

HARBEN LECTURE

Primary care and the public health

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The life and work of Sir Henry Harben was one of the success stories of the 19th century. In his way he achieved a kind of revolution. He developed his company, the Prudential, on the basis of selling industrial life insurance to the working class on a regular, often weekly, basis and built it up to become what is now the biggest life insurance company in the country. The parallels between the development of the corporation and the development of general practice are striking.

The Prudential's work was, like general practice at that time, largely home-based and offered essentially a personal service. It was about providing security to the least advantaged members of society just as general practice has always been. Like general practice, the Prudential has had to compete for its work, and like general practice, it has become a national institution. Sir Henry's special contribution as an actuary was to use a mathematical basis for the setting of premiums and to introduce more formal management methods. General practice is increasingly adopting a statistical (i.e. numerical) approach to its problems and using management techniques. The leaders of the Prudential, like the leaders of the Royal College of General Practitioners, seek to provide quality assurance in their work^{1,2}.

Definitions

Primary care is currently the fashionable term for the medical service which has been described as the 'front line of the National Health Service'³, namely general practice. However, those doctors, nurses and other health professionals who work in the front line do not always see them-

selves principally as professionals in primary care.

The terms in use for such doctors range from general practitioners and family doctors in the UK, and house doctors in the Netherlands, to family physicians in Canada and New Zealand. Nurses call themselves 'district nurses', 'community nurses', 'practice nurses', 'health visitors' or 'community psychiatric nurses', according to their primary function. Few if any want to be called primary physicians or primary nurses, nor do many of us consider primary assessment to be the most important part of our work. Furthermore, some primary care is undertaken in hospital, for example in accident and emergency departments.

However, for the purposes of health service planning, and when taking a broad overview of health care as a whole, the three levels of care – primary (front-line care), secondary (district general hospital level), and tertiary (regional or national centres) – are simple and have much logic (*Figure 1*). The purpose of each level is to support the one above.

In practice in the UK, the vast majority of the services in primary care are offered by those health professionals who work regularly in the setting of general practice.

The definition of 'public health' is easier. I shall use it to mean the health of the population, and public health medicine to mean the service offered by doctors specialising in population medicine and epidemiology.

Aims

In this paper, I offer five perspectives on the contribution that primary care can make to the public health.

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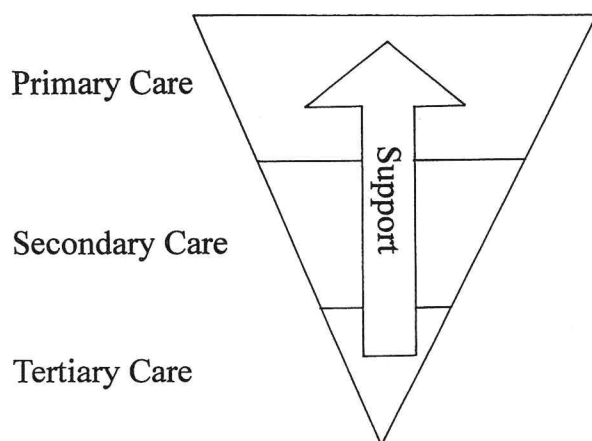


Figure 1. Relationships between primary care, secondary care and tertiary care. Reproduced from reference 27 with permission

Firstly, I will suggest that the environment and behaviour are more important causes of disease than has been recognised in the past, and that, in researching the origins of illness, a new balance needs to be struck between genetic and environmental studies.

Secondly, I will suggest that, as primary care is the best single source of data about the health of the population, there is a natural partnership between primary care and public health medicine which should be encouraged and built upon.

Thirdly, I will show that, just as statistics were the basis of Henry Harben's work, so scientific, probability-based, statistical approaches increasingly govern primary care.

Fourthly, I will propose that multi-professional primary health care teams should be the key health service institution for the future.

Finally, I will suggest that the central challenge for the members of such teams is quite different from that of public health medicine, in that they must provide personal clinical care by doctors and nurses who are generalists.

The origins of disease

Medical research seeks first to find the causes of disease, secondly to find ways of treating it, and thirdly, if possible, means of preventing it.

There are two main causes of disease: genetic factors and environmental factors. These two causes are symbolised by the choice of your two most recent Harben lecturers. Last year, Sir David Weatherall described the notable contributions made by his university department in the field of molecular biology – a subject which will always be of great importance. In contrast, I represent the other half of medicine, namely those illnesses and health problems which are not genetically determined.

Importance of the environment

It is not always understood that about half the health problems for which patients seek help are environmental rather than genetic in origin. In other words, the problems arise from aspects of human behaviour or features in their personal environment rather than from their genes.

Asthma. The prevalence of asthma has roughly doubled since 1983⁴, and now affects 10% of all children. Although asthma has a well-known familial tendency, it is doubtful whether there is any genetic explanation for such a dramatic increase. It is more likely that the increase is due to an environmental factor in the air, perhaps a pollutant, or some aspect of immunisation, food, furnishing or central heating.

Depression. This is one of the commonest causes of chronic illness in our practice population. Some forms of depressive illness are clearly genetic and familial, but most are not. The commonest factors are difficulties in personal relationships in the home or at work, or association with physical disease. Depression is more common in the most socially deprived, which supports but does not prove an environmental cause.

Termination of pregnancy. In 1991, 160170 English residents had terminations of pregnancy⁵. However, there is a genetic indication for termination in less than 5% of cases, i.e. the causes are behavioural or environmental in 95% of cases.

