A team caring for the elderly at home

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IT is well known that the average age of people in Britain has risen sharply during the last 100 years. For example, from 1861 to 1965 the expectation of life in Scotland rose from 42 years to 69 years. Again, in 1901 the population of England and Wales over 85 years of age numbered 50,000, but by 1966 there were no less than 350,000 people in this group, many of whom required medical support (Office of Health Economics, 1968).

This increase in expectation of life has been achieved primarily by our near mastery of infection. Our patients survive infections now, to linger on in increasing numbers and suffer degenerative diseases. These undermine their independence and force them to lean heavily on others for support in their old age. The result of this has been a shift in emphasis in general practice during this century, from such acute problems as diphtheria and mastoiditis, to the insidious problems associated with system breakdown.

Regrettably, these illnesses often present too late for effective treatment and there is no doubt that frequently their outlook would be improved by earlier diagnosis. They cause prolonged domestic distress and are difficult and time consuming to manage. Not only the patient, but his neighbours and relatives are involved, and often unwillingly stretched beyond their abilities. Changes that are necessary to enable him to function with as little distress as possible come at a time in life when all changes are hard.

Thompson (1969), Hodes (1971) and others have shown the value of team-work involving attached nurses and health visitors in dealing with these problems. Howell (1969) points out the importance of the general practitioner in directing the team. Portsmouth (1972) feels that the health visitor has an important but as yet poorly defined role in early diagnosis. The poverty of the existing machinery for co-ordination, probably because health, welfare and nursing services have all grown up piecemeal, is underlined in a recent report from the Office of Health Economics (1968).

I have tried to outline the development of a team caring for the elderly in a semi-rural partnership of two general practitioners in the Midlands. The project had two aims. The first was to provide continuing surveillance of the elderly whether they had symptoms or not, in order to achieve early diagnosis and adjustment. The second was to try to define, in an exceptionally ill-defined field, those areas in which help could be most usefully provided.

The scheme had to be practical so that its demands did not interfere with the other essential activities of the practice and it had to be disciplined yet flexible enough to meet a wide range of differing human needs.

Method

The practice list is 4,500, but is increasing due to development in our larger villages. The smaller ones remain reservoirs of ageing people. Two general practitioners are assisted by an attached district nurse, by two part-time general nurses, and by a health visitor shared with another practice.

The age of 75 was chosen to begin surveillance. At the beginning of this study all

the patients of this age and over on the practice list were identified from the age-sex register. There were 260 (92 men and 168 women) forming 5·5 per cent of the practice list.

TABLE 1

AGE AND SEX DISTRIBUTION OF 260 PATIENTS (92 MALES AND 168 FEMALES) AGED 75 AND OVER, COMPARED WITH THE NATIONAL DISTRIBUTION IN 1966 (GENERAL REGISTER OFFICE, 1966)

Age	*75–79*		*80–84*		*85–89*		*90–94*		*95+*	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Practice per cent ..	*53*	*47·5*	*30*	*32*	*15*	*15*	*2*	*4*	*0*	*0·5*
National per cent ..	*57*	*52*	*29*	*31*	*11*	*13*	*2*	*3·5*	*0·5*	*0·5*

TABLE 2

MARITAL STATE OF 260 PATIENTS AGED 75 AND OVER, COMPARED WITH THE NATIONAL DISTRIBUTION IN 1966 (GENERAL REGISTER OFFICE, 1966)

	Married		*Widowed*		*Single*	
	M	*F*	*M*	*F*	*M*	*F*
Practice per cent ..	*58*	*22*	*34*	*62·0*	*8*	*17·0*
National per cent ..	*55*	*19*	*38*	*65·0*	*7*	*16·0*

The age, sex and marital state of our patients at the outset of the study are shown in tables 1 and 2. They agree closely with the national average. As the project continued patients were added either when they reached 75 years of age, or earlier if their state of health seemed to require that kind of care.

Initially, every patient was seen either at surgery or at home by one of the doctors and a total assessment card (figures 1 and 2) was completed. This was a National Health Service ' summary of treatment card ' (E.C. 9A or B) overprinted. The aim was to correlate the clinical findings with all the background knowledge of the patient, his personality and his environment in a brief summary, and from that to analyse his needs and translate them into action.

