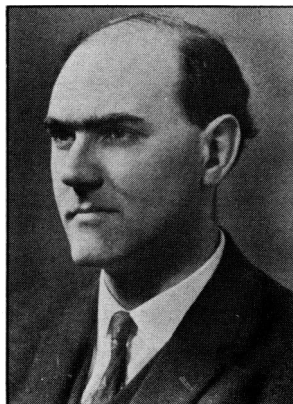


## Feeling at home

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### Council

I WOULD like to thank the Council of the College for inviting me to deliver this of all lectures, in this of all years. The James Mackenzie Lecture is one of the greatest honours this College can bestow and as the youngest lecturer so far, I am anxiously aware of my own inadequacies. Like Lindsey Batten in the 1960 Mackenzie Lecture, I feel that many may deserve it more, but no one can appreciate it more (Batten, 1961).

### James Mackenzie

The story of James Mackenzie is both remarkable and inspiring, and Gillie (1962) in her Mackenzie Lecture applauded the wisdom of the founding members of this College in choosing him for our model.

Many of my distinguished predecessors have described his life, and several have made valuable contributions to the history of his career. I can offer nothing new in historical fact; instead, I shall try to show as I develop my theme how the main principles which guided his life as a general practitioner can still

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guide ours today. These principles were: an unusually early recognition of the importance of preventive medicine; an abiding interest in his patients' homes and environment; a tremendous and continuing struggle to understand the medical problems presented by his patients; an endless capacity for hard work; an acceptance of the discipline of publishing his results in medical journals; a great love of teaching; and above all a rare gift of critical analysis and intellectual integrity.

### General practice

General-practitioner care can be classified into six components:

1. Primary.
2. Family.
3. Domiciliary.
4. Preventive.
5. Continuous.
6. Holistic.

At different times in different countries, different aspects predominate. Each one can be delegated either to a colleague in another caring profession or to a consultant. However, it is the unique blend of these six aspects of medical practice which comprise our job.

We know that one of the great skills of the consultation in general practice is noting what the patient is *not* saying, because this may be particularly significant and so it is logical on such an occasion to review an aspect of our work which we as doctors, for one reason or another, are *not* talking about.

Primary, family, holistic, and continuity of care are constantly discussed; the gap—the silence—seems to lie in the place of domiciliary care. I therefore propose to examine three important aspects of general practice—preventive medicine, the environment, and human behaviour—in relation to the home. I shall then consider the home as the patient's territory, the scope for our work there, the trends of today, and the challenges of tomorrow.

### The supreme objective — prevention

All medical activities can be arranged in a hierarchy by the point at which the doctor intervenes in the disease process:

1. The prevention of disease.
2. The pre-symptomatic detection of disease.
3. The early diagnosis of disease.
4. The diagnosis of established disease.
5. The management of disease.
6. The management of the complications of disease.
7. Rehabilitation after active treatment has been completed.
8. Terminal care.
9. Counselling the bereaved.

The higher in this hierarchy the doctor is able to work, the better for the patient. As generalists we have a unique opportunity to operate at all nine levels of medical care, although traditionally we have primarily been concerned with the diagnosis and management of disease.

While preventive medicine has never had much glamour for personal doctors or community physicians, our patients have no doubt that “prevention is better than cure”. Certainly they want to be diagnosed, treated, and if possible, cured. But most of all they would prefer not to be ill in the first place. If medicine is to serve society, then its single most important function must be to prevent ill health.

As early as 1832, Charles Turner Thackrah, the general practitioner who founded the Leeds Medical School, “realized the need for the education of masters, workmen, doctors, and legislators always towards *the supreme objective—prevention*” (Vaughan Jones, 1960, quoting Meiklejohn, 1954); and in 1919 James Mackenzie established his Institute (Mair, 1973) “with the object of studying disease *with a view to its prevention*” (my italics).

#### *The teaching hospitals*

Mackenzie was one of the first to recognize that many of the problems general practitioners had in orientating themselves to general practice lay not in themselves but were the result of the teaching they had received. He wrote: “The great majority of students of medicine become general practitioners and in the teaching schools, with rare exceptions, there is not one teacher who has obtained a knowledge of many of the problems which will meet the general practitioner. Probably in this respect medical education is unique in that in all the other branches of knowledge, whether of trade or profession, the teachers or instructors have a practical acquaintance with the subjects they teach” (Mair, 1973).

One of the inherent problems for specialists is that the very act of specializing requires a doctor to draw a boundary of interest. This has three serious side-effects.

First, specialist thinking is, by definition, confined within fixed boundaries and may sometimes become rigid. Secondly, patients are forced to fit in with doctor-determined definitions of interest or be rejected. Thirdly, in time, specialties tend to fragment or contract, not expand, so that the specialist’s subject tends to become narrower and narrower. The generalist is spared the restriction of working within a limited field and can be completely flexible to fit in with all the patient’s needs. He is free to think laterally across all “the ‘three dimensions’ of physical, psychological, and social care” (Gray, 1970).

More recently, teaching hospital training has been criticized by Pemberton (1976) and McKeown (1976). They have argued, and I agree, that the concentration on selected cases, the emphasis on pathology and on active investigation and treatment, and above all the ethos of a big bureaucracy (Susser and Watson, 1971) have largely contributed to generations of general practitioners entering practice with the wrong set of priorities. It is difficult to unravel the physical, psychological, and social origins of disease in teaching hospitals and hard to practise personal preventive medicine. Thackrah’s “supreme objective” has been systematically diminished.