Social class. In all countries, there is a close relationship between health and wealth. It is not fashionable today to talk about social class. Class categories are said to be crude and unreliable. But it is a fact that, in the UK, the expectation of life for a baby born in social class 5 is five years less than that for a baby born in social class 1⁶. Social class is thus a major factor determining the public health.

Behavioural problems. Although the behavioural problems of childhood: 'He won't eat, doctor', 'He won't sleep, doctor' are still common, more common still is: 'He won't do what he's told, doctor'. In the 19th century, the code for child rearing was: 'spare the rod and spoil the child'. It was rigid and often excessive. By contrast, in the 20th century, the pendulum has swung so far that many of the young parents in my practice openly agree that they are effectively controlled by their children. Children expect to get what they demand, and, as they get older, they more readily resort to violence and the abuse of alcohol, solvents or drugs. Research from the School of Education at the University of Exeter predicts that, by next year, almost half of all 16-year-old boys and one third of 16-year-old girls will have tried an illegal substance (excluding alcohol)⁷.

Post-traumatic stress disorder. Many of the biggest emotional scars we see in clinical practice, such as post-traumatic stress disorders (PTSDs)⁸, are due to environmental rather than genetic causes. Sexual abuse, for example, is an environmental factor. In our practice, every 70th adult woman has reported sexual abuse to one of our four (male) partners.

Fear of illness. Many patients turn to primary care for help, not necessarily because they are ill, but because they fear illness or the complication of existing disease. What middle-aged person does not think first of cancer? Behind the curtain of apparently relaxed general practice consultations lies

fear: fear of illness, fear of cancer, fear of death or disability. Lifting that curtain, perhaps only for moments, to identify and share that feeling, and then finding swift and effective ways of controlling both the fear, and if possible the disease, is a continuing challenge for primary care. If doctors are to reassure effectively, they need not only knowledge and skill, but empathy and authority as well.

New threats to health

Furthermore, there are always new threats to health. General practitioners are the only professionals regularly visiting large numbers of the population of all ages in their own homes, and this gives them the opportunity to identify new problems at first hand. For example, one major new health threat that I see on home visits today is the impact of colour pornography on children, which again is environmental not genetic in origin.

Need for systematic research in general practice

I make these points not in any way to decry gene-based molecular biology, which has contributed so much to our understanding of disease, but to underline the fact that nature does not have a monopoly on the causes of ill-health. Nurture is all too often responsible. Nurture therefore needs to be researched as much as nature. Many of the problems I have described are not illuminated by genetic studies, and primary care therefore needs its own research base to explore behavioural and environmental causes of disease, optimum management, and prevention, if possible.

For family doctors and nurses, the main environment for such research is the patient's home and family⁹. Just as laboratory-oriented doctors need to undertake laboratory research, so primary care teams need to research the impact of personal and behavioural factors on health in families¹⁰ and at home¹¹.

In my James Mackenzie Lecture of 1977, I suggested that general practice would itself emerge as a behavioural science¹¹. Whilst it still needs to assimilate the research techniques of anthropology, psychology, sociology and related sciences, the recent move towards qualitative research, which is often behavioural¹², supports this development.

It is also encouraging that the Royal College of General Practitioners has recognised the need for research general practices, and appointed its first two research general practices in October 1994.

Measuring the public health

The involvement of general practice/primary care with population medicine dates from the 1911 Lloyd George Act, which enabled working men to register with a general practitioner. Watts¹³ first described the age-sex register and he was soon followed by Eimerl¹⁴, who invented the diagnostic register. The Birmingham Research Unit of the Royal College of General Practitioners then vigorously propagated the use of these two key tools of analysis of practice populations.

Thus the linkage between primary care and epidemiology was forged. Now, 35 years later, neither discipline has yet fully grasped the potential for partnership, and a rich area of collaboration remains to be exploited in the analysis of both health needs assessment and outcomes.

We need to remember that in only a few countries in the world does primary care have exact analyses of the characteristics of all the patients registered. The registered list is not only a marvellous research instrument, providing a denominator for innumerable analyses, but it is also a powerful educational factor constantly helping primary doctors and nurses to think of all the patients in their care and therefore to care better for the most vulnerable and deprived.

The key is information. What information does primary care have and why is it so important? What is the nature of the partnership between primary care and the public health?

Information from primary care

All data from all sources have their problems. No system is perfect and it is important when considering the relationship between primary care and the public health that the strengths and weaknesses of primary care data are generally understood.

Weaknesses. A great weakness in general practice has been the paper medical record. Still used mainly in England in the form in which it was introduced in 1921, it is too small and too limited for modern primary care. Handwritten paper records, often unclassified and loosely categorised, mean that there is no proper basis for later analysis. Nevertheless, primary care data do cover more of the population than data from secondary care and include all those conditions not referred to hospital, i.e. over 90% of all cases of asthma, depression, hypertension and infections in most parts of the body.

Categories of information

There are six categories of information which are of interest:

- (i) about the population
- (ii) about the use of services
- (iii) about the diseases of the population
- (iv) about health problems and risk factors
- (v) about activities of the health care team
- (vi) about outcomes

The population. Facts about the age/sex distribution, addresses and so on are now searchable by postcode and cover social deprivation. All this is well known. What is less well known is the duration of registration and the fact that many people stay in the same area and with the same practice for several years. *Figure 2* shows how long each of our patients has been registered with the practice. Whilst our turnover is about 20% per year, as many as 20% have been with us for 20 years consecutively, and over a third have been registered for over 15 years.

