

A follow-up of geriatric patients after sociomedical assessment

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IN a survey of patients of 75 years and over in general practice during 1971, a considerable amount of unreported illness was discovered (Williams *et al.*, 1972) and the findings of previous surveys (e.g. Williamson *et al.*, 1969) were thus confirmed. Criticisms can be levelled at this type of exercise in that all that is achieved is a long list of diseases and a gloomy picture of life in old age. It has been said that such diseases may be 'normal' abnormalities in old people and that their treatment may be much more disturbing than their quiet, unknown or tolerated presence (*Teach-In*, 1973).

Perhaps it may also be thought from looking at the 1971 and similar survey findings, that there is an inadequacy in the medical care hitherto provided for old people and if this is so, such studies, if they are to be relevant, should suggest ways in which care for the elderly can be improved. Accepting these points a further look has been taken at the 1971 study and a follow up of patients has been completed in an attempt to evaluate the value of screening procedures in the elderly.

In the first place though, it must be stated that the word screening is not appropriate in describing what happens when an elderly patient is seen at a clinic or during a special survey. It is usually accepted that during a screening procedure, as in cervical cytology, a disease is being uncovered presymptomatically. This is not so in the elderly. Instead, one hopes to find established disease which has not been reported or treated—but at the stage at which it is found is amenable to treatment.

The aim should be, at the very least, to prevent established disease from deteriorating to such a level that it becomes untreatable. The same is true of social service needs and both these and medical requirements can be dealt with at the same session. So often medical and social conditions are accepted by old people or left until too late in the course of their development because of ignorance, apathy or social isolation. The doctor or social worker is then presented with a crisis situation which is impossible to resolve effectively.

Given then that these are the aims of clinics for the elderly, the question arises as to whether the old people really benefit from treatment given as a result of routine examination. Are the course and outcome of the conditions found during the survey improved by the action taken or would they be just as well left alone? The answer to these questions really determines whether 'screening' the over 75s is worthwhile.

The follow up to our 1971 study was therefore designed with these ideas and questions in mind. Although many of the patients were seen after the initial examination, for routine follow up by either doctor or health visitor, it was impossible to do a full-scale assessment of the effects of treatment shortly after the end of the survey nor was it possible to initiate any type of therapeutic experiment with a control group. When a year had passed, however, it was felt that it would be possible to see all the patients again and assess if the survey treatment had effectively improved their health and also whether action taken had been maintained. The health visitor who was the original member of the team, therefore visited or saw in the surgery as many as possible of the

original 297 patients. In the end, 225 were seen, the others having died, moved or were in hospital. There were no refusals amongst the follow-up patients.

Results

Effective health

During the course of the study it became apparent that in old people the important point was an assessment of function. Despite the presence of many diseases a considerable number of the patients were managing to cope adequately with their daily life. Because this was more important than the mere presence of disease, we became interested in the ability of old people to relate to their environment and overcome their disabilities. A concept of effective health was therefore developed. Patients were divided into three groups. These have been defined previously (Williams *et al*, 1971) and the definitions are repeated in figure 1.

1. Normal mobility, Able to do cooking, housework and shopping. Cheerful mental state, No incapacitating illness.
2. Movements restricted, housefast, Unable to do shopping, Able to do cooking and housework, Mental deterioration present but coping, Illness present but with which patient can cope.
3. Bedfast, Unable to do cooking, General restriction of movement, Severe mental deterioration, Incapacitating illness present.

Figure 1
Effective health groups

This concept recognises the fact that old people cannot be grouped together because of old age alone, as being of similar health status. Chronological age is a poor guide to physical and mental state in old age and note must be taken of this in assessing their needs.

Broadly speaking, group 1 includes patients who can very well look after themselves in their own homes. Group 2 represents the group of patients who should ideally be in sheltered accommodation such as welfare homes or warden-supervised flats. Group 3 patients are those who need to be in the geriatric department of a general hospital.

We found that 60 per cent of patients were in Group 1; 36 per cent of patients were in Group 2; and four per cent of patients were in Group 3. Whether this represents the figure to be expected nationally needs determining by further studies, but it is clearly important when geriatric facilities are being planned that effective health assessments should be made. Equally important is to find out whether the effective health group in which a patient finds himself can be altered by direct action by a doctor or social

<i>Original effective health</i>		<i>Present effective health</i>	
<i>Group 1</i>	146	<i>Group 1</i>	142
<i>Group 2</i>	71	<i>Group 2</i>	75
<i>Group 3</i>	8	<i>Group 3</i>	8

(Based only on 225 patients)

Figure 2
Changes in effective health groups

worker. To find evidence on this point was the purpose of reassessing the effective health of the patients one year after the original study. The results are shown in figure 2.