The card was not intended to be a substitute for medical or nursing case notes. Nor was the doctors' opinion intended to be a firm statement of irreversible policy. It was a baseline open to continual alteration depending on the patient's fluctuating health and the opinions of the nurse, health visitor or doctor, at the time of each visit.

Flexibility was provided by designing an index system which made it possible for a patient's card to be reviewed in any week for 12 weeks ahead and in any month for 12 months ahead. By allocating each member of the team a clip-on tag of a different colour, it was easy to arrange for the nurse to revisit in one month or the health visitor to call next week.

Each visitor entered comments on the reverse of the card (figure 3) for others to read. Freedom of opinion was encouraged. The doctor, as director, read and filed the cards each week, bearing in mind that the distribution of visits must be balanced so that the patients' needs were covered, while neither he nor any member of his team was overworked.

Because the card fitted the standard National Health Service envelope it could rejoin

MALE SUMMARY OF TREATMENT CARD

Surname	Forename(s)
Address	
N.H.S. Number	Date of Birth

DATE	CLINICAL NOTES	
	Family Status	History:-
	Medical	
	Psychological	
	Mobility	
	Special Senses	
	Continence	
	House	
	Relatives	
	Diet	
	Financial	
Needs		
Recommended Management:		
	GP	
	DN	Chiropodist
	HV	Meals on Wheels
	SS	Church
	HH	Other Recommendations:
	Day Unit	

Dd.651498 400M 2/70 XLY3708 E.C.9 B

Figure 1

Total assessment card (an E.C.9B modified by overprinting)

MALE SUMMARY OF TREATMENT CARD

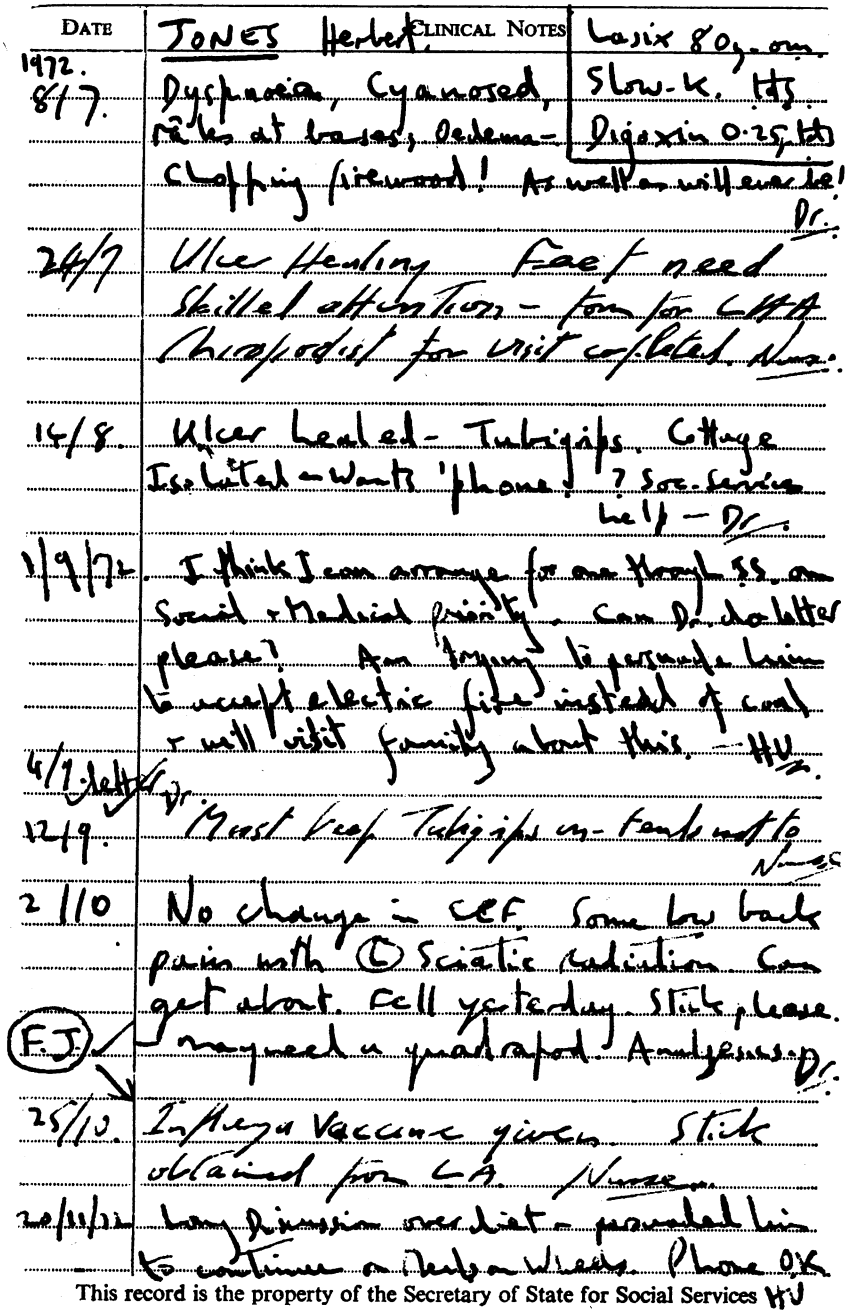
Surname	Forename(s)
JONES	Herbert
Address	11A Elder Rd. Geranton.
N.H.S. Number	Date of Birth 1884 (A)