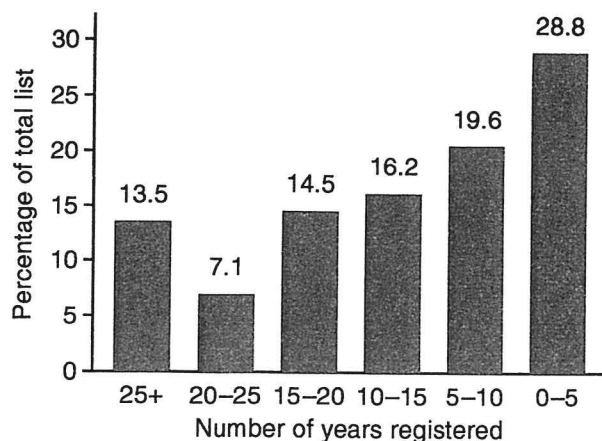


Figure 2. Duration of registration of patients with the practice, based on a list size in October 1994 of 6527 patients

Use of services. It is also possible to analyse the use of services. The information relates to the rate of consulting, which nationally is about 3.25 consultations per patient per year, plus home visit rates – about 0.25 per patient per year. More valuable are uptake rates, which show which patients have *not* been immunised, or had smears, or blood pressure checks. *Figure 3* shows the number of teenage girls who had (and

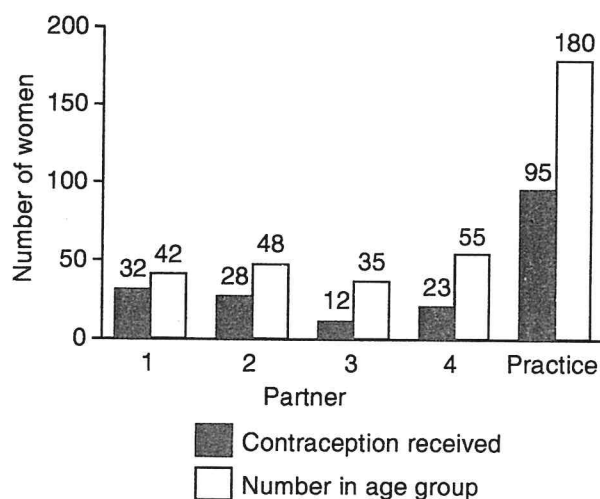


Figure 3. Recorded receipt of contraceptive advice by 16–19-year-old female patients registered with the practice in 1992

had not) received contraceptive advice within the practice, by partner.

Diseases. Simply listing the common chronic diseases in their order of prevalence raises questions. *Figure 4* shows the numbers of patients in our four-partner practice of 6707 patients who have ever been diagnosed with the main chronic

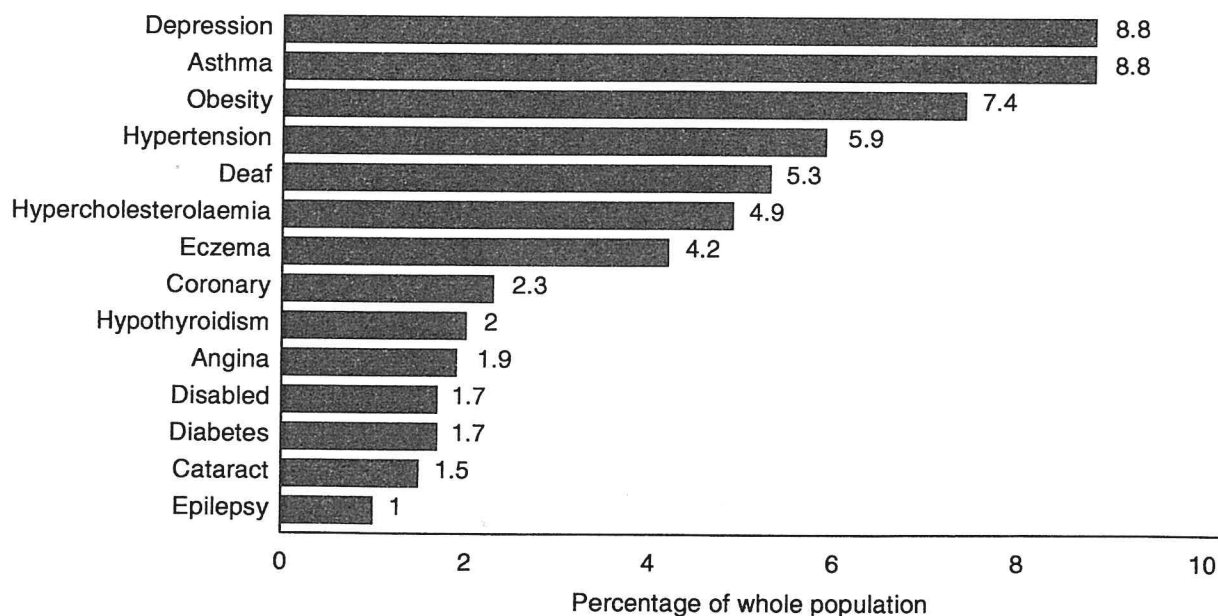


Figure 4. Percentage of patients registered with the general practice in 1993 who have a computer record of ever being diagnosed with a chronic disease, based on a list size in June 1993 of 6707 patients. Some patients may of course have more than one disease. The criteria for making a diagnosis of asthma for this figure were more liberal than those used in *Table 1*. Here recurrent wheezing episodes were included, whereas, for *Table 1*, regular treatment for asthma was required

illnesses. This immediately raises the question: why, when depression severely affects the quality of life, and is commoner than asthma, diabetes or hypertension, are 90% of medical audits in general practice based on only these three diseases? Also, how well do we understand the rate of increase of new diagnoses? *Figure 5* shows that, in our average-sized practice, a new diagnosis of hypertension is being made almost every week, and is in addition to the 350 diagnoses of this condition already made.

