THE PATTERN OF LIFE OF THE ELDERLY WHO LIVE ALONE

A Comparative Study : Medical and Sociological

by

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C O N T E N T S.

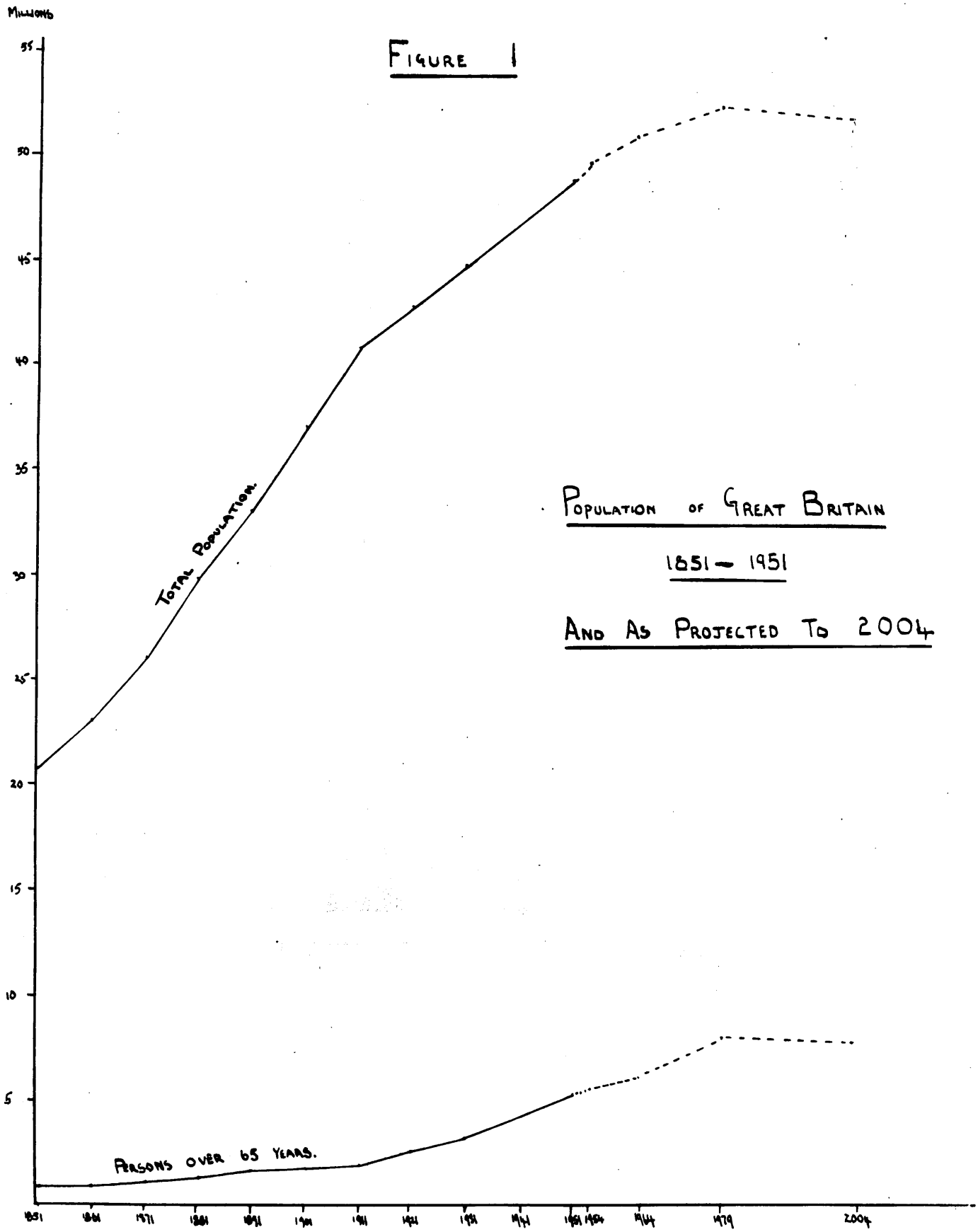
The great and progressive increase in the population of Great Britain in the late eighteenth and nineteenth centuries began to slow down in the early twentieth century, and it is thought probable that the degree of stabilisation now reached will be maintained, with perhaps some decline depending upon the family size of the future, into the twenty-first century (see Figure 1).

With the continuing increase in the total population there have been marked changes in its composition. The population pyramids of Figure 2 show that the population of Great Britain in 1951 contained a smaller number of children and young adults and a larger number of old people than in 1851.

The number of persons aged 65 and over has increased five-fold in a hundred years, from one million in 1851 to over five million in 1951; that is, those over the age of 65 have increased from five per cent. of the population in 1851 to eleven per cent. in 1951, and it is estimated that the proportion will increase to 15 per cent. in 1979, where it will remain stationary for the next 25 years (Report of the Royal Commission on Population, 1949).

The increased proportion of old people in the community is due to the decline in the mortality rates and to the variations in the annual numbers of births since the late nineteenth century. As is shown in Table 1, there has been a steady decline in the death rate in all age groups, which means that anyone born in the twentieth century has a much better chance of reaching old age than had anyone born in the nineteenth, the influences of war being excluded.

FIGURE 1



POPULATION OF GREAT BRITAIN

1851 – 1951

AND AS PROJECTED TO 2004

Table 1*

Deaths per 1,000 of the Population in Age Groups.

Period	Age in Years			
	0-14	15-44	45-64	65 and over
1870-72	29	10	23	90
1880-82	25	8	23	87
1890-92	23	7.5	25	98
1900-02	21	6.2	22	89
1910-12	15	4.8	18	80
1920-22	11	4.3	15	75
1930-32	7.6	3.6	14	74
1950-52	2.8	1.7	11	72

* From Table 3 of the memorandum of the Government Actuary to the Commission on the Economic and Financial Problems of the Provision for Old Age, 1954.

Although the expectation of life at birth has increased by approximately 50 per cent. in the last 40 years (Report of the Committee on the Economic and Financial Problems of the Provision for Old Age, 1954), there is no evidence that the actual span of life has been increased (Logan, 1953). The expectation of life of a person aged 60 has hardly changed in the last hundred years.