DATE	CLINICAL NOTES	
	Family Status W. Alone.	History:-
	Medical Poor. CCF. →	Long standing degen.
	Psychological Good.	heart disease.
	Mobility Housefast.	In CCF despite
	Special Senses Deaf.	drugs.
	Continence Satisfactory	Ankle Oedema
	House Awkward stairs. Outside toilet. sleeps downstairs.	+ Ulcer, which
	Relatives Help up to a point.	weeps. Lasix 80 mg om.
	Diet good.	Slow-K tds.
	Financial Borderline.	Digoxin 0.25 mg
Needs	Occasional HV. appraisal.	tds.
	Mainly Medical + Nursing maintenance.	
Recommended Management:	Paraffin dressing ulcer, under	
GP } About every	supervision.	
DN } 3/52 alternating.	Chiropodist Attends	
HV Occasional.	Meals on Wheels x3/week	
SS In touch.	Church Vicar calls.	
HH Not needed —	Other Recommendations:	
Family help.		
Day Unit Refuses it.	Hb% 12.7 G%. (2/10/72)	

Dd.651498 400M 2/70 XLY3708 E.C.9 B

Figure 2

Completed assessment card



This record is the property of the Secretary of State for Social Services HJ

Figure 3

Reverse side, showing interdisciplinary communication in practice (simplified in this example)

the case notes when the patient required such acute care that doctor and nurse were in daily contact with him. When completed it again rejoined the notes as a permanent record and a new card was placed in the index.

This rather complex system resulted in (1) a firm but variable control based on a continuous flow of information, (2) an evenly shared work load and (3) more purposeful visiting by all staff.

The initial assessment was made under headings designed to bring to mind the total concept of the patient and his environment.

Family status was marked with a large "*A*" if the patient lived alone. He was a man at risk. The *Medical* heading was amplified in the *History* column on the right, which could also be used to amplify other headings. The term *Psychological* covered the whole range of possible mental stresses. Under *Mobility* the need for walking aids of various kinds were mentioned. *Special Senses* and *Continence* were self-explanatory. The term *House* meant where the patient lived and drew attention to such factors as whether the bed was upstairs or downstairs, whether the lavatory was inside or outside, the adequacy and method of heating and so on. *Relatives* meant those nearest to the patient, who might not be blood relatives. In particular this heading brought to mind the degree of concern and access in need, whether there was love, or rejection and intolerance around the patient and whether those near to him could cope with the situations he created. Not only sub-nutrition but obesity were noted under the *Diet* heading. *Financial* was mainly the province of the health visitor.

In order to try to define the areas where help was required and the priorities involved, there was a heading *Needs*. A patient who was independent and able to cope well may not have been visited at all. His card would be filed without a tag and in this way he would still be periodically reviewed, but only visited if no team member had seen him. All those living alone, or with other aged people, however, were assigned a regular check by the health visitor at least every six months. At the other end of the scale, some required weekly medical or nursing support.

