 700 women, who used "morning after" birth control in the past year, said they would have requested an abortion if the service had not been provided.

The Pregnancy Advisory Service (PAS) opened its pioneer service in London, offering a choice of combined hormone tables or IUD insertion, in April 1981. It says the response has shown the determination of women who came from all parts of the country to prevent an unwanted pregnancy.

Now, the PAS has launched a campaign for the integration of postcoital birth control into routine family planning services. It says the techniques involved are simple, effective, inexpensive and much less traumatic for women than abortion.

"There is little doubt that if 'morning after' birth control was widely available from doctors, clinics and hospitals, there would be a significant reduction in both abortions and unwanted births," said Helene Grahame of PAS.

But at present, she says, "ignorance, shared by public and health professionals alike, is a formidable barrier to the rapid expansion of treatment facilities."

A symposium sponsored by PAS to bridge the information gap set down for discussion: ethical, legal and medico-legal issues arising from the treatment; advantages and risks of the treatment; and the challenge to medicine as self-administered postcoital treatment becomes available.

Oestrogen build-up?

The present method of postcoital Pill taking is to take two 50 microgram pills within 72 hours of unprotected intercourse and this dose is repeated 12 hours later, by which time many women feel very sick and vomit the second dose.

If this is repeated even once during the week (i.e., if and when self-administered postcoital treatment becomes an acceptable alternative to routine contraceptive use) it means the patient takes an unacceptably large amount of oestrogen, writes Dr Pamela Clayton, MO, Family Planning Clinic, Horsham, West Sussex, U.K.

West German ranitidine leaflet text

The additional pack leaflet information that the West German licensing authority, the BGA, required for ranitidine — launched by Glaxo as Zantic and by Cascan as Sostril last week (Scrip No 734, p 16) — was communicated to the companies concerned, three days before the launch date, as follows (Scrip's translation of the German text as

telexed to Scrip):

It is directed that the following additional information be inserted in the side-effects section of the pack information leaflet:

- 1) *Sporadic (vereinzelte) rises in plasma creatinine values and in serum transaminase levels are mostly slight, and in general normal values are restored when treatment with Zentio/Sostril film-coated tablets continues.*
- 2) *It is possible, though very rare, for hepatitis to develop under treatment.*
- 3) *There have been cases reported of gynaecomastia (swelling of the mammary glands in men), amenorrhoea (absence of menstruation), disorders of sexual attitude (loss of libido, affected potency).*
- 4) *There have been isolated cases of mental confusion occurring under treatment.*
(Additional for the injectable formulation)
- 5) *After administration of Zantic/Sostril injection solution there may be a fall in heart rate (slowed pulse rate).*
- 6) *Serum prolactin levels rise after the administration of Zantic/Sostril injection solution.*
This order must be compiled with immediately.

Glaxo in Germany has confirmed to Scrip that this is the text it has incorporated in its leaflets. Owing to a transmission error, a misprint occurred in the paragraph detailing Glaxo's translation of the text in Scrip No 734, p. 16. The first sentence in that translation should have read: "Transient and small elevations of plasma creatinine, and of liver transaminases have occurred in a few patients, but these usually return to normal after continuation". Glaxo in Germany has informed Scrip that it has withdrawn its original data sheet for doctors in order to revise it. Cascan has also confirmed to Scrip that it went ahead with its launch of Sostril on October 4th, and that the package leaflets conform to the BGA requirements, with the incorporation of the BGA text as indicated above.

The Telephone Calls to SOS

The total number of calls received this year went beyond 20,000. This is a 10.8% increase over the figure of the previous year.

We could attribute this increase to the Publicity Committee for its systematic planning in ensuring continuous publicity of our service to the public. Our posters went out to Residents' Committees in September 1981; articles about us were featured in magazines and the local newspapers from time to time; we were also interviewed over radio and redifussion. Then in March and April of 1982, we received a lot of publicity through various

media about our project with adolescents, resulting in a two-fold increase in calls from them.

From the figures of our monthly distribution of calls, as shown in Table 1, we found that more than 53% of our callers phone us only once during their crisis, but some 10% of our callers call us more than 5 times, while the rest call us between 2-4 times.

