# Individual Studies The path from middle to old age\*

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In administration it seems necessary, and has become habitual, to consider human beings in age groups, infants and toddlers, school children primary and secondary, and so on until the increasingly large group of aged is reached. There is subsidised milk for the babies, and tax-free tobacco for the old ones, and much that is planned and written implies a definable dividing line most obvious of all behind those who qualify for the great study of geriatrics.

General practitioners, on the other hand, view each human life as a vista, with an imperceptible merging of one stage into another. Of course, family doctors are not alone in doing this, but after 30 years in practice I am very conscious that babies delivered by myself are now parents, and that men and women who were in their 50's when I began have now reached their ninth decade, if they are here at all. In many cases I have been able to watch the succession of stages throughout their varying intervals, each measured by active achievement, as well as by sickness.

In this same thirty years, the proportion of pensionable people to the rest of the population has risen steeply. We are told that the seven million of today will be nine or ten million by 1970. I shall be one of them, so will my husband and our contempories, such of us as survive. There are even more pessimistic prophets who anticipate that the 15 per cent. of persons over 65 in 1947 will be 25 per cent. of the nation's population in 20 years time; an unconsciable load on society, unless this elderly quarter is to remain relatively active in mind and body.

A great deal of thought and skill, time and money is now spent on geriatrics; on putting back into some degree of activity, in however limited a way, those aged folk who have lost it. I have thought that it would be worth considering how much can be done to retain activity to the maximum in those years that follow the prime of life at 50; years which stretch for a quarter of a century before real old age begins at, say, 75. I am not considering problems of progressive disease, acute or chronic, but only deterioration arising from the aging of tissues and gradual change in habits. This can

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have a frightening and limiting effect on the residue of active life; it favours the development of infection and reduces happiness.

I am well aware that I have made an arbitrary pathological distinction which can have no clear dividing line, and I will go further, and for convenience I propose to consider this subject under two main headings, which in themselves overlap, namely, alterations in mobility of body and in mobility of mind.

My own practice has always been principally among professional classes with a proportion of skilled workers, such as tailors and dressmaking hands, telephonists, shorthand typists and domestic workers. I do not work even on the fringe of an industrial area. I have found it of interest to compare my own impressions with the survey carried out by Hobson and Pemberton on the health of the elderly at home. This work was done after a detailed investigation of the physical and mental condition of 476 pensioned individuals in Sheffield, with a social survey of their living conditions, diet and habits in work and leisure. The emphasis on certain aspects of the subject is necessarily different from my own experience, but the problems I see are the same as those in this highly industrial district, and the solutions no different.

In the 30 years since 1925 the expectation of life has been greatly increased, largely as the result of control of acute infections. Alongside this there have been great changes in national habits; old age pensions, which only started in my childhood at 5/- per week over 70 years of age, have reached something approaching subsistence level, thus favouring retirement from work of the less well paid. As the pension is at present coupled with an artificial restriction on earnings, there is little financial incentive to continue in part-time work. The larger homes have shrunk, and the smaller homes have grown in size, but in spite of better standards of accommodation there is a diminished responsibility of the young to house the old. Only rarely is room found for the elderly generation in the house where parents and children are living. In other words, there is every encouragement in the social conditions of today for life to shrink in its demands, both in area, and in scope during the years of late middle age. With the drop in social demand and incentive there is a drop in spontaneous activity. For some of us-the late Lord Horder, for instance-this never comes either mentally or physically: but for many spontaneous muscular activity falls off at the very stage when the necessity for it diminishes too. This can quickly become a vicious spiral leading to loss of social contacts, loss of employment or hobby, and loss of interest in food; all so destructive when not offset by natural habits.