As can be seen, the overall picture is much the same. However, looking in detail at the patients there was considerable movement between groups. Thus 20 patients had moved up a health group and 24 patients had moved down. This illustrates what has been called elsewhere, the geriatric continuum (Felstein, 1973) or the two way life flow between various grades of health in old age. Details of the patients who changed effective health group are given showing the probable reasons for the changes (figure 3).

Figure 3

<i>Patient's number in survey</i>	<i>Age</i>	<i>Reasons for deterioration in effective health</i>
37	78	Increasing senile dementia
54	78	Eyesight deteriorated considerably
66	78	Man whose wife had recently died. Now unable to cope with domestic situation
74	78	Admitted to hospital with rapidly deteriorating congestive heart failure
104	79	Needed chiropody at time of original examination. This was not taken up by the patient and mobility now much more restricted
106	80	Developed circulatory changes in the leg which gave rise to gangrene and required amputation
168	83	Patient with osteoarthritis which had deteriorated to make her housefast
170	83	Previously known case of carcinoma rectum with colostomy. Hb—11.0 grams at time of survey. Despite treatment with iron, condition deteriorating
174	88	Now housefast with angina pectoris of recent origin
193	85	Recent fracture. Now housefast
222	90	Developed left ventricular failure. Now housefast
225	90	Cerebral failure giving severe mental confusion
236	77	Now much more severely handicapped by osteoarthritis
256	78	Now suffering from congestive heart failure
268	79	Now housefast with osteoarthritis. Also had operation recently for carpal tunnel syndrome
<i>Patients who improved in effective health</i>		
8	77	Rehoused—ground floor flat—now able to go out to shops
15	77	Recently been treated for carcinoma and was housefast. Now improved
38	78	Treated for anaemia. Improved health enables her to go out
58	79	Had recently lost husband. General effect of survey
78	79	Physiotherapy arranged for osteoarthritis—more mobile
80	79	Patient had severe anxiety state which was making her housefast. Now improved with treatment
85	78	Treated for left ventricular failure
181	83	General effect of survey
182	83	General effect of survey
210	87	Patient has byssinosis. Treated for chest infection at the time of the survey. Since then has been more active
229	92	Treated with iron for anaemia
244	77	Treated for left ventricular failure. Zimmer frame supplied. Now not bedfast
249	77	General effect of survey
243	77	Treated with iron for anaemia
264	79	Treatment of eye condition and hearing now enables her to shop
323	84	Cor pulmonale now making patient housefast
330	84	Deterioration of mental function
350	86	Eyesight considerably worse
356	87	Bedfast due to senile confusional state
365	88	Housefast due to weakness
367	88	Recent cerebral thrombosis. Now bedfast
371	90	Bedfast due to general weakness

<i>Patient's number in survey</i>	<i>Age</i>	<i>Reasons for improvement in effective health</i>
374	91	Patient had developed congestive heart failure and was bedfast
380	96	General senility now making the patient housefast
266	79	Treatment for anaemia (Hb 11.29 g) and osteoarthritis with physiotherapy and analgesics. Now more mobile
282	80	Obese. Needed chiropody. Now more active
333	84	Treatment for anaemia (Hb 10.8 g)
390	90	Patient in nursing home. Bedfast, due to general condition of patient. Anaemia 11.9 g. Treated with iron. Now walking around with much more energy

N.B. The survey itself had a beneficial effect on many patients. A general discussion on diet, availability of recreational clubs etc. made some old people more outward-looking and enabled them to lead a more effective life. This is referred to as "general effect of survey."

Case histories

Apart from the general notes referred to in the figure, three case histories may help to give an impression of the type of benefit which can result from seeing old people.

No. 244 A.P. aged 76 years

At the time of the survey this patient was bedfast. She had been treated for biliary colic and intermittent jaundice. Consultant opinion was that she had obstructive jaundice due to gall stones but that she was too old for surgery. The family had abandoned the idea of any treatment and she was left in bed.

On examination at the time of the survey, the gall bladder disease was quiescent but she had marked congestive heart failure with gross ankle oedema. Treatment was started with very good results. She was provided with a Zimmer frame and is now walking about the house and helping with cooking. So she moved from category 3 to category 2.

No. 213 M.S., aged 88 years

This patient was housefast with severe dementia. She was living with her daughter. This was known by the doctor who visited her occasionally. At the time of the survey, a full discussion took place with the daughter who at the time was contemplating giving up her work. Supportive visiting by the health visitor was then started and this enabled the daughter to continue working and eased a difficult family situation. There was no change in the old person's effective health, but the general situation was helped.

No. 8 F.M. aged 76 years

This patient was housebound with osteoarthritis of both knees in an old house quite unsuitable for her needs. She was rehoused after the survey, to a ground-floor flat near the shops and bus stop, and she is now able to do her own shopping. Her effective health rose from group 2 to group 1.

Specific conditions

Apart from the definable effective health group, the health visitor assessed whether the survey had improved specific conditions which had been treated. Fifty six patients had received no treatment; 88 patients were not significantly improved by the treatment given. However, in 81 patients, the condition was improved up to a year later i.e. 21 per cent of the total number of patients originally seen and 36 per cent of the follow-up patients.