James Mackenzie thought that the future for preventive medicine lay “in the hands of the ‘family doctor’ ” and later wrote, “Preventive medicine can progress only so far and so fast as the family physician is prepared to go” (Pinsent, 1963 quoting Fyfe, 1933).

### The environment

If we agree that prevention is our supreme objective, we must next decide where we as general practitioners have the greatest scope for practising it. Over two thousand years ago Hippocrates said, “The physician must study the patient and his environment.” How important is the environment today?

My own awakening to its importance came when I learnt that the infant mortality rate for social class 5 babies born in Britain in 1960 was worse than the infant mortality rate for social class 1 babies born in 1939. I realized that even the combined effects of several separate revolutions—the introduction of antibiotics, of planned antenatal care, of a comprehensive NHS for every mother and baby, the increased use of hospital for deliveries, specialization by paediatricians and obstetricians—had all failed to bridge the social effects on infant mortality for more than 20 years (Morris, 1967a).

I learnt that social and environmental factors are major if not pre-eminent factors affecting the death of babies and that they may be much more important than technical advances in medicine. How much more are they factors affecting morbidity?

McKeown (1970, 1976) believes that the main determinants of health during the past 300 years have been environmental. In other words, most people are

born well and are subsequently made ill. He has shown that mortality rates improved all through the nineteenth century while environmental reforms in sanitation and hygiene occurred. Snow, a general practitioner in the nineteenth century, altered the environment by stopping the Broad Street pumps from working, thereby curing a cholera epidemic years before the cholera vibrio was identified.

Clearly scientific treatment by doctors began only in the twentieth century and, even now, scientific treatments do not counteract bad environmental conditions in the poor countries. McKeown argues that in technically advanced countries behavioural influences are more important than all others, citing patterns of behaviour such as smoking, drinking, eating, lack of exercise, childbearing, and childrearing.

Pemberton in his 1976 Milroy Lecture classified current medical research into five categories or 'levels':

1. Molecular.
2. Cellular.
3. Organs.
4. Multi-organs or clinical.
5. Man in his setting or environment.

Most medical research in the past has been undertaken at the first four levels. Perhaps one of the great contributions to medicine which we in general practice can now make is at level five—man in his environment?

James Mackenzie understood. Two of the aims of his Institute (Mair, 1973) were:

“To study the conditions under which the patients live (food, work, and surroundings).”

“To record all cases and keep in touch with patients who have been seen with the aim of *discovering the relation between environment, ailments, and subsequent disease*” (my italics).

## Behaviour as a cause of ill health

### *Infectiousness of human behaviour*

After working in general practice for several years, I gradually realized that my professional concern as a doctor was focusing more and more on my patients' feelings. Wherever I looked I found that it was their personalities, their fears and feelings that mainly decided what happened in the consultation. In other words, I was affected by the way they behaved. Nor was I alone. My partners, nursing colleagues, and all the practice staff were similarly affected by the patients' feelings, and feelings are one form of behaviour.

I slowly came to realize that although we spend years studying the infective process and the characteristics of invading micro-organisms, we still do not know why only a few patients catch infections and most do not. Only rarely, I noticed, were my staff or I infected by our patients pathologically, whereas behaviourally there was evidence every day that one or more of us had been affected, and we can, I believe, say 'infected' by our

patients' behaviour. As a doctor becomes more sensitive to his patient's feelings, so he is more affected by them. I learnt that an angry receptionist usually meant a frightened patient and later I began to diagnose depression by feeling depressed myself. It seems we are more affected and infected by our patients' sorrows and joys than by their germs.

One of the most important behavioural objectives for our vocational training scheme in the University of Exeter is “That the trainee shall demonstrate his/her ability to know what it feels like to be the patient” (Gray, 1977). We know that the management of so many consultations hinges on knowing just what the patient is feeling and asking ourselves such questions as: Why has he come at all? Why was the call late? What does the patient think the symptom means? Two patients with identical symptoms may have quite different feelings if, for example, for one the symptom was the start of an uncle's leukaemia.

### *The behavioural causes of hospital admissions and deaths*

For years general practice has been almost alone in its preoccupation with human behaviour, sharing only with psychiatry the idea that doctors should study behaviour in relation to illness. However, the general principle of the importance of human behaviour is now becoming clear to doctors in other disciplines and also to Western governments.

Lalonde (1975), for example, a minister in the Canadian Government, analysed mortality and morbidity in Canada by measuring certified deaths and admissions to hospitals. He found that the top four causes of death between the ages of one and 70 in Canada were: accidents, ischaemic heart disease, respiratory disease and lung cancer, and suicide. Similarly, the top three causes of admission to hospital were: mental illness, diseases of the cardiovascular system, and accidents and violence.

Given that behavioural factors such as smoking, obesity, lack of exercise, and probably fat consumption are all behavioural influences on cardiovascular disease, it is clear that all the main causes of death and hospital admission arise from causes in the environment and especially human behaviour.

The pattern is the same throughout the Western world: the conditions causing the greatest concern are ischaemic heart disease, lung cancer, alcoholism, obesity, depression, accidents, self-injury, abortion, and venereal disease. All have one common factor, conscious human behaviour—especially what Lalonde calls “self-imposed risks”.