Table 2*

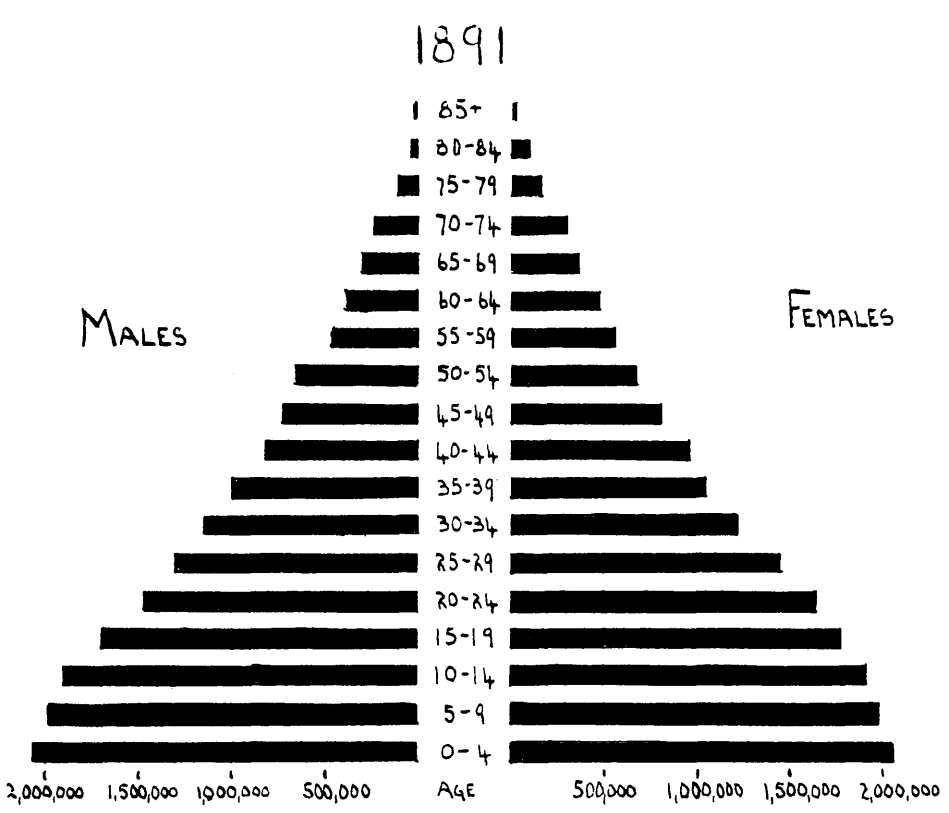
Live Births in Great Britain.

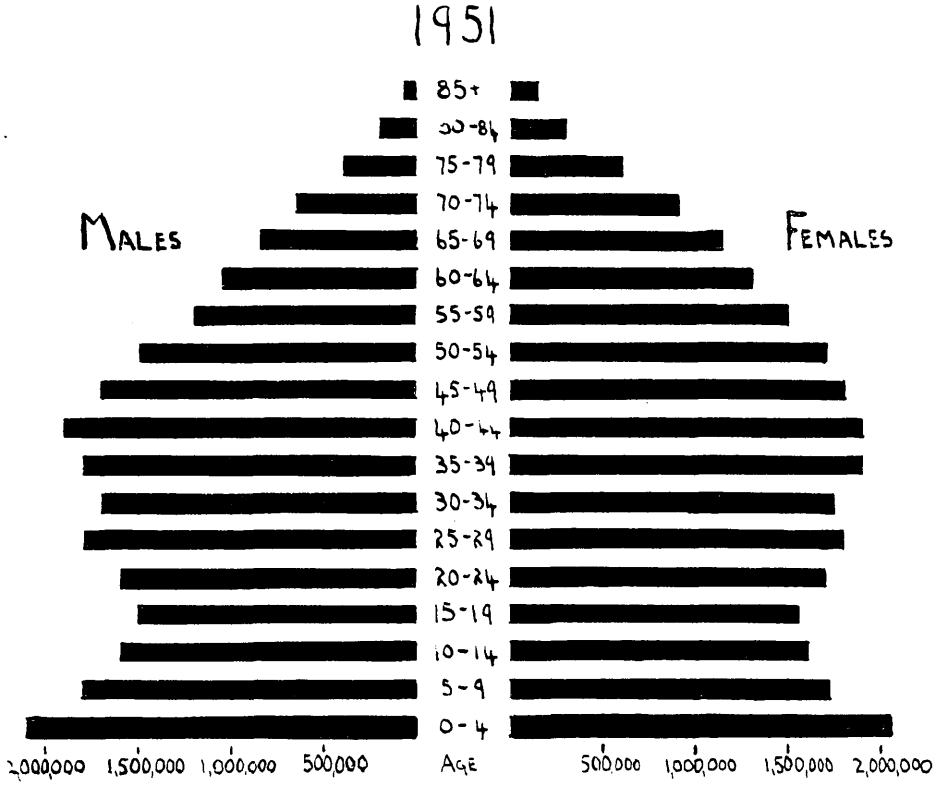
Period	Average Annual Number (Thousands)	Legitimate Births per 1,000 Married Women under Age 45
1870-72	922	295
1880-82	1,011	289
1890-92	1,018	267
1900-02	1,064	239
1910-12	1,007	201
1920-22	987	184
1930-32	725	127
1950-52	773	108

* From Table 2 of the memorandum of the Government Actuary to the Commission on the Economic and Financial Problems of the Provision for Old Age, 1954.

FIGURE 2.

AGE PYRAMIDS FOR GREAT BRITAIN, 1891 AND 1951.





Another reason for the increased proportion of old people in the community can be found by examining the annual numbers of births since the late nineteenth century. There has been a steady downward trend in the birth rate since that time (Table 2); nevertheless, as Roberts (1954) has pointed out, the absolute number of births occurring around the beginning of the twentieth century was greater than at any period before or since. These generations as they grow older are swelling the ranks of the elderly until by 1965 or thereabouts the maximum number of persons reaching pensionable age in any one year will probably have been reached.

It is difficult to illustrate the increased burden to the community that the infirmity and chronic illness of these old people cause. It can be glimpsed to a certain extent by the total number of deaths in old age in a community. In Glasgow, the total number of deaths of persons aged 65 and over has increased from 3.5 thousand in 1914, when it represented 20 per cent. of the total annual deaths, to 7.3 thousand in 1953, or 57 per cent. of the total annual deaths (see Figures 3 and 4). During this time the total population of the city only increased from 1.02 million to 1.09 million (Table III of the Appendix).

If it is accepted that a great many of these deaths were preceded by chronic illness or infirmity, then it can be seen that the burden on the community has more than doubled in the last forty years.

The present age structure of the population is often thought to be abnormal, but this view is opposed by Titmus (1955) who states that in a normal stable population the proportion of the community aged 65 and over is between thirteen and sixteen per cent. Nevertheless, while it may be argued that the population of Great Britain in Victorian times was abnormal because it contained a high proportion of children and young adults, it was during this period that much of our relevant legislation was enacted and our

Figure 3

Deaths Over and Under 65 Years. 1914 - 1953.