Moreover, the prevalence of important chronic diseases is steadily rising (*Figure 6*). Some practices already have a prevalence of diabetes approaching 2%, one in 50 of the whole population of all ages and as many as one in 12 of all the over 75s. The prevalence is steadily rising year by year.

Health problems. More information about lifestyle and risk factors is available on a regular basis for more people in primary care than in any other setting in the NHS. Identifying risk factors for major diseases is important, because, in this way, primary care can push back the boundaries of disease by identifying risk before symptoms or diseases are manifest. For example, our computer can easily identify the 1236 patients who are known

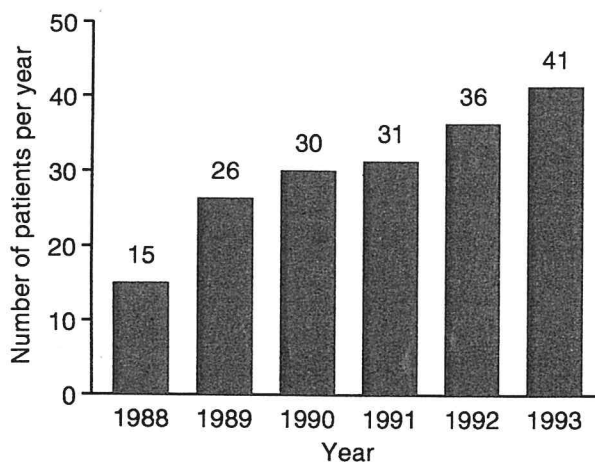


Figure 5. New diagnoses of hypertension made annually in the practice between 1988 and 1993, based on a list size of 6694 patients. The criterion for diagnosis was a diastolic pressure of ≥ 100 mmHg on three separate occasions

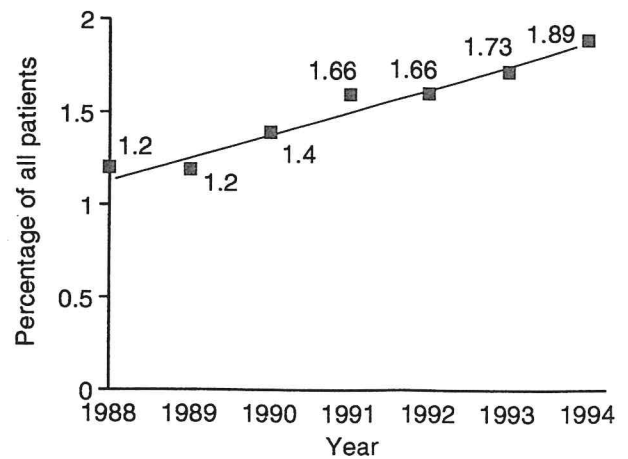


Figure 6. The prevalence of diabetes in the practice between 1988 and 1994 expressed as percentages, based on a list size of 6642 patients. The criteria recommended by the World Health Organisation for diagnosis of diabetes were used. In total, there were 117 diabetics on the list in 1994

Table 1. Use of computerised general practice records to determine a priority group for personal preventive care by linking one or more risk factors

● Patients aged 25 and over registered with the practice	4562
● Patients aged 25 and over with a record of smoking	1052
Of whom:	
82 also have hypertension	
17 also have both hypertension and hyperlipidaemia	
Priority group for personal preventive care (anticipatory medicine)	17

to smoke but also the 350 patients who have a cholesterol level of over 7.0 mmol/l (hypercholesterolaemia) and another 350 patients who have hypertension.

It is also quite easy to identify the 82 patients who have say hypercholesterolaemia *and* hypertension, and it is even more important to find the 17 who have these and smoke as well (*Table 1*). Thus targeting becomes logical, rational and possible. In Exeter, a multi-disciplinary group is testing whether the same approach can be applied to the risk factors for depression.

Medical activities. Most activities in the practice and also outside it can now be monitored. For example, within the practice, it is interesting to note the trends in some activities; for example, in *Figure 7* on prescribing for hormone replacement therapy, we can see exactly the date of change and the pace of its introduction.

When we look at referrals outside the practice, two facts stand out, both confirmed by national statistics: (i) most children never see a paediatrician, yet the under fives see a family doctor seven times a year; (ii) most of the elderly never see a geriatrician, yet the over 75s see a

general practitioner on average seven times a year¹⁵. Quality assurance can now be performed by computer both for a practice and for individual doctors (*Table 2*).

Outcomes. Using primary care data, it is also possible to follow up what actually happens to people. Our trainees have been taught for years of the lethal effects of smoking, so, now that Sir Richard Doll's team¹⁶ have reported that smoking is even more serious than had previously been thought, it is interesting to see how general practice data had anticipated this.