TABLE 3

THE SOCIAL STATUS OF 260 PATIENTS (92 MALES AND 168 FEMALES) AGED 75 YEARS AND OVER

	Living alone per cent	*Living with others per cent*	*Hospital or institution per cent*
Male	*27*	*70·5*	*2·5*
Female	*46*	*51·0*	*5·0*

TABLE 4

A COMPARISON OF 260 PRACTICE PATIENTS AGED 75 YEARS AND OVER INTO GROUPS OF EFFECTIVE HEALTH AS DEFINED BY WILLIAMS *et al.* (1972).

				Practice	*Williams et al.*
	Male	*Female*	*Totals*	*Per cent*	*Per cent*
Group 1 ..	65	109	174	*67*	*60*
Group 2 ..	23	51	74	*30*	*36*
Group 3 ..	3	5	8	*3*	*4*

Excludes four patients who were in hospitals or institutions.

G.P., *D.N.* and *H.V.* referred to the practitioner, the nurse and the health visitor respectively. The doctor's attempt to allocate took into account the special training of his team and kept the patient visited in proportion to his clinical and social needs. Of the other headings *S.S.* referred to social services and *H.H.* to the need for a home help. The rest were self-explanatory.

Hb gm 100 ml and *Urinanalysis* for sugar and albumin were also entered on the front of the card.

Results

Our scheme was conceived more as a plan for care than as a research project.

Table 3 shows the social status of 260 patients over 75 as revealed by the cards. The majority of men were not alone, 58 per cent of them were with their wives (table 2) and the rest were with younger relatives. A high percentage of women, however, were alone and the majority of these were widows. These and the smaller percentage of men alone constituted a major social ' at risk ' group. All of these were visited at home at least every six months by the health visitor. Medical conditions supplied the rest of the ' at risk ' patients.