The City of Glasgow

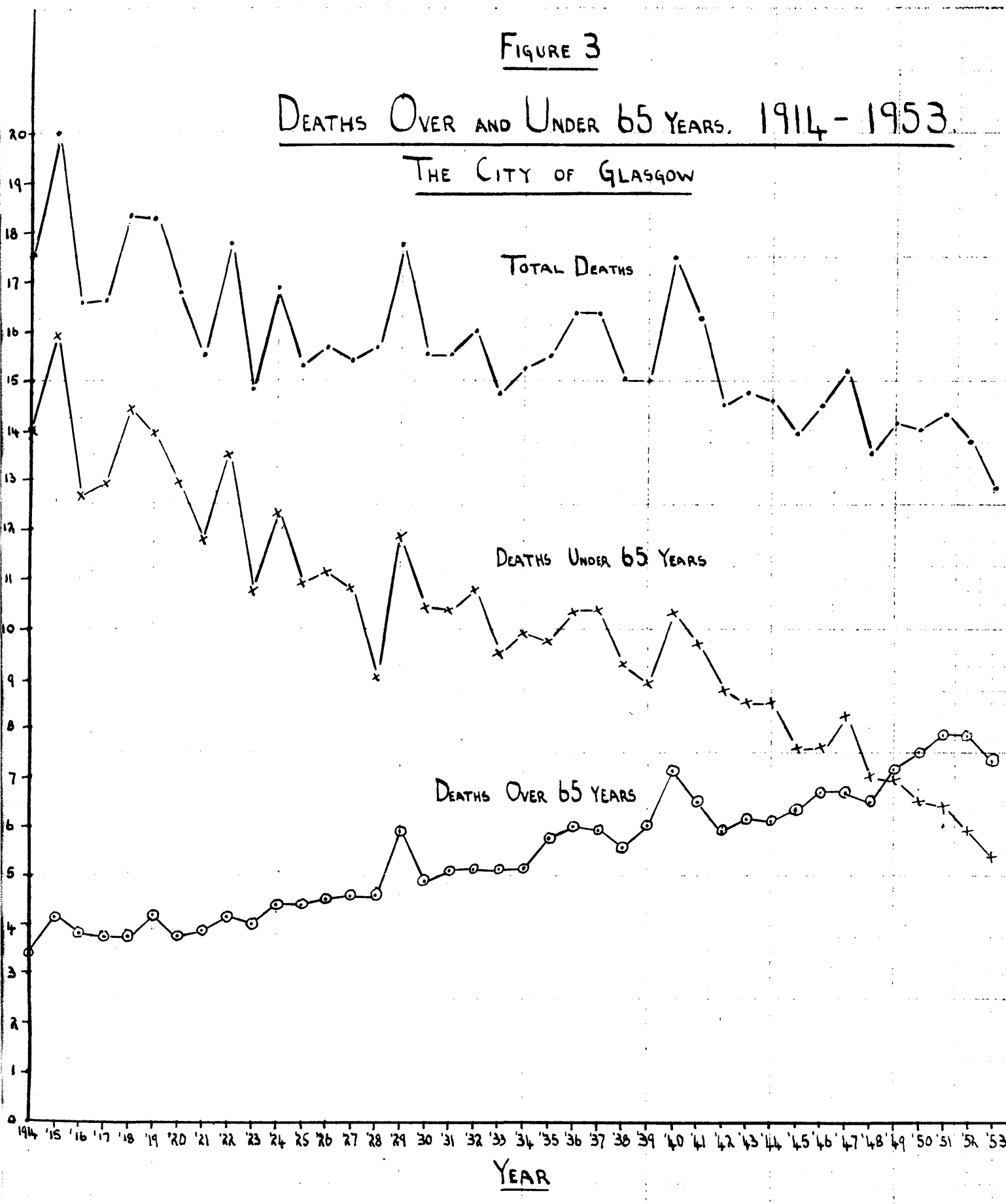
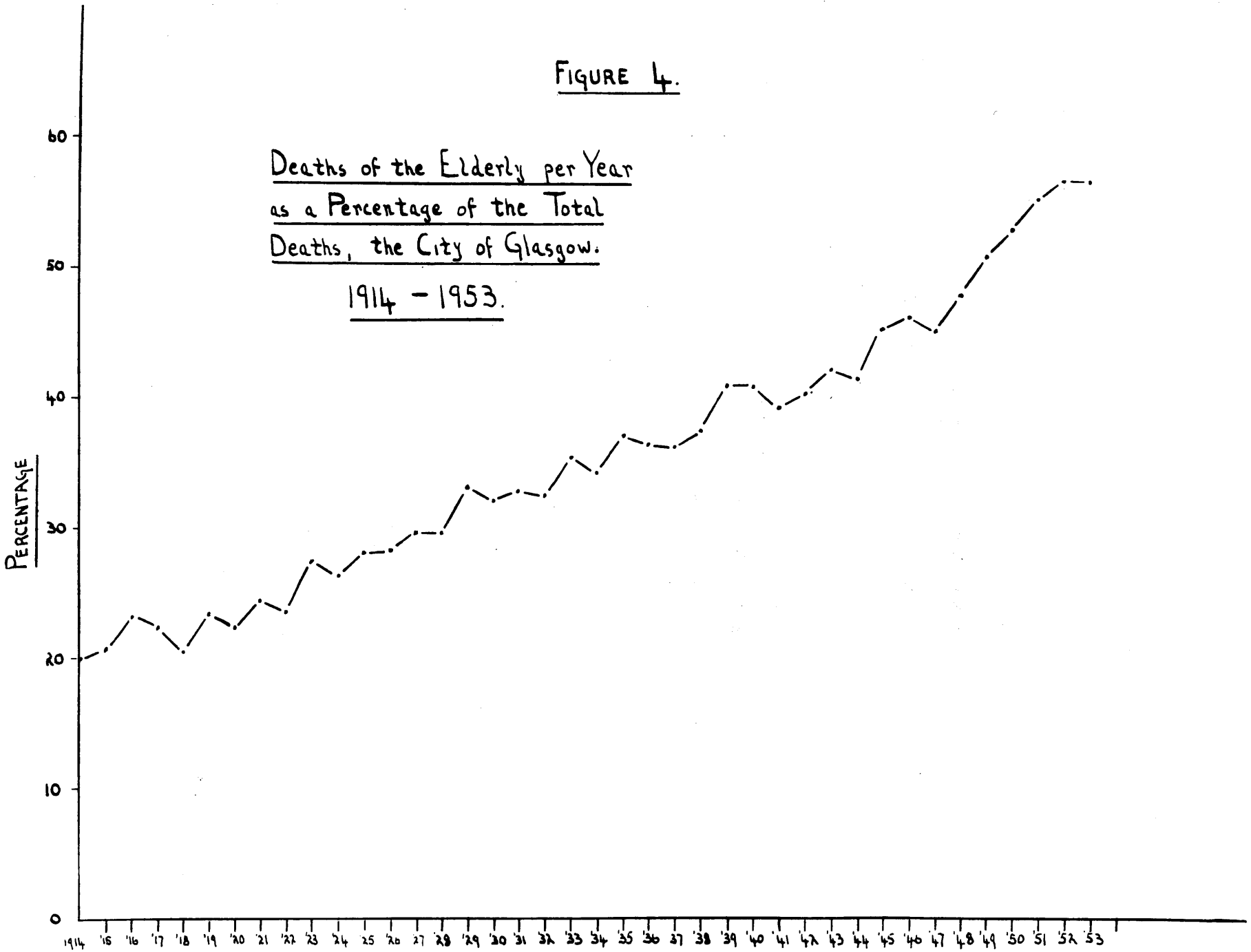


FIGURE 4.


Deaths of the Elderly per Year
as a Percentage of the Total
Deaths, the City of Glasgow.
1914 - 1953.
PERCENTAGE
0
10
20
30
40
50
60
1914 '15 '16 '17 '18 '19 '20 '21 '22 '23 '24 25 '26 27 28 '29 '30 31 32 '33 34 35 36 37 38 '39 '40 41 42 43 44 45 46 47 48 49 50 51 52 53

conventional social structure developed. The gradual change in the age distribution of the population in the twentieth century has found a society unprepared and almost unwilling to adapt itself to its new structure with its associated problems.