Table 2. An audit of the recorded provision of advice to patients with asthma in a general practice from 1 April to 30 September 1994

	<i>Partner 1</i>		<i>Partner 2</i>		<i>Partner 3</i>		<i>Partner 4</i>		<i>Practice</i>	
	<i>n</i>	<i>% of group</i>	<i>n</i>	<i>% of group</i>	<i>n</i>	<i>% of group</i>	<i>n</i>	<i>% of group</i>	<i>n</i>	<i>% of group</i>
Patients with asthma	98	8	77	5	75	4	151	9	401	6
Patients under 5 years old with asthma	10	10	4	5	5	7	9	6	28	7
Patients ever prescribed a peak flow meter	81	83	67	87	37	49	43	28	228	57
Patients with peak flow recorded freehand in last six months	52	53	41	53	23	31	62	41	178	44
Smokers with asthma offered health promotion (aged 15+, <i>n</i> = 295)*	2	3	1	2	3	5	3	3	9	3
Patients with asthma aged 15+ (<i>n</i> = 295) prescribed inhaled steroids, Becotide etc*	49	66	43	77	33	57	53	50	178	60
Spacer ever prescribed to children between 0 and 10 years old (<i>n</i> = 79)	9	45	7	50	6	40	9	30	31	39
Patients prescribed oral steroids (Prednisolone)*	4	4	16	21	5	7	8	5	33	8
Patients referred to hospital for asthma/COAD/chest infection	3	3	1	1	0	0	2	1	6	1

*Treatment offered/prescribed between 1 April and 30 September 1994
COAD: chronic obstructive airways disease

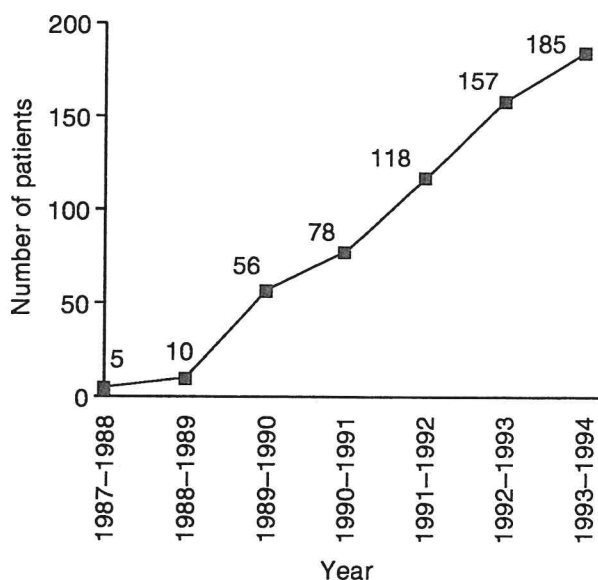


Figure 7. Number of female patients prescribed hormone replacement therapy (HRT) in the practice between 1987/1988 and 1993/1994

In a practice in which about a quarter of all adults smoke, of the 143 people registered with us over the age of 80, only five smoke! Thus, for health needs assessment, quality assurance and outcome measurement, three of the top targets of the new NHS¹⁷, primary care data offer special insights. One such outcome is cessation of smoking in those at high risk of dying or losing quality of life, i.e. those patients who have had a myocardial infarction, or who have angina, asthma or diabetes. Our practice nurses achieved the reductions illustrated in *Figures 8 and 9*.

Computers in primary care

Sometimes an advance outside a specialty can transform it more than advances from within. Just as the discovery of safe anaesthetics in the 19th century did more for the development of surgery than any advance in surgical technique, so the introduction of networked desktop micro-computers in general practice has done the same. In both cases, the great resource released was time. Primary care has always had the information, but it has been swamped by it – so much knowledge about so many things and so many people,

yet no system for retrieving it in a systematic way. Now, for the first time in their history, general practices are able to categorise information and recall it when needed. This has added a whole new dimension to the discipline.

One new and exciting application of desktop computer systems in general

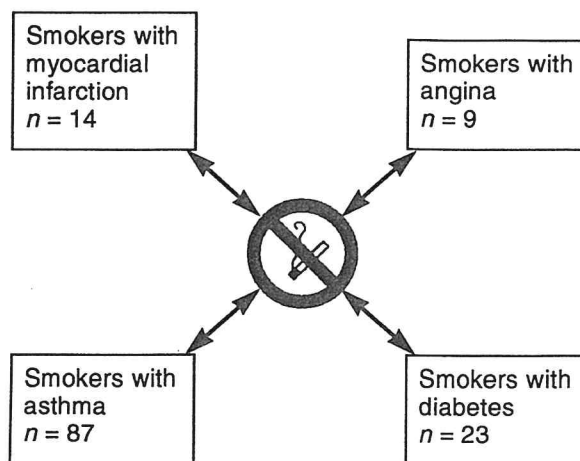


Figure 8. Patients recorded on computer as currently smoking in 1992 ($n = 1236$), classified by the presence of a disease in which continued smoking is a threat to life or health, thus forming a logical priority group for personal preventive care (anticipatory medicine). Data are for 1 January 1990 to 31 July 1992, providing a baseline for outcome measurement