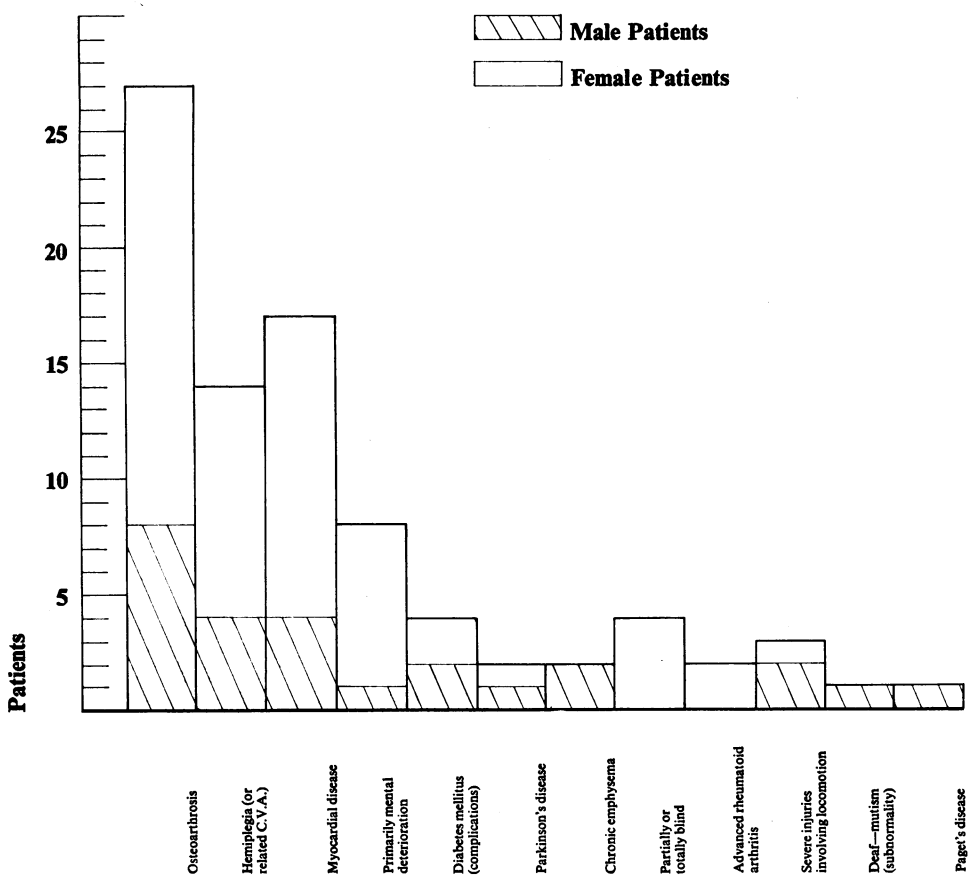


Figure 4

Principal debilitating conditions found in 85 patients in effective health groups 2 and 3 after Williams *et al.* (1972)

Williams *et al.* (1972) defined three groups of effective health, described as follows:

Group 1 Normal mobility, able to cope, do housework and shop. Cheerful without incapacitating illness.

Group 2 Movements restricted, unable to shop, but able to cook and do house work, mental deterioration, but coping with illness.

Group 3 Bedfast, unable to cook etc., general restricted movements, severe mental deterioration, incapacitating illness present.

Table 4 compares effective health defined in this way in this semi-rural sample with Williams's sample from a large Lancashire industrial town. Our sample appears to have fewer group 2 patients than Williams had.

Figure 4 classifies the principal disabling diagnosis in those mainly housefast. Many diagnoses of secondary disabling importance have been excluded. Osteoarthrosis, cerebrovascular and cardiac disorders formed the majority, as expected.