The increased number of old people in the community has produced many social problems, which although accumulating for many years have only recently become prominent. Once revealed and appreciated, they have steadily assumed increasing importance, demanding the attention of workers in many different fields.

In common with the rest of the medical profession, those engaged in the practice of Public Health have become increasingly involved in the medical and social problems of the elderly. In Glasgow, old people commonly approach the Health and Welfare Department for help, and many more are notified as being in need of care and attention. For some, advice and a little assistance are sufficient, but others are found living under conditions that can only be remedied by removal to hospital or to an institution. Personal experience in attending to these old people showed that the hard core of those in need of care were the elderly who lived alone.

It is these old people who live alone, rather than those who live as members of a household where help and companionship are at hand, who face the greatest problems and have the greatest needs; and it is they who are most likely to drift into states of unhappiness and self-neglect. Yet relatively little is known of the pattern of their lives, of their reactions to their solitary existence, or of the troubles and difficulties they face in health and disease.

While certain aspects of their social life and physical condition have been described in the pioneer investigations of Sheldon, in Wolverhampton,

and Hobson and Pemberton, in Sheffield, and while reference to their difficulties is not uncommon in existing reports and surveys of the elderly, no detailed investigation of the lives of solitary old people has so far been reported.

It was with the hope of providing additional information on the way of life of these old people who live alone, that the enquiry about to be described was undertaken.

The climate of thought surrounding modern social welfare makes it desirable that there should be systematic investigation of groups of citizens, particularly old people, who have special problems and difficulties. Even limited enquiries may add to the sum of our knowledge of the way of life in old age, and pave the way towards making necessary provision for the elderly and to easing their burdens by suitable services.

The elderly who live alone form a group which repays study, for these people are a responsibility of the community among which they live, and more often than not need help.

CHAPTER 2.

THE ORGANISATION OF THE ENQUIRY.

Personal experience in the practice of Public Health in a large city suggested that the elderly who lived alone had greater problems and difficulties than those who did not. It was felt that an investigation of this group of the aged would be revealing and would be likely to yield valuable information.

In order to obtain this information it was planned to visit and interview in their own homes a number of elderly persons living alone, whence it was hoped to gather knowledge of the particular problems which they faced and of the conditions under which they lived.

Before starting the enquiry, careful attention was given to defining the group to be studied, the site of the enquiry, and the methods of collecting the sample.

The Site of the Enquiry.

The area chosen as the site of the enquiry was the twenty-ninth (Govan) ward of the City of Glasgow.

This area was chosen as it mirrors a fair average of the housing conditions found in Glasgow and its people are fairly representative of the citizens of Glasgow. This ward had been the site of an industrial enquiry two years previously (Laidlaw and Bell, 1953), and it was hoped that a further enquiry, albeit on an unrelated subject, would be quickly accepted. As it happened, after the present enquiry had been conducted for about a year, a social and economic research project was started within the same area.

Finally, from the practical point of view, the Govan ward adjoined the offices of the South-Western Division of the Health and Welfare Department where the investigator was stationed.

The Definition of the Group.

The term, "living alone," was taken for the purposes of this enquiry as referring to a person who was the sole occupant and householder of the house visited.

It was realised that borderline cases would occur. For example, a widow who was the sole occupant of the house visited but who lived next door to her daughter's house was classified as living alone, although in reality she was part of a communal family unit. In the same way, a lodger was not classified as living alone although he might have little or no contact with the landlord family.

Other writers have appreciated the ambiguity of the phrase. Sheldon referred to the difficulty and concluded that a person should only be considered to be living alone if there were no regular family contacts. Exton-Smith (1948) regarded a person as living alone if there were no relatives in the household. Thomson (1950) considered a person to be living alone if he or she had no frequent contact with relatives and for human companionship was dependent on neighbours, casual acquaintances or fellow inmates of a lodging house or municipal home.

The conception of the term, "living alone," as used in this enquiry falls, therefore, between the rather lax definition of Thomson and the rather strict one of Sheldon.

For the purposes contemplated, the elderly are taken as those who have reached pensionable age; that is to say, females of 60 years and over and males of 65 years and over.

The Collection of the Sample.

The selection of a representative sample of the elderly who lived alone presented certain difficulties. Random sampling has been defined as a strict process of selection which is roughly equivalent to drawing lots

and which ensures that each member of the population has the same probability of being selected (White, 1953).

While the value and need of such a random sample were fully understood, it was found impossible to obtain such a sample. As Feller (1950) states: "In sampling human populations, the statistician encounters considerable and often unpredictable difficulties, and bitter experience has shown that it is difficult to obtain even a crude image of randomness."

The lists of names and addresses held by the Food Office, from which source Sheldon and later Hobson and Pemberton (1955) derived their samples, were found on enquiry not to be sub-divided into wards. This source had to be abandoned, therefore, as the work entailed in creating a random sample within a confined area of the city was too great.

Enquiries to two other Government departments were without avail. The departments concerned felt, understandably, that their information was of a confidential nature and could not be divulged.

In the face of these difficulties it was decided that the most practicable approach would be to collect from as many sources as possible the names and addresses of those elderly people in the Govan ward who were known, or believed, to be living alone. All the organisations which were thought to be in a position to supply these data were approached. All took an immediate interest in the project and co-operated freely. One organisation, the local branch of the Old Age Pensioners' Association, arranged a meeting of over 200 members for the investigator to address.

In this way a list was compiled of the names and addresses of elderly persons in the Govan ward who were believed, or known, to be

living alone. The organisations approached, together with the number of names they supplied, are shown in Table 3.

Table 3.

The Sources from which the List of those Living Alone was Compiled.

Source	Number Supplied	Number Eligible for Inclusion	New Names
National Assistance Board	600+	307	307
Old Age Pensioners' Association	200+	122	52
Society of Social Service	32	32	3
Corporation Sources:			
Welfare Department	22	22	-
Home Helps Department	26	19	2
Housing Sisters	16	16	12
Divisional Records	24	24	-
Hospital Removals Records	6	6	2
Total	926+	548	378

Some organisations had obtained names under conditions of confidence and only divulged these names under similar conditions. This was particularly so of the list supplied by the National Assistance Board, which was only made available through the good offices of a highly placed member of the Board.

To respect this confidence, the names and addresses of those to be interviewed were not disclosed to anyone not directly concerned with the enquiry. The source from which each name was obtained was kept to myself and withheld from others connected with the enquiry and from the elderly persons interviewed themselves.

As might be expected, there was a great deal of re-duplication in the various lists, one subject often being on the rolls of two or more organisations. The list supplied by the National Assistance Board was

taken, arbitrarily, as the main list. Names not already on this list were added and thus a working list was compiled.

It was planned that the working list would act as a nucleus from which the enquiry would develop. To compensate for the fact that a true random sample could not be obtained, it was decided to interview as many as possible on the list. Those interviewed were also to be asked if they knew of anyone else who lived alone.

It was thought, however, that the enquiry would be incomplete if confined solely to the elderly who lived alone, and in order that the problems of this group could be more fully appreciated it was planned that a further group of elderly would be interviewed: a group of elderly persons who did not live alone. In this way it was hoped that comparisons could be made between the two samples, the latter group being intended to act as a "control" to the first.