### *Behaviour at home*

Evidence from many disciplines is accumulating to show that behaviour at home is strongly associated with ill health. Colley and colleagues (1974) linked smoking by parents with an increased incidence of bronchitis and pneumonia in pre-school children. Alas, Colley (1976)

also showed that half of all boys and a third of all girls smoke by the age of 17.

Fundamental research work on the behavioural aspects of general-practice medicine is already being done—but not often by general practitioners! Some medical sociologists are already investigating this concept of disease and have started research on depression. Brown and his colleagues (1976) in a sophisticated and exciting analysis of the “social causes of disease” have identified four ‘vulnerability factors’ in working-class women in London. Three of the four—having three children under 15, not going out to work, and low intimacy with husband—are behavioural.

Melia and colleagues (1977) have shown a statistically significant increase in the prevalence of “coughs and colds going to the chest”, and “bronchitis” in children in homes where the cooking is done by gas.

Douglas and colleagues (1977) have linked exposure to a significant emotional event, such as parental separation or divorce, in children under the age of five with an increased proportion of sexual or violent crimes in boys and subsequent diagnosis of stomach ulcers. Macdonald and Macdonald (1977) found a significant association between falls in the elderly at home, leading to fractured femurs, and the taking of barbiturates. Perhaps some of the pollutants in the home are pharmaceuticals which we have ourselves prescribed?

Carpenter and Emery (1977) show that many children at risk of ill treatment can be identified at birth. They started an intensive health visiting service in the home and Sheffield’s post-neonatal mortality rate has fallen.

Finally, Sibert and colleagues (1977) report a highly significant fall ( $p < 0.001$ ) in the number of children under the age of five admitted to hospital with self-poisoning using one form of aspirin after the introduction of a child-resistant container. But where were we as domiciliary doctors in the cry for reform of child-proof packaging? Why were we so silent while children in our care at home were left at risk so long after the technical solution was available?

### James Mackenzie

The most famous incident in the life of James Mackenzie was when a young woman died in front of him in childbirth. It is clear that that tragic moment, which occurred in her home, so affected Mackenzie that he decided immediately to study as best he could the diseases which made the greatest impact on his patients. But where to start? In his own words, he chose on a logical basis: “A great number of symptoms presented themselves to me and at first I did not know which to select. Finally I decided to attack two *kinds of symptoms which were the most common*, i.e. pain, and the irregular action of the heart” (Mair, 1973; my italics).

That process of logical selection is still valid today. Just as medicine as a whole must serve society, so each general practitioner must serve the needs of his particular population of patients. In short, our task

now is to concentrate on those symptoms which are most common in our patients today, and the evidence is that these are particularly associated with patterns of human behaviour.

### Injuries in the home

A classic example of ill health occurring as a result of human behaviour lies in the problem of injuries in the home.

This country is rightly concerned about the tremendous loss of life through road accidents. Bills are debated in Parliament about compulsory seat belts but during recent years the number of patients dying as a result of accidents at home was greater than the number of patients dying from accidents on the road (Registrar General, 1973). Accidental death in childhood is now the commonest single cause of death in the 1 to 15 year-old age group and the commonest place of accidental death under the age of five is the home (Jackson, 1977).

Such information as we have so far has arisen from workers other than general practitioners, and most of it comes from accident and emergency departments. General practice has largely failed to analyse the injuries at home which are managed by us and not referred to hospital.

The Department of Health and Social Security has recently been criticized for its silence on this subject (Roberts and Dale, 1977), but perhaps the blame lies nearer home? Can the Government be blamed if the domiciliary doctors who work in patients’ homes show little interest in the causes of injuries and deaths at home and do next to nothing about preventing them?

Why do we have this blind spot? Why is it that this colossal cause of death and disease has not been studied systematically?

One reason, I suggest, is to be found in linguistics, which Tanner (1976) has emphasized is a behavioural science. Words can cloud as well as clarify. I believe we may be misled by the linguistic connotations of the word ‘accident’ which imply a ‘chance happening’ which cannot be prevented. I suggest that we should relabel ‘accidents’ at home as ‘injuries’ at home. This would not only do away with the connotation of the word ‘accident’ to mean ‘accidental’ but encourage us to think of it as a serious cause of damage to living tissues.

Another, more important, reason lies in the subtle relationship between behaviour and pathology. Husband (1975), a paediatrician, and many others have shown the importance of family relationships in the home and the problem of ‘accident-prone’ children. Accidents occur relatively more often in homes where the interpersonal relationships are tense. Husband maintains that it is the role of the family practitioner to help. Are we collectively shrinking from some of our major responsibilities?

It follows that the key to prevention will lie in altering human behaviour. The word ‘doctor’ means ‘teacher’—we are all educationalists now.

## Pathological and behavioural sciences

### *The disproportionate importance of pathology*

We have to face a fundamental realignment of our priorities. Our generation of doctors, both in hospital and general practice, has been brought up in a tradition which has until now accepted the dominance of the sciences of anatomy and pathology, and underrated the sciences of behaviour.

At Cambridge, in the 1950s, I started my medical course in the dissecting room. Can anyone imagine a less appropriate setting in which to start the training of a future general practitioner? Can anyone devise a better way of ensuring that 18 year olds, late adolescents, should feel distant from their patients and that the first docile, dependent, and very dead patient should be seen as an inanimate object—which indeed it is—an object which above all has no feelings and no home?