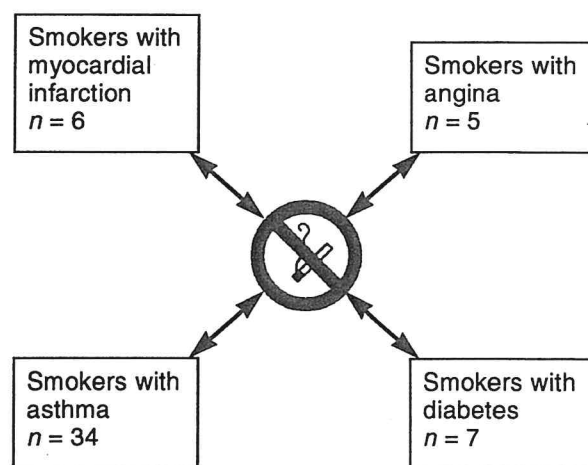


Figure 9. Patients recorded on computer as smoking in 1993 ($n = 1290$) after planned anti-smoking intervention by practice nurses through group work on the practice premises, showing a reduction in smoking in high-risk groups of about 50% for all diseases. Data are for 1 August 1992 to 31 May 1993

practice is their use for monitoring performance and comparing this between partners. This creates a new and effective method of ensuring quality of care for patients and also educating general practitioners in the setting where we need it most, the practice itself. *Figure 10* shows the steady improvement in performance by all four partners for one simple measure of personal preventive medicine (recording the blood pressure on computer for all adult patients), and also the equalisation of performance between partners when the starting position was significantly different between them.

Strengths – ‘living epidemiology’

Now that general practice has the tools of the trade, its data are often the best available in the NHS.

For example, general practice is the place where most changes of address are captured, as the practice registers are more up to date than any other. Information about smoking, drinking and lifestyle changes day by day, and this information can only be monitored in primary care. Similarly, both the incidence and prevalence of disease and health problems are always changing and primary care data are more up to date than any other.

In the Exeter Institute, we have coined the term ‘living epidemiology’ to describe this information about living patients¹⁸. We predict that, in primary care, ‘living epidemiology’ will increasingly replace the traditional statistics based on mortality ratios, i.e. the epidemiology of the dead.

Primary care teams generate these data and they look to a natural partnership with public health medicine in interpreting them. However, primary care is not just a collection point for information for planners: a new marriage between primary care and public health medicine has been formed, and, in future, clinical generalists will increasingly research and publish in this field. Research is growing *in* as opposed to *on* general practice, as Stott (personal communication) has emphasised¹⁹.

Both general practitioners and public health physicians now have to make major adjustments to this new role. Not least will be the need for formal training for both professions in the setting of the other.

Multi-disciplinary primary health care team

For about 150 years, the teaching hospitals have been the dominant health care institutions²⁰: as a site of optimum care, as a base for research, and as a base for

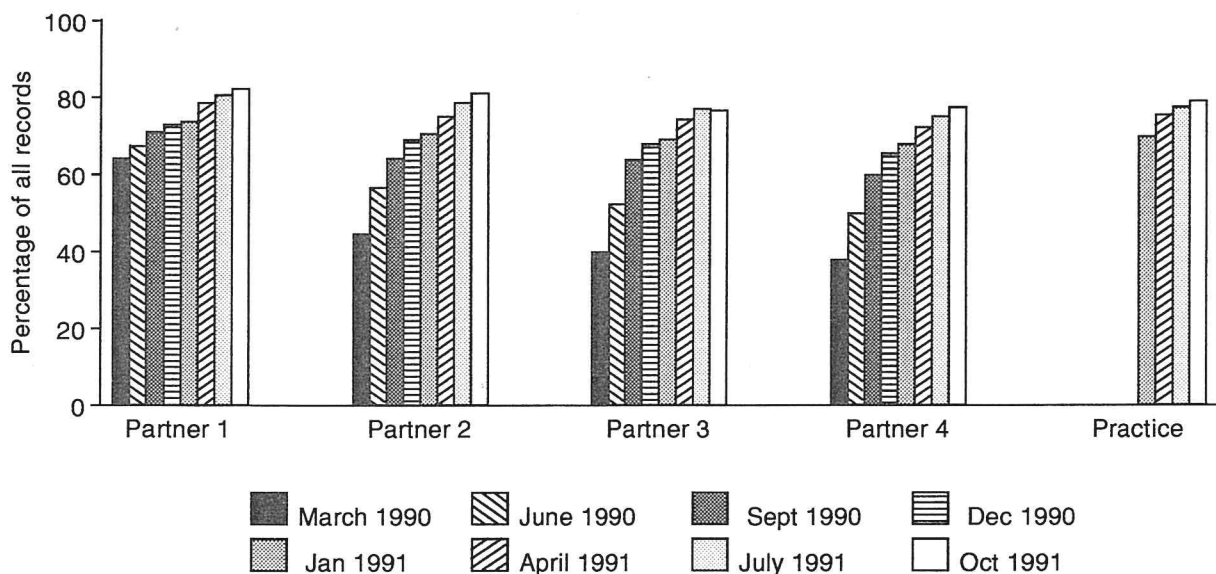


Figure 10. The recording of blood pressure on computer based on personal lists, showing an improvement over time by all partners and an equalisation of performance between all partners

teaching. However, land and accommodation costs, day care services and ever earlier discharge from hospital, closure of mental hospitals and 'down-sizing' of other hospitals all combine to make these institutions less suitable for the care of the common conditions from which the British population suffers.

Research and teaching must follow care. Medical students cannot learn their craft in hospital because patients do not stay for long enough. Undertaking research and teaching where care is and especially where the health information is remains logical but now needs re-interpretation.

Just as we saw multi-professional primary health care teams come together for the care of patients, so these new health care institutions, comprising doctors, nurses and manager as the core team, supported by physiotherapists, midwives and a counsellor, are likely to form a new research base and teaching team for all the main health professions in the future.