It was planned that this group would be isolated by asking the elderly persons being interviewed if there were any other old folk on the same stair. If there were no other elderly people there, or if the house had an individual entry, the question was to be asked of people living in adjacent houses or stairs. This was done and a further group of old people were interviewed.

Finally, to ensure that the group of elderly who lived alone were as representative as possible, an analysis was made at the end of the enquiry of the number of entries visited in each street. If the number of entries in each street was found to be below one-third of the total number, further entries were picked at random to bring the number up to one-third. These entries were visited by a health visitor who enquired of any elderly person living alone.

When four streets were found which had not been visited, every third entry was visited by the health visitor who enquired of any elderly person living alone.

The Size of the Sample.

The final lists contained the names of over 900 elderly persons known, or believed, to be living alone. Of these, 548 were found to have addresses within the Govan ward, and because of re-duplication of names this represented 378 individuals. This group was visited, but only 301 were included in the group of elderly who lived alone. The reasons for the rejection of the remainder are shown in Table 4. A further 46 names discovered in the course of the enquiry were added to the group.

Seven-hundred-and-four elderly persons not living alone were interviewed. Access to a further 36 was not available because they were not at home on two visits. One elderly couple refused to co-operate.

Table 4.

The Results of Visiting 378 Elderly Persons known, or believed, to be living Alone.

Living Alone	301
No Reply on Three Visits	7
Removed to Hospital or Institution	5
Not Living Alone	39
Removed to Another Address	12
Deceased	4
No Trace at Address Given	9
Non-co-operative	1
	378

Commentary.

Although the group of the elderly living alone selected for the study does not fulfil the conditions of a random sample, in that the names were obtained from the lists of various organisations, it is believed that they do represent adequately this particular section of the elderly.

The sample was purposely made a large one and every street in the ward was visited in order that the selected group would, as far as possible, reflect fairly the varying social conditions within the ward.

It is seen from Table 3 that most of the names supplied came from, or were already on, the list supplied by the National Assistance Board. It may be thought then that the group is biased in favour of the poorer members of the community. This bias, however, is more apparent than real, as most elderly people who live alone do in fact receive a supplementary grant from the National Assistance Board. It is now well known amongst the elderly and the organisations connected with them that those living alone are eligible for such a grant.

Only eight elderly persons known, or believed, to be living alone were not interviewed. One was non-co-operative and aggressive, and the other seven were not at home, or did not answer the door, on three or more visits. No reason for their absence could be obtained.

It is thought that the group interviewed is reasonably representative of the section of the elderly under consideration, namely, the elderly who live alone.

Summary.

The methods of obtaining a sample of the elderly who lived alone are described. Particular attention was paid to the site of the enquiry and the definition of the group to be interviewed.

The method of obtaining a further group of elderly persons who were not living alone is described. This group, which had a comparable environmental background, was intended to be used for purposes of comparison with the group of elderly who lived alone.

Every effort was made to make the sample as representative as possible of the area of the enquiry.

CHAPTER 3.

THE GOVAN WARD.

The Govan ward is situated in the south-west of the City of Glasgow. It was the nucleus of the old burgh of Govan which, before its absorption by the city in 1912, had its own Town Council, Town Clerk, and Medical Officer of Health. Many old customs still prevail, such as the Govan Fair and the Govan Burgh Band. A local paper, the Govan Press, is published weekly, and the Govan Town Hall is regularly used and houses the offices of the South-Western Division of the Glasgow Health and Welfare Department.

A plan of the ward is shown in Figure 5. The River Clyde forms the northern boundary of the ward and there are extensive shipyards in the area which have earned a world-wide reputation. Most of the people of the ward are of the artisan classes and many are employed in the shipbuilding industry. The coat of arms of the burgh of Govan includes a ship being built and has the motto, "Nihil sine labore."

There is an air of independence and pride of birth amongst the people of Govan. This was particularly noticeable among the old people interviewed during this enquiry.

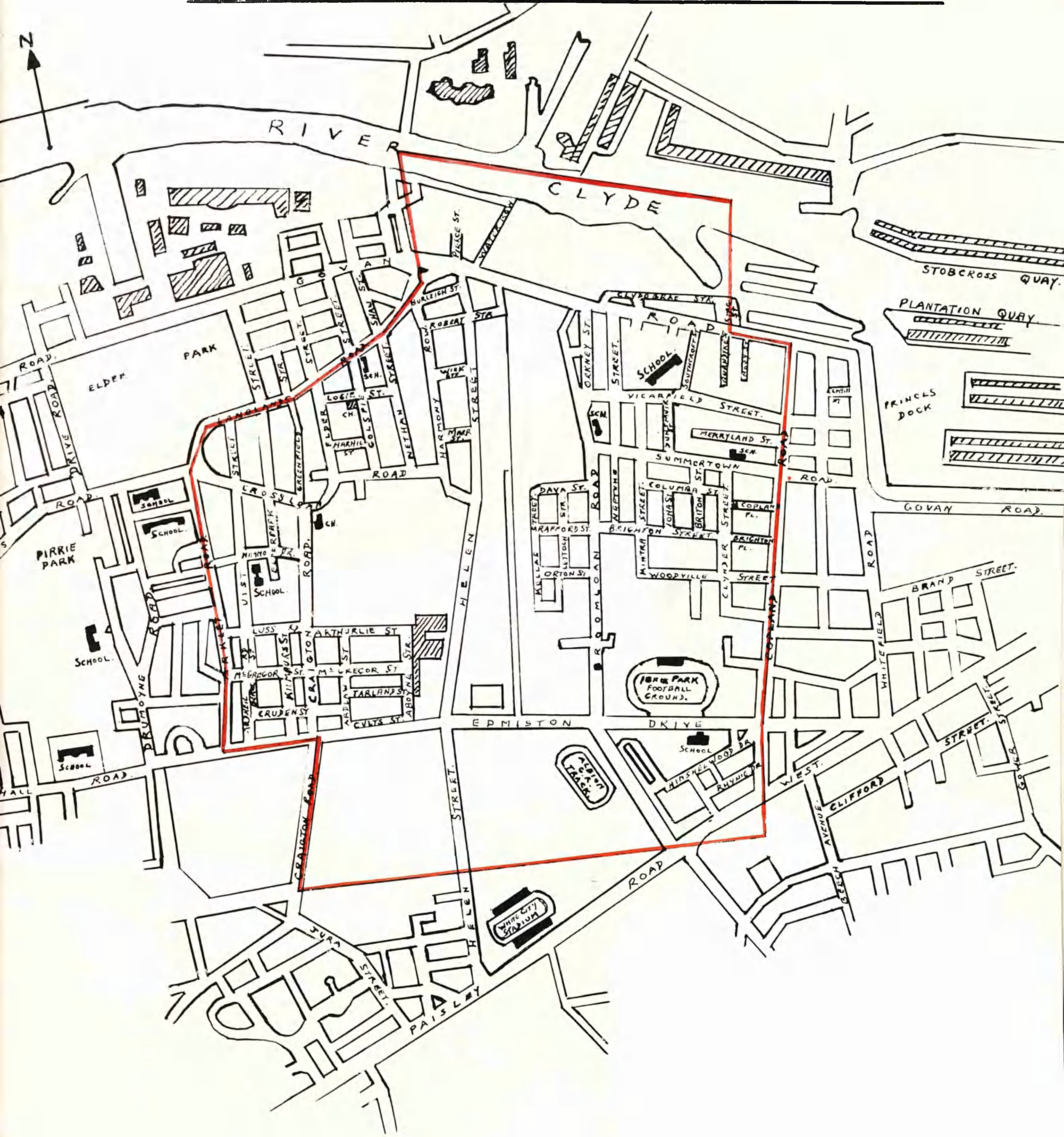
Statistics.