#### Obesity

Mobility of body must depend upon a reasonably comfortable back and limbs, and these in turn upon the load that they support. Hobson and Pemberton found that elderly men, who were overweight, were chiefly in social classes 1 and 2, whereas elderly, obese women preponderated in classes 4 and 5. My own experience is that in the late 50's and early 60's obesity of varying degree is abundantly obvious in men and women in classes 1, 2 and 3. Obesity is not quite identical with over-weight. The build of the human body varies enormously, and there are individuals of identical height whose weight in health should differ by a stone or two. In my opinion, it is rise in weight and distribution of weight that are significant. The fifties are the years when it is often gained abruptly, and the effort is, of course, raised in proportion to the load carried. This, my own experience, is in contrast with the report on weight increase on Bourneville employees, where only a gradual curve was noted. In women an increase of several pounds often occurs within a year, or even three months, of the last menstrual period. Vanity and economy together bring women to the doctor sooner or later.

In men the process is more gradual, and more easily tolerated emotionally, but it is as serious in its other results. Weighing scales are as useful in assessing health from 50-70 as the stethescope; to my mind the tape measure is as valuable as scales. It is the ratio of abdominal girth to height and weight that is significant, and it is its reduction that adds so much to comfort and to sprightliness. In many cases the abdominal measurement shrinks more rapidly than the loss of weight would lead one to expect, in other words, there is a redistribution of weight. In others there may be a loss of less than a stone, but the reduction of waist measurement is greater than that of the hips and chest. This drop of a few pounds can alter the patient's sense of effort remarkably.

The value to the middle-aged patient's morale of watching a reducing waist line is far greater than that gained by watching loss in weight, which can even raise latent uneasiness about overlooked diabetes or cancer. Added to this, decrease of breathlessness and a far more comfortable digestion go hand in hand. Fatty dyspepsia usually disappears in the absence of gall-stones, and even when they are present can diminish to near vanishing point. Where rise in weight and rise in arterial tension have both occurred, the drop in weight is obviously of the greatest importance, owing to the double circulatory load, and the fall is very often accompanied by a parallel fall to a greater or lesser extent in blood pressure reading. I am quite clear that an average person in their 50's should weigh 7—14 lbs. more than their weight between 35—45 for the best of health. If excessive gain has been avoided during the following 15 years, there is a natural and gradual fall in weight after 65 to the healthy spareness that is associated with vigour. We all know those aged women who appear frail and brittle as an autumn leaf, and yet have astonishing physical energy.

As to methods, it is a matter of each case on its merits. Control of weight is impossible unless the patient actively desires it. Broadly it is fat and starch cooked together that is the chief trouble excessive alcohol apart. The obvious drawback to this is cost, for starch and margarine must remain the cheapest form of satisfying food.

The maintenance of weight at the new level is quite as important as its reduction, and one where patients are often left without guidance; when pounds and stones pile on again, there is usually no further attempt on their part to reduce.

I have referred to the effect of excessive weight on the circulation and digestion, but it is crippling to a greater degree on knees and feet, usually becoming obvious within a few years of the rise if this is considerable.

#### The Importance of Posture

There is a normal drop in muscle tone in most of us from 35 onwards. This usually becomes noticeable in stance, and especially in the feet, by the sixth decade. Diminishing exercise hastens the process, which is increased when joints become painful and there is accompanying reflex wasting, most obvious in the quadriceps and buttocks. As pain develops (and painful feet in women is a symptom in nearly all of those who are well over normal weight for age and type) so walking is reduced to a minimum. Once weight is reduced to a satisfactory level, regular moderate walking exercise must be encouraged and maintained. This is impossible unless it is also a pleasure; comfortable feet are the first essential to this. Few women realise that they require shoes half to one size larger than when they were 30. Broadening and lengthening of the feet from flattened arches is due to the toll of stone, brick or concrete kitchen floors when muscle tone is diminishing. A very large number in every class (except that tiny minority who have shoes made for them) have corns and callosities; ingrowing toenails, arthritis in the big toe joint and metatarsalgia are only too common from 50 onwards. Toes are difficult to reach with added growth and stiffness.