In fact, this vision of the team in the future already exists. In Exeter, there are already more physiotherapists working in primary than in secondary care, and an evaluation of their work showed it to be more effective in the primary care setting²¹.

This has profound organisational implications for premises and training, especially higher and continuing professional education, and in the allocation of resources, which must follow both care and teaching. The Culyer report²² opens up a level playing field for research funding for primary care for the first time this century, and will, if implemented, counter some of the obstacles which have long existed²³.

Thus the pattern of multi-disciplinary primary care practices, with some selected for research and training as well, is fast emerging, and should be common by the end of the decade.

Whole person medicine (generalists)

Research in medicine over the last 100 years has led to advances in understanding

of truly breathtaking proportions. Almost every part of the body, every system and every organ has had its structure and function illuminated. The science of the cell has been particularly rich.

Simultaneously, there has been a very different approach through research on health and disease in populations. Public health medicine is strong in the UK and its academic origins in Britain in the 1930s led the world.

This approach has helped us to see medicine more broadly, to review its place in society, to appreciate issues of access, of take-up rates, of unmet need, and of the needs of subgroups within populations. Consequently, a major thrust of all health services all over the world is the increased attention being paid to groups of patients.

These two perspectives can be summarised as cell-based science and population-based science. They can be linked together as an 11-point list in descending order of size as shown in *Figure 11*.

This list sets the topics in a logical relationship and helps to illuminate the one great gap in scientific enquiry – a gap which has no logical basis, but which now cries out to be filled.

Most such lists are expressed in tens or dozens. A list of 11 is unusual. This one is

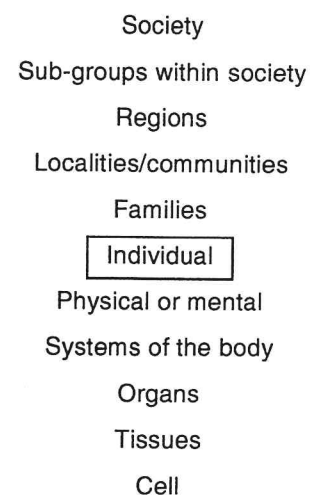


Figure 11. The place of the individual (whole person) in relation to parts of the body down to the cell on the one hand, and to groups of people up to society on the other. This figure also indicates areas of research activity

11 to make a point. The first five categories refer to populations, i.e. groups of people of varying size, and the last five are parts of the human body of varying size.

What now stands out, but is often overlooked, is the relative absence of research and writing on the medicine of the *whole person*.

Medicine, it seems, is the only science in which the study of the whole has somehow come to be seen as less important than the study of its component parts. In sciences as diverse as astronomy, biology, physics and psychology, the study of the whole is rightly recognised as lending meaning to the study of the component parts: it is the integrating, synthesising process of many separate pieces of research. Only in the science of medicine has the study of the individual, the whole person, lagged behind the study of both the cell and society. Restoring a proper balance is a great challenge for the next decade.

So what does the study of the whole person mean? In medicine, it must surely mean seeing health problems and diseases in terms of individuals: what does this health problem in this part of the body or mind, set against this background, mean to this particular person at this particular time?

The study of the whole person has to take into account the three 'dimensions' of care – physical, psychological and social – first described in 1969²⁴, not only at the same time, but also over time. Care which really takes all three dimensions into account and actually uses them simultaneously is thus 'three-dimensional' and so more solid and supportive for the patient.

The hierarchy in *Figure 11* can be rearranged as shown in *Figure 12* to show more clearly how the science of caring for whole individuals stands on two 'legs': the science of society and the science of the cell.

The generalist

It is the special privilege of operating in all three dimensions simultaneously which is the essence of being a clinical generalist.

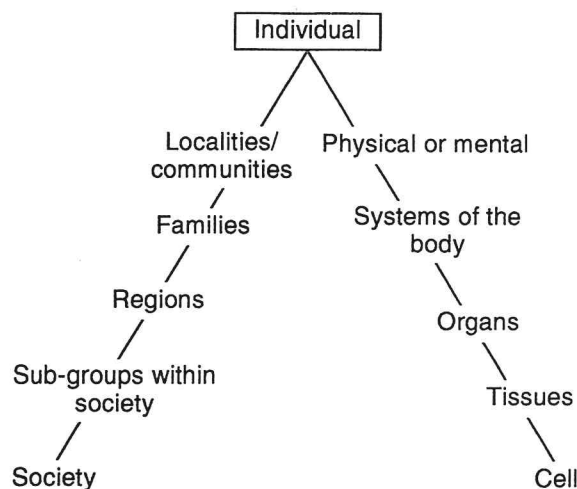


Figure 12. The 11 categories represented to illustrate both the importance of research on whole person medicine and also how this subject stands on the two 'legs' of science-based research and society-based research

It means that a doctor or nurse has to be familiar with much of the patient's past history, both physical and mental. He or she must know the patient as a person, which usually means knowing their partner, their children, and their home. It means a readiness to deal with problems in any part of the body or mind; a readiness to see patients directly off the street. It means a commitment to trying to improve the health of the individual and therefore of the practice population, and it means a continuing over-riding orientation to the whole person.

Of course, these conditions cannot always be fulfilled; for example, the doctors may not have visited every home. They may know only the address, but they will have worked in the area and they will know the neighbourhood and the 'social milieu'. In this way, they have a tremendous advantage over specialist doctors and nurses who limit their field of practice to some groups of diseases, who may have never met the partner, never seen the children, and never visited the home.