Throughout my course we were taught that “pathology is the basis of medicine”. It fell to Crombie, Pinsent, and their colleagues to remind us that in half the consultations in general practice doctors did not have an adequate pathological basis for diagnosis (Research Committee of the College of General Practitioners, 1958). This still holds good today.

We were brought up to believe that the behaviour of patients was usually a consequence of their pathology; today we are learning that their pathology is often a consequence of their behaviour.

The integration of the traditional pathological model with the new behavioural model of medicine can now be achieved by regarding pathology as the behaviour of organs, tissues, and micro-organisms, and the behavioural sciences as the study of the behaviour of the whole man. Both are essential, but it may well be that the behaviour of man, especially in his natural setting, is now more important in affecting health than the behaviour of particular organs or tissues, and offers much more scope for the prevention of disease.

The physico-chemical sciences will, of course, continue to advance, particularly in hospitals, and I see general practice continuing as an applied science in these disciplines.

By contrast I believe that general medical practice will increasingly be seen as a behavioural science in its own right. Fundamental advances will be made in our discipline which will later be applied in hospitals. Our study of the doctor/patient relationship is one example.

Thus the physico-chemical sciences lead inevitably to the laboratory: the behavioural sciences lead to the environment. Where is the patient's natural environment? I suggest that one stands out above all others. The behavioural sciences lead us to the home.

### Home territory

Many of the behavioural sciences, especially zoology, psychology, anthropology, and ethology underline the importance of territory. Time and again fundamental

insights into animal behaviour have been possible only when animals have been observed in their natural habitat. Morris (1967b) looked at man as a primate and analysed perceptively both ape-like and human behaviour. Most of the basic physiological functions of eating, sleeping, mating, and child-rearing predominantly occur in the home, and Young and Wilmott (1973) have shown that, contrary to what we might expect, we all spend most of our time there.

However, many important behavioural reactions, such as fear and aggression, are also first felt in and around the home, and patterns of behaviour to deal with them first tested there. More deaths from injuries, for example, occur in the home than at work and are often the result of behaviour. Yet this is not really surprising when we realize that the relationships formed in the home—the marital, parent/child, and sibling relationships—forge patterns of behaviour.

Hodgkin (1970), in his Mackenzie Lecture, was one of the first general practitioners to emphasize the importance of territory and I believe that we should use our privilege of observing our patients in what is for them the most important territory of all—the home.

However, on entering general practice, young doctors are often so concerned with organizing their own territory, getting the premises, staff, and the records right, that they tend to forget the importance of the patient's territory.

Most of our meetings with patients take place on our territory, at times of our choosing. We and our staff decide when, with whom, and often whether the consultation will take place. The patient sits where we decide.

All human relationships involve giving and taking. How much 'give' is there in general practice today?

I often do home visits with trainees and frequently they tell me how insecure they feel when orientating themselves in a patient's home. If such feelings commonly occur among highly intelligent, highly educated, social class 1 colleagues, how much more intense may be the feelings of social class 5, poorly educated people when confronted in our surgeries with all the trappings of our territory?

The fact that social classes 4 and 5 have disproportionately high death and sickness rates suggests that logically we should seek behavioural change in just these groups. Patterns of behaviour in society do change and often originate in small and privileged groups (for example, the reduction of smoking among doctors), and most people learn best when they feel 'at home'. Thus the meeting between patients in the lower social classes and their doctors in the patients' own homes is uniquely significant.

Where else in our society do working-class patients receive social class 1 professionals into their homes and discuss their problems with them? If behaviour is as infectious as I suggest it is, not only are we affected by our patients' behaviour, but they may be, far more than we realize, affected by ours; so that those who most

need our help have most to gain from contact with us in their homes.

I believe we need to be reminded day by day that the struggle between the patient and the illness takes place in the home. The home is the battleground, the home is the boundary for most people where the transition from health to ill health and back again takes place, where limitations are most damaging, and where most of the main adjustments of our lives take place.

We can now construct a new model of the consultation. I regard it increasingly as a precious fragment of the pattern of the patient's way of life at home. I struggle and often fail to understand how the patient is feeling at home. What does the patient fear? What does this symptom mean to family and friends? How does the disease strike home?

I suggest that we should define one aim of the consultation as understanding the patient at home.

### **Homes and health**

Many books have been written about occupational medicine. Why is there no comparable literature for domiciliary medicine?

Few general practitioners have written much about their work in patients' homes. However, Carne (1961) in a sensitive study found that well over half his families did not have a bathroom in the house and two thirds did not live in self-contained accommodation. Goodman's (1974) survey of a council estate was also disturbing, and only 14 months ago the Department of the Environment confirmed that "One million families in Britain live in houses that lack either hot water, a bath, or an inside lavatory" (Shelter, 1977). What kind of castle is the Englishman's home?

Whatever the economic state of our nation surely we can afford to invest in healthy homes? Quite apart from social justice, can we, as the health professionals in the home, stay silent on the slums?

But do homes really affect our patients' health? The striking and persistent social class gradients certainly suggest it. In general practice as early as 1960 Hodgkin in a classic study showed that children living in caravans had a highly significant ( $p < 0.001$ ) increase in the prevalence of acute upper respiratory disease compared with age/sex matched controls in houses from the same practice. Fanning's better known article, "Families in Flats" (1967), came later and showed that the range of significantly increased morbidity between families in flats and families in houses included respiratory, urogenital, and emotional conditions.