Hobson and Pemberton found that 67% of men and 71% of women were in need of chiropody and 2% of these women were house-bound by their feet alone. Undoubtedly the high accident rate in elderly women is closely linked with painful. stumbling feet. It is not difficult to instil the habit of regular visits to a chiropodist in the well-to-do, but such visits are a serious matter for those whose incomes cannot stretch. Foot clinics are few, and the wait can be lengthy. I believe that an adequate chiropody service with scaled payments for use by the whole population would pay a high dividend in national comfort and activity; irritable tempers would benefit, as well as extended mobility and reduction in accidents. For most, in the first half of this third quarter century of life, only two or three visits a year would be needed, increasing for many to monthly attention from Such a service is easily mobile for rural areas, and 70 onwards. can be used for training in a certain amount of self-service too.

I am always interested in noting the reduced tendency for painful knees and backs to relapse following treatment in a physical medicine department which occurs if patients can be encouraged to walk from very slight and early beginnings as soon as benefit is first experienced from treatment. This must, of course, be preceded by non-weight-bearing exercise of quadriceps and glutei. I hold it against some departments that far too little of this is urged upon the patient, and much skilled treatment is thereby wasted. Arthritic hip joints are, alas, a far more complicated problem, and one that I do not touch on here.

The walking capacity of elderly people in towns is now much restricted by the absence of seats in the streets and the absence of chairs in the shops. So many who have partial disabilities of various kinds tell me that they could get out to do their own shopping easily, if only they could sit half way or when the shop is reached. Many know low walls where a pause can be made, but now even those on bomb sites are disappearing in London. Local authorities would do a good work in placing seats strategically. Kensington has begun on this, and many villages are admirably supplied, but seats are rarely seen in cities.

Our trunks present two big problems, both starting much earlier in adult life, but often left untreated during the years of slow deterioration. These are low backache and emphysema with chronic bronchitis and a rigid chest wall.

Low backache in women certainly begins many years before the age limits imposed by my subject, but I cannot resist the opportunity to ride one of my hobby horses. If every girl left school knowing how to lift and carry normal household weights with safety, whether shopping bags, buckets of water, or babies, very much later trouble would be saved. What a contrast we present to some of the Eastern and African races. Equally, if taught to perch on a stool or to stand at a sink of a suitable height on a sorbo mat or duck board, with her weight well forward on her toes, instead of carried with hollowed lumbar spine on her heels, she would be a happier middle-aged woman. The insistence on using a stool and a table made at a level suited to standing height, not to sitting at it on a chair, is now recognised and gradually coming into general use.

Vaginal prolapse is a condition causing as much general postural fatigue as local discomfort. Most of us aim to have any case repaired as soon as diagnosed, even if child-bearing is not over. and certainly at an age not later than the 50's. I have no more grateful patients than these women, although they are invariably reluctant to undergo operation. The additional avoidance of stress incontinence removes one of the greater discomforts of later life. Seventy-five per cent. of the elderly women in the Sheffield survey suffered from this. My own impression is that severe low back-ache diminishes and changes character throughout the 50's as the spine progressively stiffens. Some stiffening is invariable, even in symptomless spines, with corresponding radiological changes. Few of us are aware of the stoop that we are each developing, and, when once stiffened, it is irreversible. The advantage of a short course of postual training, to make us posture conscious in late middle age, is invaluable in encouraging a reasonably upright poise before losing flexibility. It is only necessary to compare the well-bred, healthy woman of the 19th century, reared on posture consciousness from childhood, with the rest of us, who take our position as we find it, and are unaware of our increasing droop. The early 50's are an admirable phase of life for joining mind to muscle sense in order to age in a good position.

### **Bronchitis and Emphysema**

If women need posture training in relation to their vertebral columns rather more than men, I think that the position is reversed when considering the chest. I try whenever possible to follow up bronchitis in middle age by physio-therapy before the lungs in the stiffening thoracic cage became subject to bronch ospasm and develop emphysema. Even when this crippling process is well under way in the 60's and 70's, there is much to be gained by training in expiration added to tipping, where there is excessive secretion.