The ward covers an area of 489 acres and contains 9,200 houses within its boundaries. These house 35,152 persons in 21,900 rooms. The ward has a net density of 72 persons per acre and ranks sixth highest of the Glasgow wards for overcrowding. It has 161.7 persons per 100 rooms compared with 126.8 for the city as a whole.

Sixty-five per cent. of the houses are of one or two apartments and these house 58.6 per cent. of the population of the ward. This may be compared with the city as a whole in which 47.3 per cent. of the houses are of one or two apartments and which house 41.5 per cent. of the population.

Figure 5.

The Area of the Enquiry, The Govan Ward of Glasgow.



(From the Report of the 1951 Census and the Annual Reports of the Medical Officer of Health.)

Housing.

The housing is mainly of tenement type and is mixed in standard and appearance. Many of the worst tenement properties have been demolished and, in some instances, modern flatted houses built in their place. Many near-slums do exist, however. Some are in a bad state of repair and many have outside lavatories.

There are four areas of Corporation building within the ward. Two are of the "rehousing" type and, as such, are visited regularly by health visitors. Within the ward are several examples of well-kept terraced houses, some of which are quite large. There are also a few prefabricated houses. There are no common lodging houses within the ward.

Some illustrations of the houses in Govan are shown in the Appendix.

Social and Medical Amenities.

The ward is well equipped with social amenities. There are excellent transport facilities - tramway cars, omnibuses and the underground railway all link the ward with the centre of the city. From nearby Govan Cross is the well-known Govan ferry to the North bank of the river.

It is well supplied with shops and public halls and it has four cinemas either within or adjacent to the ward boundaries. Within the ward are a police station, a fire brigade station, a public baths and laundry and a refuse disposal works. Of the several football grounds within the boundary perhaps the best known is Ibrox Stadium. Although there is a lack of open space, two public parks adjoin the ward boundaries and they are well used by the elderly.

There are excellent facilities for religious worship. The Protestant and Roman Catholic churches are well represented within the ward, and in addition there are several minor religious organisations and outdoor missions. Many of the religious organisations visit regularly their elderly parishioners, and meetings for the elderly are becoming more common.

There are ample medical facilities in Govan. Although the one hospital within the boundary no longer acts as a casualty receiving hospital, the large Southern General Hospital is nearby and all accidents and emergencies are taken there.

There are fourteen general practitioners' surgeries in the ward, and at the time of writing these house twenty-seven medical practitioners. There are two child welfare clinics within or near the ward boundaries. In the Govan Town Hall are clinics for diseases of the chest, venereal diseases and B.C.G. vaccination. The Divisional Medical Officer and Divisional Sanitary Inspector are also located in this building.

There are many amenities for the three thousand elderly people in the ward. The Govan branch of the Old Age Pensioners' Association is situated at the Pearce Institute at Govan Cross. Meetings are held there twice weekly and on certain days of the week lunches are provided.

There is a district branch of the Society of Social Service in Govan Road. This Society has a small visiting service and also acts as an intermediary for the "Meals-on-Wheels" service. It co-ordinates much of the welfare work for the elderly in the area. Within the ward is a branch of the Glasgow District Nursing Association.

There are three hostels for the elderly in the district, one of which is Crookston Home. This latter Home is one of the finest in the

country and has gone some way to remove from the minds of the elderly in the district some of the misconceptions regarding elderly persons' homes.

Summary.

The Govan ward is described and some of its characteristics mentioned.

It is a crowded, bustling ward, industrial in type, well supplied with social and medical facilities, but its housing is inadequate. Its inhabitants, on the whole, are friendly and industrious people.

CHAPTER 4.

THE METHOD OF THE ENQUIRY.

A list was made of the elderly persons known, or believed, to be living alone in the Govan ward of the City of Glasgow. This list was broken down into smaller lists of those who lived in the same street. The enquiry proceeded street by street. In this way a considerable amount of time was saved in travelling from one person to another. Houses at which there was no response on the first visit could be re-visited more easily, as in many cases several days were spent on one street.

Usually, only part of a day could be devoted to the enquiry, morning or afternoon. The number of interviews in any one session varied with the ease of access to the elderly person, the length of the interview and the proximity of the others to be interviewed. Depending upon these circumstances, three to eight interviews could be carried out in any one session. No evening visits were attempted as it was thought that those who lived alone would be apprehensive of strange visitors in the evening.

The Period of the Enquiry.

Preparations for the enquiry were made in November and December, 1953. The interviews occupied the period January, 1954, to April, 1955. A small clinical study, described in later chapters, was made between May and July, 1955.

The Interviewers.

All the interviews were carried out by the writer in order to maintain a uniform standard when subjective assessments had to be made. Gradually a suitable interview technique was developed, and experience gained of the varying temperaments of the elderly which was valuable in assessing their various statements and claims.

After a very few interviews it was found that more satisfactory results could be obtained if the investigator was accompanied by a health

visitor. There were several advantages here. The presence of two persons, one a female, tended to allay the fears and suspicions of those who lived alone, particularly females. The health visitor's well-known green umiform was recognised by most of those visited. It assured them more than an official letter of identification that the visit was bona fide. By thus gaining their confidence the visit was made more easy.

As the health visitor became more experienced she became invaluable during the actual interview. Her presence helped put the elderly person at ease. By making conversation during the awkward lulls when notes had to be taken, an atmosphere of sympathy was established which aided interrogation.

It was also helpful to discuss with her aspects of difficult interviews. Her support and assistance in obtaining interviews with difficult or aggressive elderly persons were of great value. Two health visitors were employed in the enquiry.

The Visit.

The visit in almost every case was unexpected, the exceptions being those who were not at home on the initial visit. In such cases word was left with a neighbour to say that another call would be made on a certain day but the purpose of the visit was not disclosed.

Unexpected visitation has not been carried out by all other investigators. Sheldon, Hobson and Pemberton, and Scott and Williams (1954) found it advantageous to precede their visit with an explanatory letter. The group of London workers who wrote the report, "Over Seventy" (1954), had a field worker visit before the actual interview. Rowntree (1947), on the other hand, employed a system of unexpected visitation.

In this enquiry it was thought that an unexpected visit would show conditions as they really were and not as they might be made to appear

for an official visitor. That this might happen was demonstrated during the enquiry. An elderly man was asked if we might photograph his house the following day. Permission was given, but we arrived to find that a daughter had been hastily summoned to make the place tidy before it was photographed.

The initial fear that an unexpected visitor might not be admitted to the house was not fulfilled, but a good deal of time was spent on the doorstep explaining the purpose of the visit. Sometimes these explanations had to be made in front of an interested audience of neighbours and, if the elderly person was hard of hearing, in a loud voice. On several occasions they had to be made through semi-opened doors and once through a letter-box.