The medical team which works in the home is very small compared with the great teams of doctors, nurses, and technicians who work in hospitals. There are only four of us—the general practitioner, the health visitor, the district nurse, and district midwife. The very names of our colleagues, health 'visitor'—a visitor to the home—and 'district' nurse or midwife indicate their function. Each has an honourable tradition, and I hope

we four will continue to work together in the future. When considering health visiting, the Court Committee (1976) concluded, "We are convinced that home visiting has an indispensable and increasing place in the future child health services".

However, as doctors we know that in every aspect of our work we have to both see and feel. It is always dangerous to take a history by proxy or rely exclusively on someone else's examination. I suggest the same is true for the home. We must sometimes see it and feel it for ourselves.

### **Examining the home**

Each doctor assessing the home should be aware of the historical development of the housing in the area. In cities like Exeter, for example, a medieval core can still be identified, surrounded by a Georgian ring of development with outlying Victorian and Edwardian buildings. Postwar housing estates, both private and council, form a further ring which eventually meets the Victorian mental hospitals originally placed well away from the city centre.

The doctor can often predict the pattern of living merely by glancing at the patient's address. He will know what is usual in each area, whether it is likely to be multi-occupational, bedsitter-land with student residents, flats for the rich or the poor, and which are the council houses and which are owner-occupied. It follows that before entering the house at all he will be able to estimate the type of accommodation inside, how many rooms there are, and what furniture and fittings to expect.

We have the unique privilege of access over a long period of time to virtually all the rooms in our patients' homes and this enables us to discover facts which may not be offered in the consulting room. Cigarettes may be seen at the bedside and a change from a double bed to single beds noticed long before marital difficulties are presented in the consulting room.

A child's room often shows how much stimulation the child is receiving in his own environment, and the kitchen, which can vary from being a cramped and dirty cupboard to a planned work area fitted with expensive labour-saving devices, is the key to hygiene.

Most of all, it is the 'feel' of the living room which indicates better than anything else I know the general feeling of the family. To the perceptive eye a room can reflect happiness or unhappiness; order or disorder. Nor should extreme order necessarily be taken to be healthy. Our health visitor has shown me how a mother can be too houseproud, too tidy, for the good of her family (Chapman, 1970-77).

The garden should not be forgotten—if there is one. Its size and whether the emphasis is on flowers or food should be noted, and whether or not the young mother can watch a pram from her living rooms.

All the time he is in the home, the doctor is looking for influences which might be causing the patient's ill

health, evaluating the impact of disease on the patient and the household, and determining the capacity of the household to care for a sick member.

One of the most important assessments of all is to determine whether a home places greater value on human relationships or on inanimate objects. In some homes a beautiful and valuable collection may be a cold comfort, a silent substitute for close and caring relationships.

Often it is only on a home visit that a doctor discovers the presence of another person in the home. A dominant grandmother or a lingering lodger may well be the key to relationships which seem mystifying in the surgery. Meeting other members of the family helps the doctor to establish a relationship with the family as a whole and not just one patient. Rapport is much more easily achieved, particularly with children, by means not available in our consulting rooms. Pictures, posters, prizes, and particularly books make it infinitely easier to learn about patients as people.

Patients express their feelings more easily at home and are often able to reveal not just the focus of their feelings, but their depth. Nor do they always need words to do this. Argyle (1975) has shown that non-verbal messages are more important than verbal if we can only learn to recognize them. Actions speak louder than words. I well remember a young married woman severely depressed after the death in hospital of her second child, three years after the death of her first, suddenly pulling open a drawer of baby clothes and bursting into tears. I do not believe I could have understood fully without being in her home and able to see as well as hear. Two years later in the middle of the night she rang me from a bus stop to say she had just discharged herself from hospital late in her third pregnancy. I met her and took her back to my home, gave her a cup of coffee and was able to persuade her to re-enter hospital, where with superb scientific care she was later successfully delivered. My ability to persuade her stemmed, I believe, directly from the relationship established earlier on home visits.

Argyle (1975) notes that only friends are normally allowed to invade the privacy of the home. I suggest that I am privileged to be treated as a kind of friend when I am told, "Don't knock, Doctor—just walk in" or, during terminal care, when I am given the key of the front door. Such a relationship is difficult to achieve simply in the surgery.

### Working in the home

Having learnt what insight can be gained from people's homes in both physical and emotional terms, we ought to decide what work we are going to do there.

#### *The home and the hierarchy of care*

If we apply the above hierarchy of care to home visiting, we find a special application at each level.

1. *Prevention.* The opportunities for preventive medi-

cal work are unparalleled in the home and the impact of advice is vastly heightened when the patient is both physically and emotionally 'at home'. When the doctor sees tablets within reach of the toddler or actually slips on a mat himself in the home of an old person, his advice really does strike home.

2. and 3. *Pre-symptomatic and early detection of disease.* Although most clinical screening will be done on our premises, the whisky bottle in the bedroom will continue to aid detection long before symptoms of disease are presented. In future, patients will increasingly screen themselves at home under our direction, for example by testing their own urine, and more sophisticated diagnoses, such as detecting 'morning dippers' among asthmatics (*Lancet*, 1977) will often be made at home by portable flow meters.

4. and 5. *Diagnosis and management of established disease.* The list of serious disorders which we will continue to treat by visiting at home is long. I suggest we shall continue to care for many patients with coronary thrombosis, acute heart failure, strokes, croup, pneumonia, prolapsed disc, severe depression, schizophrenia, brain failure, and post-operative complications.