Continuity of care

Another key component of looking after the whole person is continuity of care.

The importance of continuity of care is consistently under-estimated. Whilst we certainly all live in a more mobile society, we need to remember that it is the most mobile who keep moving! As we saw earlier, there is a silent majority who live in localities for reasonably long periods of time, who often get forgotten. The average patient in the average NHS practice is still registered for as long as 12 years (Difford, personal communication).

Given the national average consultation rate of 3.25 consultations plus 0.25 home visits per year for the average patient, a single-parent family with two children will have consulted on average 10.5 times a year, approaching once a month. In total, after the average 12 years of registration, the number of consultations will be as high as 126. Given the Department of Health's finding that the average consultation in general practice lasts 8.75 minutes²⁵, this averages over 1100 minutes or 18 hours with one of the three family members. Of course, personal lists are needed to maximise this arithmetic, as otherwise all these contacts will be diluted between different doctors.

With this kind of background, a real understanding of people in primary care can be achieved and questions such as:

- Why the patient has really come?
- Why now?, and
- How exactly is this disease or problem limiting their lives?

can be answered.

Indeed, the third question is a fascinating intellectual issue for personal doctors. The longer I am in practice, the more I realise that it can take many consultations before the doctor comes to a real understanding, especially for chronic diseases, of the true impact in terms of limitations on each individual patient's life and what indeed the patient is 'feeling at home'¹¹.

If difficult choices about priorities have to be made, the primary care team is the best placed to know which patients are really suffering while waiting for an opera-

tion compared with those for whom it is more a matter of convenience. Whether primary care exercises this choice through fund-holding or through non-fund-holding consortia is of secondary importance. The point is that primary care staff usually know the patients as people, and are now being given a greater say. Decentralisation of health care means the development of primary care, which will increasingly influence, I believe for the better, the state of the public health.

Hierarchy of care

In the past, medicine has been taught as a hierarchy, with physical factors seen as the most important, psychological factors as lesser, and social factors as the least important. Missing a physical diagnosis, however minor, was a sin, while missing major depression was not discussed. Both research funding and status follow this hierarchy too.

In primary care, the hierarchy is reversed. It is the personal social factors which are the most demanding and the most difficult to manage, where the greatest uncertainties lie and where the emotional involvement of patients, families, and the primary team is highest. Depression suddenly becomes a significant health problem.

Look at it from the patient's point of view – which disease would we rather *not* have – psychiatric or physical? Which causes the most suffering and which most affects the quality of life?

By what authority do the physical diseases rank higher than the mental ones when most of us fear the latter more and primary care staff find them more demanding to manage? Which is the easier problem for the primary team – a congenital dislocation of a hip in a child or a cataract in an older person, compared with an ill-treated child or demented granny? How does a surgery consultation for a prolapse compare with a request for termination? Is it easier to treat hypertension or heavy drinking? Yet compare the amount of research available to me as a working general practitioner to

determine a logical treatment strategy for mild essential hypertension, which is common and moderately serious, with the relative lack of research evidence (especially in primary care) to help me as a family doctor manage heavy drinking, which is commoner than hypertension, harder to diagnose (because often concealed), and yet poses a more serious threat to health.

Conclusion

Henry Harben, whom we now honour, built up a system of security for the poorest and most vulnerable people in society. His insurance company, the Prudential, made a national name through personal relationships and home visits, encouraging security, and planning for the future. As an actuary, he applied statistics to his policies, and, through good management, steadily expanded the Prudential so that today it is in many ways the leader in the British insurance world.

Meanwhile, at much the same time, primary care in Britain was also becoming more organised. It also initially served mainly the less advantaged, increasingly propagated values of self-care and forward planning, and steadily applied a more statistical approach to its work. Sir Henry Harben and Sir James Mackenzie, the leading figures in their fields, were contemporaries²⁶. As a result of their life's work, the Prudential is now the largest insurance company, and general practice is the largest branch of the medical profession.

I have suggested that the origins of disease are more often behavioural and environmental than has been recognised, and so need to be studied in people in their natural habitat. Using the new computer systems, general practice/primary care increasingly holds the data that really count and is starting to use them in what I have called 'living epidemiology'. I see a natural partnership between those interested in data about small populations and those interested in data on large populations.

To sustain their role and provide the necessary mutual support, multi-

disciplinary primary health care teams should continue to grow and become the key health care institution for the future, the base not just for most care, but increasingly for research and teaching as well.

Finally, I believe that those working in the front line of any national health system must retain their orientation to the whole person, and continue to ensure that someone, somewhere, continues to care for the whole individual. This will be the enduring privilege of the 'generalist in medicine'. I conclude that primary care will increasingly contribute to the public health.

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I would like to thank the Royal Institute of Public Health and Hygiene for the great honour in inviting me to give the 1994 Harben Lecture. For almost 100 years, Harben lecturers have included names like Sir Alexander Fleming and I follow with some trepidation the excellent lecture given last year by Sir David Weatherall. For the first time since the lecture was established in 1896, you have chosen your lecturer from general practice and I greatly appreciate this honour.

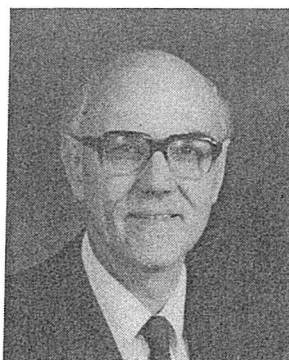
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