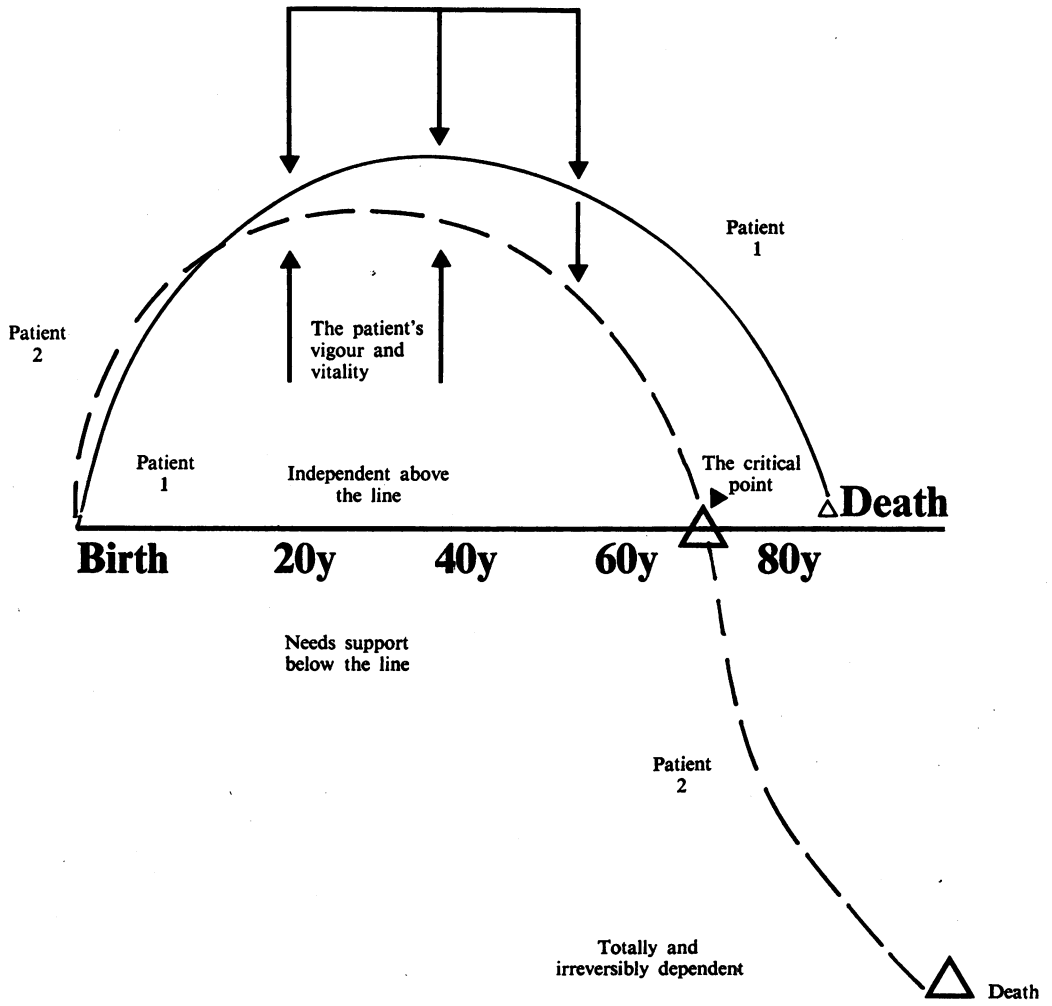


Figure 5

The downward thrust of illness and environmental stress.
Schematic representation of the ageing process

Discussion

Comfort (1965) likens life to a space probe which sets out on a programmed course. It fulfils its evolutionary function, but perhaps because early in man's history he died young from competitive trauma, there is no programmed return, so components gradually deteriorate at different rates, guidance mechanisms fail, and loss of homeostasis results in symptoms and then finally death.

Such a trajectory may be expressed as a diagram (figure 5) in which two people start their programmed course and reach a parabolic summit together at about 40 years of age. Now begins the unprogrammed decline, but so long as adaptation to ageing proceeds without shock it is possible to reach a late age in a compensated state of equilibrium (Thompson, 1972). This is not effortless, but involves vitality acquired in youth and a sense of outward looking interest in life to combat the increasing pressures of ' component ' or system deterioration. It also involves the development of a philosophy of adjustment and acceptance.

Example one represents such a person, who can say with Karl Jung, who lived till 85, " We grant goal and purpose to the ascent of life, why not on the descent? Anyone who fails to go along with life remains suspended, stiff and rigid in mid-air. That is why so many people get wooden in old age. They look back and cling to the past ".

Example two has failed. Had he made the effort to keep his interests alive, especially through the ' retirement ' period (or the menopause for a woman) when there is so much risk of boredom and hopelessness, he might have adjusted and kept above the line. A feeling of uselessness with physical disease may add up to overwhelming illness. At the point of balance he could perhaps have been helped by a team. Even some way below this line rehabilitation may have rescued him, if a team existed to spot the need for it. For each individual this curve is different and so our system must be adaptable to any situation, not rigidly schematic to the point of uselessness. Its course can be influenced by the whole of life, not merely physical or mental illness. The space around us, those in it, their love or otherwise for us, the money we have or need, the poverty of our sight and the depth of our insight, even the temperature of the toilet may influence it. Because of this multifactorial interplay and its subtlety of variation, often unrecognised by the patient who does not present himself for help, a health team from different disciplines is more effective than one unilaterally-thinking doctor, blinkered by his clinical discipline.

The age at which this health team should start surveillance is determined by a balance of priorities. On one hand some with a rapidly falling curve may need help earlier than 75 years of age. On the other hand, a lower age would have increased the number surveyed beyond practical limits in a general-practitioner setting. We selected 75 years as an arbitrary compromise, which accorded with the suggestion by Leeming and Ross (1967) that real social, physical and mental disability begins at that age. Against this, Williams *et al.* (1972) discovered seven previously unknown and intractable neoplasms while screening 297 people over 75. As they say, neoplasms are a special group for which no really effective treatment can be offered, nevertheless their finding points to the fact that a compromise based on conflicting priorities must be less than ideal. A partial solution to this problem would be to include in the scheme any patient found in need of the kind of help offered by the team before his 75th birthday.

Williams *et al.*'s ' effective health groups ' unfortunately do not imply a changing situation, but a *status quo*. The fluid equilibrium shown in the diagram finds expression in the fact that many patients in group 2 in winter will move to group 1 in summer. Other factors, such as intercurrent illnesses and environmental changes, place the patients'

' effective health ' in continual flux. For this reason our comparative figures in table 4 may be of little value and the rigidly classified system suggested by Williams *et al.* may not be so helpful as appears at first sight.