Table 1 Monthly distribution of calls

Month	Number of calls	Number of new clients
July 1981	1,470	873
August	1,479	737
September	1,506	735
October	1,883	981
November	1,982	1,053
December	1,899	931
January 1982	1,808	815
February	1,807	943
March	1,920	1,004
April	1,886	1,133
May	2,015	1,233
June	1,917	1,037
Total	21,572	11,475
Average per month	1,798	956

At SOS we are especially concerned about our callers' feelings and dilemmas during their crisis and assure them of confidentiality whenever they call. Though it does help us to understand them better if they could provide us with more information about themselves, we do accept that many do not want to tell us more than what they consider pertinent to their problem. From the limited data on our callers who had willingly provided us with facts about themselves, we were able to pull together the information to analyse our calls and callers in the following paragraphs and tables.

The types of problems that our callers faced can be classified under 5 broad categories:

- a. Relationship problems which arise as a result of communication breakdown, lack of trust, open hostility, rejection or misunderstanding between persons. A number of calls came from people in their twenties who were going through a breakup of a relationship or difficulties during courtship. This problem has also affected a number of married persons who were struggling with an unfaithful spouse, or had difficulties in adjusting to one another.

Other relationship problems discussed were those experienced with working colleagues, family members, or relatives. A higher proportion of Malay callers brought up these problems compared to callers of other ethnic groups.

- b. Psychological problems that have their roots within the person have also affected a number of our callers, especially those in their forties. Feelings of guilt, anxiety, fear, confusion, or depression, oftentimes become overwhelming to those who are undergoing a painful life event. Feeling helpless, even hopeless and unable to cope, they called SOS for support. Owing to the inadequacy of social services in meeting the needs of the mentally ill outpatients, we continued to receive frequent calls from a small group of them and to assist them in a limited way. A day-care centre for these people may serve to provide them with the support and sympathetic understanding they need in coping with their lives.
- c. Sexual problems discussed concerned curiosity and anxiety about sexual functioning, or shame, guilt and frustration about sexual experience. Confusion about sexual identity, difficulties arising from premarital sex and unwanted pregnancies, are often problems that are difficult to confide to family or friends. SOS became, therefore, the initial, if not the only avenue of help, for persons with such problems. Most of our callers with these problems came from the under-twenty age-group.
- d. Material problems include requests for assistance or information regarding employment, housing, citizenship applications and finance. This problem category has affected a fair proportion of our male callers who were retired or old. We were indeed glad when the Crisis Centre opened in June 1981. Since then, the Centre has provided shelter for 24 of our callers who were in need of immediate temporary shelter for various reason e.g. safety, a time to sort out problems, or simply because they had nowhere else to go.
- e. The physical problems presented by our older callers mainly concerned the distress they

face through illness or old age. The younger callers spoke of their unhappiness or anxiety over their physical appearance.

Kaposi's sarcoma is first sexually transmitted Ca?

By Dr James Le Fanu

London — Could the present epidemic of Kaposi's sarcoma among American homosexuals be the first example of a sexually transmitted cancer?

Amidst a welter of speculation around the new syndrome, this idea comes from Dr Robin Weiss of the Imperial Cancer Research Fund.

So serious has the epidemic become that the Centre for Disease Control in Atlanta has had to form a task force to investigate it.

It was in June 1981 that there was a report in the *Morbidity and Mortality Weekly* of a curious collection of five cases of the opportunistic infection *Pneumocystis carinii* in five previously healthy young homosexuals.

Almost immediately there was a report to *The Lancet* of eight cases of the rare tumour, Kaposi's sarcoma, also in young homosexuals.

By the end of the year it was being reported at the rate of seven to ten per week, an increase of almost a hundred-fold compared with the previous year. Ninety-five per cent of cases were among young, white, male homosexuals; it had a fatality rate of over 40 per cent, and it was confined to New York and San Francisco.

It was apparent that the primary defect was one of immunosuppression; as the infections were all opportunistic (*Pneumocystis*, *Toxoplasmosis*, *Candidiasis*), and the tumour itself was opportunistic.

Kaposi's sarcoma is rare, confined to the over 60s, with a low fatality rate — except that among immunosuppressed patients when it occurs at any age, it is virulent, affects the internal organs of the body and generally behaves as it was doing among the young homosexuals.