6. and 7. *Management of complications and rehabilitation.* The full impact of chronic handicap on patients is best evaluated at home and delicate discussions about possible ill-treatment of children are often much more productive there. Visits for both these reasons may be doctor-initiated and I suggest that just as one of the characteristics of good general practice today is the doctor-initiated surgery consultation, so in the future could selected doctor-initiated home visits become a hallmark of good care.

If we go to see for ourselves what difficulties our patients face, we are often led away from our traditional over-emphasis on drug treatment and find other ways of helping. We may be able to offer practical help such as suggesting an aid (Disabled Living Foundation, 1973; Dobson, 1974; Equipment for the Disabled, 1976 a and b) or providing emotional support in the care of the dying. We have to become as skilled in caring for incontinence as for coronaries.

8. *Terminal care.* As family doctors we are privileged to provide terminal care at home. Given willing families and highly trained district nurses the home is often the natural and optimal setting. Many of us hope to be allowed to die at home.

9. *Counselling the bereaved.* Much support can be offered to the bereaved in our surgeries or by our nursing colleagues, but a cup of tea given to the doctor at home by a widow who wants to talk about her dead husband may be worth several counselling sessions in the surgery.

Home visits do take more time, it is true. I see eight

patients an hour in the consulting room and four an hour in their homes. Home visits may take twice as long; but they are sometimes twice as valuable.

### The future

Moreover, our future work in the home has several exciting possibilities.

In the distant past it was usual for medical care to be provided in people's homes. It was only when the great voluntary hospitals were built in the mid-eighteenth century that medical care began to move into hospital (McKeown, 1976). The explosive increase in scientific knowledge which occurred towards the end of the nineteenth century, and is still continuing in the twentieth, made the hospital the focus for the scientific care of patients.

Is the wheel of history turning again? Is the pendulum of care swinging back from the hospital to the home? Many recent scientific developments have improved the opportunity of caring for people at home. The recent trend towards outpatient investigation and day-care surgery means that patients may be away from their homes for only a matter of hours.

### Miniaturisation

#### *Three mechanical revolutions of mankind*

I interpret the history of the last 200 years to show three separate, but related mechanical revolutions. First came the industrial revolution in the eighteenth and nineteenth centuries. This was followed in the twentieth century by the scientific revolution.

Now I suggest that we are on the threshold of a third technical revolution—miniaturisation. At first sight the process of miniaturisation hardly seems to merit a title such as 'revolution', but it may be that its effect on the lives and health of our patients may be truly revolutionary.

After major scientific advances have been made there is a subsequent process of simplification and refinement. Several years after each new instrument or machine is invented, a modified version appears which is simpler, smaller, often portable, and hence more widely available. Calculators are a classic example and within two decades have changed from being expensive machines to children's toys.

Miniaturisation has two important consequences: decentralization and cost effectiveness, and the importance of both these principles is being recognized increasingly (Schumacher, 1974).

The main scientific revolution will continue, but it may begin to be subject to the law of diminishing returns. Increasingly expensive equipment requires rising real resources, yet produces only marginal benefits. By contrast, miniaturisation is subject to a law of increasing returns. The smaller the equipment, the more become the possible applications; benefits for the

many become possible at only marginal increases in costs.

The second general principle is that just as the scientific revolution led inevitably to a concentration of resources—to centralization—so miniaturisation leads to their dispersal—to decentralization. For example, the district hospital plan represented the logical consequence of economic pressures to centralize hospital medical care for both men and machines; by contrast, machines in miniature can be moved or dispersed away from big hospital complexes into homes.

I am quite confident that machines at which today we merely marvel will become the day-to-day tools for the general practitioner of tomorrow.

The historic deprivation of equipment in British general practice has blinded us to the implications of this third revolution. Because we are still struggling to equip our surgeries, we have not yet begun to consider the problem of medically equipping our patients' homes.

#### *Medical equipment in the home*

However, several specialists have already started to use medical equipment in patients' homes. In 1969, Epstein and colleagues successfully gave patients peak flow meters to use at home and in 1975 Burns-Cox and colleagues concluded that selected patients could measure their own blood pressure at home. In the same year, I learnt from one of my trainees (Kratky, 1975) that in future diabetic patients will probably test their own blood sugars at home with new machines and adjust their doses within guidelines set by the general practitioner. Burns-Cox pointed out that patients on kidney machines at home are able to undertake much sophisticated self-investigation and treatment. In 1976, Pickering reported the use of electrocardiographs by patients who succeeded in taking satisfactory tape recordings at home, which helped to control episodic arrhythmias.

Rosemary Evans (1978), the daughter of Mr Ancrum Evans, in whose home our College was founded, now works with handicapped children using videotape in their homes.

The Exeter computer already supplies its general practitioners with portable microfilm records of all their patients for home visits (Bradshaw Smith, 1976).

The medical applications of micro-electronics are almost unlimited. Mini computers are coming. This year the cost of a pocket computer terminal, 12.7 cm × 5 cm (5 in × 2 in), fell to only £900 (*Economist*, 1977)—the equivalent of the annual telephone bill of our three-partner practice.

Chemical advances will provide us with instant and increasingly accurate bedside investigations; 'Labstix' just points the way. Last year our practice provided each partner with a peak flow meter. This year a new mini flow meter is available at a cost of only £8 and one of my patients has already been lent one. With falling prices patients will increasingly use these themselves at home.