The team's aims

The team's aim must be to keep its patients above the line and in compensated equilibrium. Five basic principles emerge:

1. The team should favour any move which will boost the force of vigour and vitality. Obviously help through the middle years, especially over the menopause, and for men with problem of retirement, is important. " To achieve living in the least protected environment possible " (Portsmouth, 1972) is a reasonable aim. This favours keeping patients in their own house and suggests avoidance of the over-indulgence of some well-intended ' welfare '.

2. The team must decrease the pressures of illness and environmental stress. Trained, informed eyes are needed, as the patient will not always present his failure, though his family are often painfully aware of it. Not only medical skills are required, but also those of nurse and health visitor, dealing with relatives' attitudes and social and financial pressures.

3. The team must continuously assess the patient in his environment as a whole. At any time the patient may slip below the point of equilibrium. His homeostasis gets increasingly unstable and unpredictable. From this it follows that:

4. The team should step in at the right time, with its carefully controlled modification of the patient's life pattern. This involves moving at equilibrium point. Too soon, and you are a do-gooder offering, say, a day unit to a patient who does not need it. Too late, and you have failed. Oral iron is not much use to a lady of 80 not seen for ten years, and suddenly discovered in congestive heart failure with a haemoglobin of 4·5 grams/100ml, but it might have turned the whole course of her life at equilibrium point.

5. The team must include comprehensively all people ' at risk ' as defined by an age limit, from a practice age-sex register so that some attempt can be made to avoid late presentation of severe illness in lonely and neglected old people.

A system which enables these criteria to be fulfilled has been presented in this paper.

Summary

A practical method of comprehensive team surveillance of the elderly at home, aimed at prevention, early diagnosis, and rehabilitation, has been used in a semi-rural practice in the Midlands. This is described and an attempt has been made to define principles of care from which a universally acceptable standard might be developed.

Acknowledgements

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ROUNDS ON A BICYCLE

I have for years been trying to persuade my partners that we should have a practice bicycle, but the suggestion evoked only smiles of tolerant disbelief, and there the matter stuck. Yet these are all strong, active men, and our secretaries—who guard the biscuits—would say that only one of them has a weight problem.

My primary reason for deciding to work from a bicycle was speed in getting round my visits, and in the spring, as the traffic got steadily slower, I bought my own. Now after 1,250 miles I am totally convinced. The saving in time is enormous, and I think I have learned a few things thich may be worth sharing with other doctors in choked city centres who will increasingly be turning to this form of transport.

I am not, of course, the only doctor using a bicycle, nor the first—far from it. Several London surgions already cycle to or between their hospitals, and our district nurses have been bicycling for years. For all I know other cities more enlightened than this in their control of the motor car—one thinks at once of Nottingham—may be stiff with general practitioners pedalling about, but if so they are not broadcasting it.

. . . To put it another way: at these respective speeds one litre of oxygen will carry me in my car for five yards, and on my bicycle for 250 yards; and in less than ten minutes at 30 m.p.h. my car will burn up the total daily oxygen output of a fair-sized London plane tree. . . . It might be argued that the greater carbon-dioxide production from my motor car—220 litres per mile, compared with my 6 or 7 litres—is a nice metabolic bonus for the local flora, but in fact photosynthesis from plants appears not to be keeping pace with our immense and increasing combustion of fossil fuels, and the carbon-dioxide level of the atmosphere is rising.

After I had ridden about 600 miles the initial saddle soreness began to wear off, but my trousers went through. A more subtle hazard then appeared as the unaccustomed freedom from what I can only call car-bondage produced a state of near euphoria which was hard to contain. A quick clip down the Brompton Road past a tropid mass of creeping four-wheelers including probably an Aston Martin and a couple of E types, is after all heady stuff. You can't do that in a car on any day of the year. But it is wise at this point to reflect, and perhaps even slow down a little. You have to remember that the poor enclosed motorist can neither see nor hear as clearly as you can, and that you were one once.

. . . I now feel that any town doctor who accepts the virtual imprisonment of a motor-car on his rounds perhaps needs specialist help. And if he tells his patients to exercise there could well float back to him the rather cool reply," Physician, wheel thyself".

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