Asian Medical News 4:11
Tuesday, June 29, 1982

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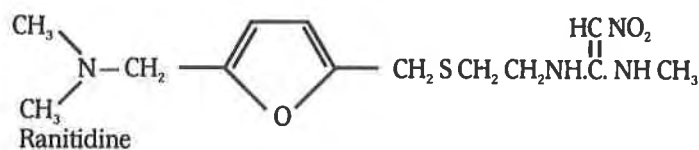
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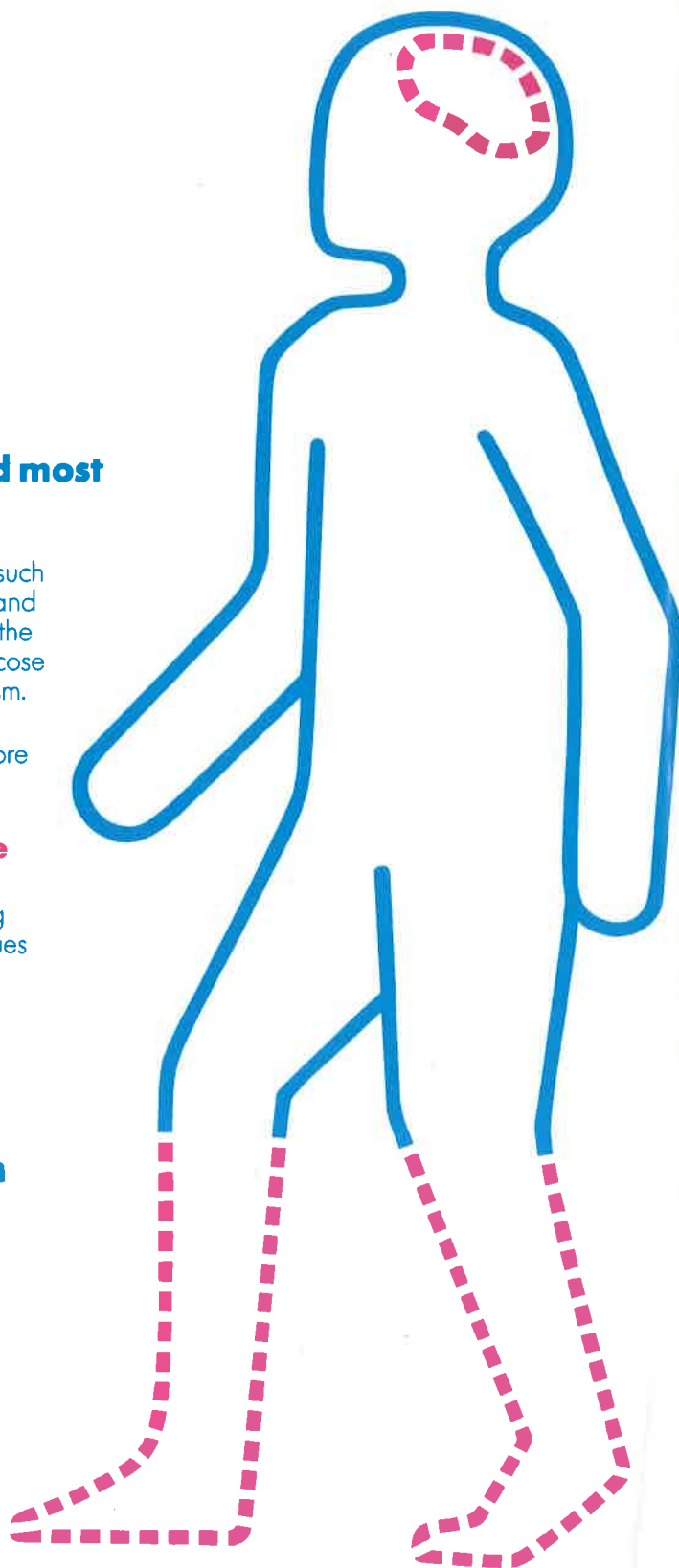
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As clinical experience had shown that milk was poorly tolerated, dietary measures were confined merely to putting the child on a starvation diet

for a varying length of time and then gradually introducing milk again, slowly and very carefully.

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have made it possible to understand the reasons for this intolerance to milk and have opened up fresh vistas in the treatment of diarrhoea in infants.



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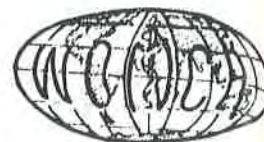
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HIGHLIGHTS:

- * **KEY-NOTE ADDRESS** by Dr Donald I Rice, Executive Director, College of Family Physicians of Canada.

- * **PLENARY SESSIONS**

Saturday, 21st May, 1983
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Around the World"**

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Dr Julio Ceitlin
Dr Prakash C Bhatla
Prof David H H Metcalfe

Monday, 23rd May, 1983
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Dr Maurice Wood
Dr Henk Lamberts
Dr Poul A Pedersen

Sunday, 22nd May, 1983
"Education"

Dr F Marian Bishop
Dr Wesley E Fabb
Dr Reg Perkin

Tuesday, 24th May, 1983
"Future of Family Medicine"

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