In Hobson and Pemberton's survey in Sheffield, the limiting effect

of cardiovascular disease on activity was astonishingly small in relation to its incidence. Out of four hundred and seventy-six, two were bed-fast (both after strokes) and twenty house-fast, and there was some degree of limitation in 18%. A large proportion of the total (over 70%) showed electro-cardiographic evidence of disease but with slight or no symptoms and with few or no limitations. Several, with mild angina, were keeping on at their full-time jobs with little or no sick leave. One conclusion is obvious; the severer cases had not survived or were already in hospital, but relatively active lives can still be lived in the presence of cardio-vascular disease in the elderly, provided that reasonable physical activity has been kept up without major interruptions. It was found that 44% of the men and 38% of the women suffered from bronchitis and emphysema, many of whom had broncho-spasm with long periods of complete or partial disablement during winter. Sheffield is an industrial area with atmospheric pollution second to few in this country. My practise is in a relatively clean part of central London, close to a large open space, but my experience coincides with these findings in that the serious crippling from bronchitis with emphysema in elderly people exceeds that from obvious cardiac abnormality. Every attempt should be made to postpone loss of elasticity of the thoracic wall and lung tissue. It needs an enthusiastic physiotherapist to gain an elderly patient's co-operation early enough to obtain most benefit from treatment, but, even late in the condition, I have watched patients enjoy winters of comparative health following physical treatment. If this can coincide with reduction of their explosive cough, deterioration will be appreciably slower. How few of us leave school knowing how to use our respiratory muscles to advantage, either in youth or when aging. We have wisely swung away from Sergeant-major drill, with the dangerously over-expanded chest, but we have not replaced it by intelligent consciousness of the use of an invaluable part of our body machinery.

I hesitate to touch on the controversial subject of smoking, the more so as I am a natural non-smoker, but I must state that for many years I have been convinced of its deleterious effect in maintaining chronic explosive cough and in adding to the irritation of chronic bronchitis. In my relatively well-to-do practice this association looms large, and, in curious contrast, the cases of lung carcinoma have been few. The thankfulness with which a wheezing patient enjoys his increased comfort when released from smoking is great, as is the thankfulness of those living or working near him. I have long ago given up wasting breath on persuasion, but I rely upon a plain statement of fact as it appears to me. It is the individual who must decide to face a few tortured weeks and take what help I can give in the process. It is interesting that we subsidise the elderly to smoke, whereas for a proportion of them even very moderate smoking ties them by the chest.

The effect of atmospheric pollution is well shown in the Shefield figures: those living in the eastern industrial part of the city suffer from bronchitis to a significantly greater degree. Perhaps our children will look back to the barbarity of our smoky age with astonishment.

## Vertigo

One last condition affecting mobility of body is vertigo. I do not refer to the vertigo of Meniere's disease, or to the acute and paralysing labyrinthine attacks, but to mild, persistently recurring giddiness which adds a real hazard to locomotion. I am either seeing more cases of this, or else my patients have been more plangent in describing this symptom. It is far more common in women than in men; the Sheffield survey reports it in 30% of women and only 13% of men. There is no significant relation to hypertension, to deafness, to general ill health or malnutrition. It is quite definitely linked with certain movements of the head, as in stooping or turning, and is stimulated by the sight of rapidly passing objects, such as traffic. In my opinion vertigo, together with painful and stumbling feet, is largely responsible for the high proportion of accidents among pensioners; these accidents are so much higher among women. In managing this symptom, I encourage continued activity, re-arrangement of work to avoid stooping, and the early habit of a stick or long umbrella when out of doors. Cupboards, and especially the oven, should be at a convenient level, and gardening is better done from a low stool. Vertigo of this type once it appears is usually obstinate, and I have vet to meet the neurologist or otologist who has helped me to alleviate it. The vital point is to encourage those who are only moderately giddy to be ingenious in remaining active in spite of it and to assist stiff necks by gentle manipulation and massage. I suggest that over-activity of arms seems to be particularly costly. Distempering the ceiling, fuelling the stove, cleaning the windows and the weekly wash becomes a burden as the years go on.