### *Adjusting attitudes*

I believe as domiciliary doctors we shall have to make substantial adjustments in our attitudes. Most British general practitioners are reluctant to tell their patients what their blood pressure is: yet, within the foreseeable future, I believe it may become usual for patients not only to know, but to record readings of this kind for themselves. We may begin to permeate all our work with the counselling relationship and form practical working partnerships with our patients in organic as well as psychological medicine. Perhaps one of our roles during the next 25 years will be ensuring the application of existing knowledge to the whole population.

James Mackenzie wrote in 1920: "My great desire was to make the panel doctor a superman in medicine, by giving him facilities for the investigation of disease and the examination of patients which no one possessed. This in addition to his peculiar opportunities would achieve that object" (Pinsent, 1963).

Now with miniaturisation, the 'panel doctor' at last has the chance of becoming, in Mackenzie's words, "a superman in medicine".

### **Home truths**

But that is for the future. What is the truth about our work in patients' homes today?

Throughout the lifetime of James Mackenzie, and later during the professional careers of my grandfather and father, home visiting was a fundamental and important part of general practice. When I entered practice in 1962 it formed at least a quarter of the work, and this was also true nationally (Office of Population Censuses and Studies, 1975).

Only 11 years ago Eimerl and Pearson (1966) found that home visiting took between 40 and 60 per cent of general practitioners' time.

In the late 1960s, however, a succession of reports appeared confirming a steady and progressive downward trend in the number of home visits to patients. Marsh (1968) showed this clearly, and indeed by 1972 Fry, my distinguished predecessor last year, reported only 0.1 home visits per patient per year. For a doctor with an average sized list this is equivalent to four or five visits per week—less than one home visit a day.

Similarly the home visiting rate on my own personal list (which has fluctuated between 2,700 and 3,000 patients during the last four years) has fallen from 0.50 visits per patient per year in 1974 to 0.43 in 1975, to 0.35 visits per patient per year in 1976.

### *Home confinements*

One form of home visiting, home deliveries, is now being abandoned altogether. It must surely be one of the great academic failures of general practice since the war that this is happening without satisfactory scientific evidence. A prospective, randomly-selected, home-versus-hospital trial, with controls matched for age, parity, and social class would have given us evidence

one way or another. Measures of outcome should have included perinatal mortality, the mothers' opinions, breast feeding rates, and subsequent ill-treatment of children.

### *Records*

It is another sad truth that even in 1977 we have not yet begun to work out any way of classifying homes or recording their essential features in our notes.

Walford (1955) and Zander (1977) noted that as family doctors we rarely record family history. I suggest that as domiciliary doctors we rarely record the home.

### *Withdrawing from the home*

Nor is Great Britain different from other countries; indeed home visiting in North America has declined even faster, and in many places has virtually been abolished.

Kuenssberg (1976) has summarized the reasons: the reduction in the number of bedridden patients, the change in medical attitudes to bed rest, greater demands on the doctor's time, traffic congestion, and parking difficulties. In addition, general practitioners now have nursing colleagues and better equipped premises, patients have better transport, and cities are spreading out.

Graphs of the total number of home visits per patient each year show a trend-line pointing steadily downwards. As general practitioners, we face three crucial questions: will the proportion of home visits rise again? Will there be a plateau? Or will the rate continue to fall, perhaps to zero?

For the first time in our history we face the question—is home visiting going to go? For the first time we now have the power to end domiciliary care. This question is usually evaded, I believe, because it touches a deep anxiety among many of us. Our silence is significant.

While we are relieved that the number of our visits is falling, we are worried because we know the home is important. Can it be right for the patient for us to withdraw from the home?

### **Vacuum of care**

If it is simultaneously true that on the one hand the home is important in relation to health and on the other hand that general practitioners are withdrawing from it, I conclude that a vacuum in medical care is being created.

If this is so, then it will be filled in some way by some other kind of medical service. The question is, what service, and who will supply it?

There is not enough time to review adequately the variety of medical workers who are now developing an interest in home care, but their services now include: paediatric, psychiatric, geriatric, contraceptive, and terminal care.

### *Children*

In London, the Paddington Home Care Scheme is well

known, but more recently there have been many papers arguing that hospital-based home care should be arranged for children. In the south, Gow (1976) described the paediatric home nursing service started in Southampton in 1969; in the north, Hally and colleagues (1977) pioneered a scheme for home nursing for small children; and in the west, Brimblecombe and colleagues (1977) are assessing the needs of families with handicapped children by home visits.

#### *The mentally ill*

In psychiatry, the number of hospital-based community mental nurses is steadily increasing (Harker *et al.*, 1976). Davies (1977) from Gwent has advocated a hospital-based community service for the mentally subnormal where patients are "visited regularly by one of the domiciliary hospital nurses".

#### *The elderly*

The first national random survey measuring the temperature of old people living at home was carried out in 1972 (Fox *et al.*, 1973). What might have been a natural study for general practice was led by geriatricians and showed that low body temperature is statistically associated with low income. More than half the elderly had room temperatures below the minimum legally specified for offices.

#### *Chronic medical conditions*

Barber and his colleagues (1977) showed that in the continuing care of patients with thyroid disease "over one third" of general practitioners had abdicated their responsibility *and* failed to answer reminders. They successfully bypassed this vacuum of care with home visits by their office staff.