This time, however, was not ill-spent. It helped to establish contact with the subject, and when confidence was won and interest aroused the interview could be proceeded with more easily. It was surprising, nevertheless, to find how many elderly persons living alone allowed the team to enter their houses and be seated before asking the purpose of the visit.

The other disadvantage to unexpected visitation is that the elderly person might not be at home. This was not found in practice to be a major drawback. Most of the elderly were at home on the first visit and almost all who were not stayed in for the return visit.

To help overcome this disadvantage, the time and site of the visit were carefully selected. For example, visits were not made too early in the morning when the elderly person might still be in bed. Streets nearby were never visited on the afternoons that the Old Age Pensioners' Association held its meetings. Friday mornings proved unsuitable as many of the elderly drew their pension and did their weekly shopping at that time.

If there was no response to our knock it became our practice to knock on a neighbour's door to make enquiries or leave word for a future visit. In a surprising number of cases neighbours either had keys or knew methods of securing the attention of the occupant. This was particularly helpful in obtaining interviews with deaf persons. Some of the latter had door bells which caused a light to flash inside the house. Unlike Sheldon, we had no occasion to bless those who kept dogs to help them become aware of callers, as most of the dogs we encountered were rather aggressive.

An elderly person who lived alone was visited at least three times before being classed as not responding to visitation. Attempts were usually made to arrange suitable times of visitation with the neighbours on these occasions. Seven elderly persons living alone were thus classified.

In the case of those who did not live alone, two visits only were made as an appointment could usually be made with a relative. It was our experience that if people were not at home for the second visit, they did not wish to be interviewed. Thirty-six who did not live alone came into this category. In certain instances we were asked to return at a more convenient time.

The over-all impression of this method of visitation is that it is quite practicable. This may have been due to the co-operation of the elderly people of Govan who appeared ready to listen to anyone interested in their problems. Only occasionally had hostility to be overcome. Many, however, were dubious of the value of such an enquiry and many asked what immediate benefit would accrue to them.

The Interview.

When the person to be interviewed answered the door, the investigator introduced himself and explained that he was carrying out an enquiry on "how elderly people managed to get on nowadays." Some

general conversation usually took place on the door-step during which co-operation was asked for. The team were usually asked to enter the house, although in some cases permission to enter had to be asked. Once seated, the interview was started.

The first few minutes were usually spent in general conversation. The questionnaire was not produced until a sympathetic atmosphere had been created. The health visitor was very useful at this stage as she assisted in the general conversation and helped to overcome any initial shyness. Occasionally she took over some household task, such as watching a meal cooking, while the interview progressed.

Most of those interviewed grasped the idea of the interview and many expressed gratitude that an interest was being taken in them. Others were more concerned with where we had obtained their names. Such elderly persons were told that their name had been supplied by another elderly person. It was found important to make it clear from the start who we were and that we were from the Health and Welfare Department.

The average interview took about thirty minutes; some were shorter and some a good deal longer. No attempt was made to hurry an interview as this resulted in a falling off of co-operation. The garrulous old person was often a mine of information concerning the background and difficulties of living alone. In every case, however, both as a matter of courtesy and in order to obtain background information, the garrulous person was patiently listened to, although in practice it was found that they could be diverted into desired channels without giving offence.

Care had often to be taken in the phrasing of questions and in the order in which they were put. The amusements and hobbies of old people often are related to income. Some were unhappy because they could not afford a

radio licence. Enquiries into income in its relation to the life they lived had to be put delicately.

The interview was conducted chiefly by friendly conversation, and direct questioning avoided as much as possible. In interviewing one who did not live alone, it was usually the case that others were present. It became surprisingly difficult sometimes to obtain answers from the elderly person owing to family interruptions. Frequently one had to be persistent to prevent the rest of the household answering the questions, but generally speaking the relatives were helpful and often each question produced a discussion as a form of answer.

The interview completed, the questionnaire was filled in without being overlooked by the elderly person or by one of the family, but occasionally the questionnaire had to be rewritten immediately afterwards as the investigator was unable to avoid being overlooked.

It was clear that to many the visit was a welcome break in the routine of their daily lives. Such persons were often reluctant to let us leave and always asked when we would be back. At the conclusion of the interview, the names of other elderly persons were sought. Not infrequently the elderly person who had been interviewed took us personally to others in the same stair.

Many seized the opportunity both during and after the interview to ask our advice on various problems. Queries concerning pension rights, supplementary grants, exemption from prescription charges and how to renew inadequate spectacles became commonplace. It became obvious during the course of the enquiry that greater effort was needed to disseminate information to the elderly of the facilities and amenities available to them.

Before leaving, the investigator again made it clear who he was

and where he came from. This was found to be helpful as in some cases relatives reported to the local Health and Welfare Office to make further enquiries about the purpose of the interview.

The Questionnaire.

The form of questionnaire is reproduced in Figure 6. It was designed to give an adequate coverage of certain medical and social conditions which might exist amongst the elderly who lived alone. A broad outline was envisaged rather than a series of detailed questions.

The questionnaire was drafted in its final form after ten pilot interviews had been carried out. It was planned as an outline to be followed in obtaining a medico-social case history. It was not designed as a series of questions with mutually excluding answers. Ringing of answers was carried out primarily for ease of completion and multiple ringing with explanatory notes was frequently used. Adequate space was left for comments in each section. An example of a completed form is shown in Figure 7.

It was sometimes surprisingly difficult to make an accurate answer to the questions on the questionnaire. For example, an elderly lady left her home once a week to collect her pension and do some shopping. Her married daughter did her day-to-day shopping. In such a case a decision had to be reached on whether the old lady was able to do her own shopping.

Similarly, decisions had to be reached on other matters; for example, the assessment of the cleanliness of the house or the subject's mental state. These decisions were often highly subjective and may well have differed from those of another observer. As they were all made by the one investigator, it is hoped that they are comparable in accuracy.

Much of the information had to be obtained by replies to questions.

FIGURE 6.

SURVEY OF THE AGED IN THE GOVAN WARD.

Name:_____ Male / Female Age: ____ M/S/W/Sep.

Address:_____ Occupation:_____

HOUSING DETAILS

No. of Rooms: Position of House: Gas/Elec. Hot Water: W.C. inside / outside

Live alone/with spouse/with family/others. State of House: Clean/Fair/Dirty.

Additional Notes:_____

PERSONAL DETAILS

Personal Cleanliness: Clean/fair/dirty. Able to get out: Do own shopping:

Do own cooking: Do own washing:

Receive help from others: Spouse/family/neighbours/others.

Nature of help: Shopping/washing/cooking/cleaning.

Who will look after you in the event of illness? Spouse/family/neighbours/don't know.

Any infirmity - Mental: Normal/impaired/senile.
Eyesight: Satisfactory/poor/almost blind/blind.
Spectacles: Not required/distance/reading/both.
Hearing: Normal/poor/very deaf.
Locomotion:
Other:

In hospital in last six months? In-patient/out-patient.

If so, with what?

Does family doctor visit? How often?

Is surgery attended? How often?

Additional Notes:_____

MEDICAL CONDITION

Dizzy turns: Stomach upsets: Chronic bronchitis:

Painful feet: Varicose veins:

Any other medical condition:_____

Who attends patient? Self/spouse/family/neighbours.