In emphasising the need for continuing activity of the body as a whole, there is the risk of over-activity as the years accumulate. Continuity in accustomed and moderate activity is important, and so is moderation of pace and the avoidance of spurts. Mobility of body cannot be extended in the added years of life that statistics anticipate unless there is also mobility of mind. Mobility of mind hinges, I believe, on two points, pleasure and satisfaction in what you are doing, and the conviction of more and as good yet to come.

For so many of the old the vista of life narrows, and worse than this, there is no distinct view of any interest throughout the length of it. Women are luckier than men in some ways, for the daily needs of household life, and the satisfaction of fulfilling them, are to many a continued incentive. It is easier for them to get work outside their homes, if only on a domestic level. Fifty per cent. of the unmarried women in the Sheffield survey were doing part or whole time work; only 20% of the men were at work, though another 13% wanted and could not get it.

For so many the only rigid dividing line between birth and death is the date of retirement, with the fear that life will hold less stimulus and satisfaction on the other side of it. In fact, full retirement is only happy for most of us when it affords opportunity for expanding interest and activities for which the appetite is already well developed, but time has hitherto been lacking.

In my own practice I have watched with interest the reaction of senior Service Officers, compulsorily retired at 50-55, an event which is inevitably anticipated with dismay by themselves and by their wives. The impact of this enforced change of work can have a stimulating effect. I know of a Brigadier who took a full course of Personnel Management training, and is now holding a substantial post in Coventry. Another is secretary to a London Teaching Hospital. A third commuted part of his pension to set up as a carnation and chrysanthemum grower on a commercial scale.

It is relevant to consider which aspects of mental and physical activity deteriorate first, and which persist longest. Apart from those jobs where the sheer labour is beyond the strength of a man or woman in the early 60's, such as heavy industry, the food markets, and others, it is the acquiring of new skilled movements and carrying them out at a sustained speed that go first. New habit patterns are not easily laid down; old ones are well maintained if the pace is not forced. This has the unfortunate result that change of work for the elderly operative or mechanic usually means a drop in social class from 3 or 4 to 5. One of the hardest issues to face in the latter third of life is loss of social status and prestige, and, for some at least, prompt retirement, even if lonely and boring, may be preferable to a drop to the grade of casual labourer.

The Nuffield Foundation's first report by Le Gros Clark and Dunne on New Jobs for Old Workers reviews age groups in sixteen moderately sheltered occupations in the census reports of 1921, 1931 and 1951. These occupations include watchmen, office cleaners, caretakers, hotel and hall porters, as well as "other" railway and " other " road transport workers, all of them full-time occupations. These occupations as a whole now contain nearly double the number of men over 55 than the proportion of that age group in the working population. It is interesting to read into the figures how large a proportion of elderly workers appear to have deliberately entered this group of occupations, 10-15 years ahead of pensionable age, thus carrying out the policy decided upon by the service men already referred to. The whole number now doing office cleaning contain 61% of 55 years of age or more in contrast to only 27% both in 1921 and 1931. If men office "chars" can thus be encouraged, there may well be hope for household domestic cleaners. It is notable that many of the jobs, in which the proportion of older workers is increasing, can be done at the workers' own pace.

The mental attributes that are slowest to deteriorate are the highest, namely, judgment and creative ability. A judge or a prime minister may be as effective in judgment or in leading the country at 75 as at 55, and often is so. Renoir at 80 was crippled by arthritis so that he could only paint with a support for his arm and his brush tied to his stiff fingers, but his flesh tints were as exquisite as 25 years before. The later poems of Walter de la Mare were rarer, but as lovely as when he was young. There must be many doctors in this group, also, whose ripened opinion is so valuable.

In leisure occupations the same holds good. I know a first-class bridge player who never played a rubber until well over 60. William de Morgan, having lost two fortunes on ceramics, took to writing best selling novels at over 70. In contrast, it is generally difficult, for even the well trained among us, to acquire new manual skills much after the 50's. I struggled with the intricacies of a simple form of lace making five years ago. I think that I was almost too late, but I mastered it. A musical instrument can be taken up again after long neglect, but the technique is nearly insuperable, if a beginning is made when over middle age.