#### *The dying*

Terminal care schemes are now appearing. Lamerton (1975), in London, has made valuable contributions to the care of the dying at home through another specialized home care service. We are increasingly retreating from caring for the dying at home by sending them into hospital. Nationally the number of deaths at home has fallen from just under a half in 1960 to only a third today (McMahon *et al.*, 1977).

#### *Home visits out of hours*

Home visiting shares much with out-of-hours work, and of course most consultations out of hours do take place at home. At present about one third of British general practitioners use commercial deputizing services. For some practitioners these services cover as many as three quarters of all the hours in the year. Another medical vacuum is being filled, often by doctors who have not been trained in primary care.

#### *Multiple domiciliary specialist services*

General practice and this College face a crucial choice. On the one hand we can continue to withdraw from the

home and become office-based workers spending our day at the desk. On the other hand, we shall have to define a home visiting policy.

If we do withdraw, it is likely that this country will develop a multiplicity of specialist domiciliary services, which could extend rather like the social services before Seebohm. One home could then have several specialist services providing medical care. In homes where this has begun to happen I have been struck by the recurring difficulties in obtaining information and co-ordinating care. The greater the number of sources of advice, the greater the problems of communication and the greater the difficulty of one doctor in understanding the whole patient and the whole family (*Journal of the Royal College of General Practitioners*, 1974).

In the seventeenth century the powerful physicians left their patients and fled from the plague (Copeman, 1968). The humble apothecaries filled the vacuum and served the needs of that society.

Are we now failing to meet the needs of our society? Are we being replaced in the home? General practice seems poised to abandon its traditional power base. But if we move out of the home, we can hardly complain if many others move in.

#### **Conclusion**

I have tried to show that four great aspects of general practice—preventive medicine, the environment, human behaviour, and domiciliary care—are all related and that each leads naturally to the other. Indeed, I believe that the consultation can be considered from a new perspective: with the "supreme objective" prevention always in mind, we can regard it, wherever it is held, as a struggle by the doctor to understand in environmental and behavioural terms what the patient is feeling at home.

The trends are already apparent, but I myself believe that it would be wrong for us to give up home visiting altogether. For me, it is still an important part of general practice to work with my patients in their homes. For me, knowledge and understanding of the family, especially one with children, the elderly, the disabled, or the dying is always incomplete if I have never visited the home.

I am aware that this view will be unpopular. It will, of course, be opposed. It is contrary to every trend in this country and across the Western world. History may show me as a latter day Canute proverbially struggling to stem the tide.

I do not know, because there is no evidence, what proportion of our work ought to be in the home. There is much that our colleagues in the health visiting and nursing professions can do and are already doing very well. I am not suggesting that the number of home visits should necessarily be increased, but that there is a problem and we should not evade it. The message from Mackenzie is that it may take much hard work and many articles published over many years to clarify a

problem. Those of us who care about home visiting should discuss and document our work while there is still time.

### The College

Twenty-five years ago this College was founded—founded from the depths of despair, when general practice was in danger of disintegration. I have already suggested that history will see this as a unilateral declaration by the generalist of academic independence from the specialist (Gray, 1977). It was also a liberation from the dominating territory of the teaching hospital bed.

Twenty-five years ago this month the Foundation Council took up the task of building for the first time in Europe an academic body of general practitioners. How well they succeeded, how far their dreams came true, we celebrate in this silver jubilee today.

Twenty-five years ago, this very day, general practice as an independent discipline was born. It is our privilege now as members of this College to rise to the challenge of our founders. Inevitably, in its first generation our College had to fight for its very existence, to struggle to break into the universities, to initiate vocational training, and above all to raise our standards of care.

I have not hesitated to point out some of the problems and some of the failures of general practice, but our task now is to look ahead, certainly to our Golden Jubilee, and indeed much further still. I am quite confident that we have now come of age and that our discipline will respond to our patients' needs.

In responding, I hope we shall follow the example of James Mackenzie and continue to analyse our work critically. "The inquirer must keep his mind ready to review his most cherished beliefs", he wrote, and later: "What is accepted today as axiomatic may be shown tomorrow to be but part of the truth" (Mair, 1973).

I would like to end by thanking you again for allowing me to share with you today "One crowded hour" (Mordaunt, 1791).

Good general practice will always consist of patients feeling at home with their doctor and of doctors feeling at home with their patients.

I believe in this College. I believe in general practice. I believe that as we move together into the last quarter of the twentieth century we shall continue to raise the standard of care for our patients through integrating the natural with the behavioural sciences. *Cum Scientia Caritas*. Compassion, like charity, may begin at home.

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**Acknowledgements**

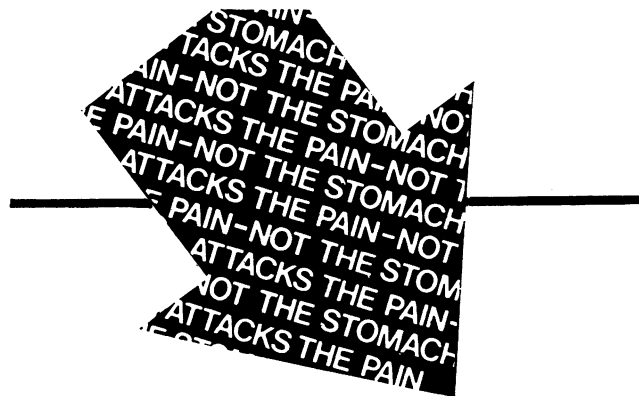
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