Action taken as a result of the survey was maintained in 140 cases, but not in 23 cases. Further action had to be taken as a result of the follow-up interview in 31 cases.

Two hundred and twenty-two patients thought the survey had been worthwhile. One was too confused to give an opinion and two thought it unhelpful. One of these resented the examination and the other had a car accident on the way home from the surgery after the examination and 'had never been right since.' One patient had a cerebrovascular accident between the health-visitor interview and the examination by the doctor and we wondered if this was brought on by the procedure. A good recovery was eventually made.

It is impossible to follow up every individual item of treatment. However, some conditions were specifically looked at. Twenty-eight cases of heart failure, five cases of late-onset diabetes and seven malignancies were found and these were looked at again. Only one of the patients with heart failure had died. In two cases, the action taken at the time of the examination was not maintained; 15 cases were improved and 12 were not affected. Three of the patients with malignant conditions had died, the other four including a man with lymphatic leukaemia are still active. Of the five patients with diabetes, two were put on oral hypoglycaemic tablets and their symptoms have improved. The other three were advised about diet and this does not seem to have made any difference to their condition.

Of the follow-up cases, 24 had required some social service in the original survey. All but three had received these. These failures included one failure in rehousing, an inability to get meals on wheels in one, and absence of home help in another.

Conclusions

Is it then worth finding and treating undiagnosed and unreported disease among old people still living at home? Looking at specific conditions at follow-up, about half were improved. This judgment had to be subjective and doubtful cases were not usually included in this "improved" group. The decision was not made by the health visitor alone but only after full discussion with the doctor.

Lowther *et al.* (1970), in a similar evaluation of early diagnostic services for the elderly, followed up 300 patients previously examined at two clinics. The ages of the patients are not comparable with our own—being from 65 years and over. The group also differed by being selected to some extent by concentration on high risk groups of patients such as those who were living alone, had recently been bereaved, or had recently been discharged from hospital. The survey was not carried out by general practitioners, but selection was from the lists of several local practices. The results they obtained are however, quoted here and compared with our own because few similar studies have been carried out.

Taking the original 297 patients which we examined, 27 per cent (88 patients) were improved. Lowther's figure is 23 per cent. On the basis of those in Lowther's group for whom recommendations were made and who were traced and the recommendations carried out, 53 per cent were improved. Our comparable figure is 50 per cent. In Lowther's group, 14 per cent required further action and in our group ten per cent required further action. In 17 per cent of Lowther's group action recommended was not taken—in our group it was seven per cent. The results of the two follow-up studies agree closely. It is interesting to note however, that the survey undertaken by general practitioners produced understandably, far fewer failures to act on recommendations made. Lowther *et al.* concluded that if only 25 per cent of the total examined can be improved it is worthwhile in that early detection reduces the periods of suffering in many conditions and avoids hospital admission. Some merit lies also in the mere identification of disease. Unless diagnosis is made, there can be no rational therapy and the question of prevention can never arise.

In these observations, I would agree, but he goes on to conclude further that because of the work load in general practice, such early diagnostic clinics should be undertaken

by geriatricians. I believe, however, that general practice is the place for these clinics to be situated but that they should be limited to an older group and that invitations be made to all patients in that group to attend.

No assessment seems ever to have been made on the general improvement of health that can be produced by geriatric early diagnostic clinics. Using the device of effective health groups, we have attempted this, but the results are, perhaps, a little disappointing. By direct questioning, nearly all the patients stated that they had benefited by the examination even if nothing specifically had been done to help them. Most old people react favourably to anyone who is prepared to take an interest in their problems. Twenty people improved their effective health group but 24 were in a lower group after a year. Of those who went up in health group, one third were over 80 years, and five were over 90 years old. One is faced with the inevitable downward trend as age advances and probably nothing can be done to prevent this. Perhaps even more would have dropped in effective health group without the active intervention of the doctor during the survey and certainly fewer would have improved their effective health.

Over-ambitious treatment was avoided throughout the whole survey. It is true that patients' difficulties can be made worse by therapy which is of doubtful value. When faced with a multiplicity of symptoms, our policy was conservative and only conditions which could be improved were treated. Many diseases were just noted and no action taken.

The way in which such clinics are organised and arranged will vary and certainly more research needs to be undertaken into this aspect and also into which are the most important areas where help is necessary. Educating old people as to what local services are available is also important. This seems to be difficult and Meyrick and Cox (1969) repeating a survey of old people eight years after the original, still found a high and persistent ignorance of available local services.

In conclusion however, I would submit that general practice is probably the best situated and equipped area in which to undertake early diagnostic and preventive work among the elderly. However, more research needs to be undertaken to evaluate the effectiveness of such work. The next stage should be properly planned studies of "screened" groups with matched controls.

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