In fact, we should encourage all our older patients to get well started, either on their hobbies or on their alternative occupations, at an age when the tricks and knacks can be learned so that the fullest pleasure and use can be derived from them in the future years. Any reserve of new skills should be accumulated by us well ahead of the time when we hope to indulge in them.

Blindness coming on in age is a smaller problem than it was, with operation for cateract and glaucoma at the optimum moment. Deafness is less crippling now that so many can be assisted by hearing-aids. The paranoid elderly relative still remains a menace to almost every family, and is probably the aspect of age that, as doctors, we fear most. Except among skilled craftsmen, accustomed to work in relative solitude, or in the group with highest mental attributes, it is obvious that loneliness after retirement must be a seriously unfamiliar condition for the average worker in an industrial town. In loneliness, character defects, always inherent in the individual's make-up, come to dominate the personality; though they were under reasonable control, even of value, when activity and social contacts were normal. In loneliness, too, rigidity of character progresses rapidly after mature age, unless social mobility as well as mobility of mind and body is fostered. For these reasons alternative occupation, introduced at an age when most can be made of it, is the best corrective for character and personality deterioration. This process is difficult to reverse once developed; irritability can become irascibility, and halfformed suspicions of neglect and unkindness develop into fixed ideas of persecution.

Lord Amulree reported in the British Medical Journal of September 24th last year that the hospital admission rate of old people living alone, especially solitary men, was far higher than their proportion in the population. The accident rate is also higher among them, and so, of course, is plain unhappiness.

In this country we seem to be aiming at a middle course for our older folk, mid-way between retention in the family circle and institutional seclusion. Almshouses are still in use in villages and towns, half-way homes are related to them in the new towns, where, too, flats built for the elderly are set among family dwellings. Exeter is finding a new solution by advertising for foster homes for their aged people, especially when they are bereft of wife or husband. The response has been surprisingly good. Ideally, I think the conjunction of generations can be enriching to the outlook and happiness of all, but this is so often spoilt by the clashes of relationship. It is easier to consort daily with an older person who is neither parent nor parent-in-law, and the companionship of the very young and the very old brings the best of occupations with it, that of being wanted. Our now vanishing nannies got their name from Nanna, the older name for grandmother, and with the near extinction of the true nannie, the original nanna has often found her place. Even walking which, like Bernard Shaw, I think almost essential for the aging body, must have satisfying objectives, and pushing the grandchild's perambulator is better than most.

If activity into the later years is to be maintained, guidance and advice from the family doctor is needed. Training of the individual in skilled selection of what to do, how to do it, when to do it, and when to stop must come from somebody. Senescence guidance clinics sounds like a very bad joke, but we all know how much senescence guidance general practitioners do, and how much more is needed. It is easy enough to give advice to keep on going, but far more difficult to carry it out unless someone has a long, intimate and constructive view of an individual life. The old people's welfare departments of the local authorities are superbly helpful when there is evidence of difficulty and helplessness in age, but I believe that only the doctor can anticipate that stage and suggest the change of habit and techniques in toilet and digestive management that can release especially the early part of the day from anxiety if the house is to be left. Only the family doctor notes that carrying coals from a cellar is using physical energy that is in short supply, and thereby taken from more profitable or enjoyable occupations, and this advice may well be needed as early as the late 50's and the early 60's. He or she alone can detect the failing ventilation or the increasing giddiness that need treatment, or estimate the unsuitability of work or the journey to work still just achieved but at such a cost to health in the years that lie immediately ahead. Only the family doctor can advise on the risks that can, and should, be taken, if life is to be lived with satisfaction, but not wantonly.

Perhaps those of us who are in practice all tend to see a majority of patients near our own age. I have enjoyed the young families that coincided with my own. I still see many, and grandchildren of the original ones, too. I have shared and learned much of the discomforts of women at the menopause, and now I find a new and absorbing fascination in guiding those of 55-75 in the physical, mental and social activity, bringing happiness for themselves and others, into and through the next phase of their lives.