Confined to bed? Wholly/partially/not at all.

Able to go to lavatory? Unaided/with help/not able.

Is nursing required? Who does nursing?

Incontinent of urine? Incontinent of faeces?

If incontinent, who does washing?

Does home nurse attend? On hospital waiting list?

Does home help attend? Additional aid?

Additional Notes:_____

FIGURE 6a.

FINANCIAL DETAILS

Old Age Pension? Is this sole income? National Assistance?

Does family help? Dependent on savings?

Additional Notes: _____

LEISURE DETAILS

Occupation at present: Housekeeper/part-time employment/full-time employment/nil.

Is there a wireless? Reading?

Member of Church? Is Church attended? Does padre visit?

Go to pictures? Member of an Old Age Club?

Does family visit? If so, how often?

Other recreations:

Additional Notes: _____

REMARKS CONCERNING RELATIVES

If relative is looking after aged person, is relative able to get out at night?

Is relative able to get a holiday?

DETAILS OF DIET

State of nourishment: Normal/under-nourished/overweight.

Meat eaten: Daily/occasionally/rarely or not at all.

Vegetables eaten: Daily/occasionally/rarely or not at all.

Fruit eaten: Daily/occasionally/rarely or not at all.

Fish and chips: Daily/occasionally/rarely or not at all.

Loneliness: Rarely/lonely at times/very lonely.

Attitude to Old Folks' Home: Favourable/unfavourable/undecided.

ADDITIONAL NOTES AND RECOMMENDATIONS

Because of this the degree of accuracy cannot be guaranteed. Whenever possible, however, answers were checked in the course of the interview, and some had later to be altered or modified, due to further statements made in the course of the interview. Occasionally deliberate lying was encountered, as in the case of a male who said that he was living by himself when it was obvious from the household arrangements that this was not the case. He was probably stating that he was living alone in order that his supplementary money grant would not be modified.

The information was obtained and the assessments made on the basis of one interview. Many cases who were in need of medical or social care were, of course, visited more than once, but the assessment was made on the first visit.

No medical examinations were carried out and the diagnosis and assessment of medical complaints were based on the elderly person's history and on what could be observed. When further medical information was thought to be necessary, the subject's medical practitioner was consulted. In the same way, if it was thought that medical attention was required the medical practitioner was informed.

It says much for the tolerance of the medical practitioners in Govan that none complained of these visits. All of the practitioners so consulted expressed their interest in the enquiry and promised their co-operation. As time went by, some took to referring their elderly patients with social problems for help and advice. Others requested visits to certain sick people in the hope that removal to hospital could be arranged.

Numerical Results of the Enquiry.

Questionnaires were completed for 347 elderly persons living alone. Seven-hundred-and-four questionnaires were completed for elderly persons not living alone. At the end of the enquiry the information obtained was

FIGURE 7.

SURVEY OF THE AGED IN THE GOVAN WARD.

Name: A. BROWN (Male / Female) Age: 71 M/S/W/Sep.

Address: 54 UIST ST. Occupation: RIVETER (RETD.)

HOUSING DETAILS

No. of Rooms: 1 Position of House: 1 Gas/Elec. Hot Water: N.1 W.C. inside/outside

Live alone/with spouse/with family/others. State of House: Clean/Fair/Dirty.

Additional Notes: Two Sons and a daughter. Sons visit occasionally, daughter every week. All live nearby

PERSONAL DETAILS

Personal Cleanliness: Clean/fair/dirty. Able to get out: Daily Do own shopping: yes

Do own cooking: yes Do own washing: yes, but daughter helps

Receive help from others: Spouse/family/neighbours/others.

Nature of help: Shopping/washing/cooking/cleaning.

Who will look after you in the event of illness? Spouse/family/neighbours/don't know.

Any infirmity - Mental: Normal/impaired/senile.
Eyesight: Satisfactory/poor/almost blind/blind.
Spectacles: Not required/distance/reading/both. — Reading glasses need to be renewed
Hearing: Normal/poor/very deaf.
Locomotion: complains of difficulty of getting about - arthritis of knees.
Other: Had cataract ① eye: operated on 2 years ago.

In hospital in last six months? No In-patient/out-patient.

If so, with what? —

Does family doctor visit? No How often? —

Is surgery attended? yes How often? monthly

Additional Notes: Took Pneumonia last Christmas but family wouldn't let him be removed and looked after him at home

MEDICAL CONDITION

Dizzy turns: No Stomach upsets: yes Chronic bronchitis: yes

Painful feet: yes Varicose veins: yes + a varicose ulcer

Any other medical condition: Arthritis of knees (mild). Headaches: States that he has high blood pressure. Teeth occasional nigons. Frequency - ? enlarged prostate

Who attends patient? Self/spouse/family/neighbours.

Confined to bed? Wholly/partially/not at all.

Able to go to lavatory? Unaided/with help/not able.

Is nursing required? No Who does nursing? —

Incontinent of urine? No Incontinent of faeces? No

If incontinent, who does washing? —

Does home nurse attend? No On hospital waiting list? No

Does home help attend? No Additional aid? —

Additional Notes:

FIGURE 7a.

FINANCIAL DETAILS

Old Age Pension? yes Is this sole income? No National Assistance? yes

Does family help? occasionally gives help. Dependent on savings? Nil.

Additional Notes: Has a small pension from Army

LEISURE DETAILS

Occupation at present: Housekeeper/part-time employment/full-time employment/nil.

Is there a wireless? No (would like one but can't afford it) Reading? yes. Enjoys reading. mainly newspapers

Member of Church? yes Is Church attended? No Does padre visit? Monthly

Go to pictures? No Member of an Old Age Club? No

Does family visit? yes If so, how often? weekly

Other recreations: Enjoys walks. visits to beach, library. works as a "knocker up"

Additional Notes:

REMARKS CONCERNING RELATIVES

If relative is looking after aged person, is relative able to get out at night?

Is relative able to get a holiday?

DETAILS OF DIET

State of nourishment: Normal/under-nourished/overweight.

Eats at a restaurant twice / week.

Meat eaten: Daily/occasionally/rarely or not at all.

Vegetables eaten: Daily/occasionally/rarely or not at all.

Fruit eaten: Daily/occasionally/rarely or not at all.

Fish and chips: Daily/occasionally/rarely or not at all.

Loneliness: Rarely/lonely at times/very lonely.

Attitude to Old Folks' Home: Favourable/unfavourable/undecided.

ADDITIONAL NOTES AND RECOMMENDATIONS

Has false teeth but doesn't wear them.

Goes for a walk at 3.30 - 5 p.m. acts as a "knocker - up" for a postman, a baker and four other people. He walks with postman on his beat.

Goes to bed at 2 p.m. Makes pocket - money this way

Likes living alone - "I'm my own boss". Sometimes lonely. Takes an occasional drink.

transferred to Hollerith cards and the material subjected to analysis by mechanical computers.

Commentary.

In spite of the visits being unexpected, much co-operation was obtained from the elderly persons visited and from their relatives, which undoubtedly reflects the interest and good-will of the people of Govan. The great majority of those interviewed were interested in the enquiry. Many gave interviews under difficult conditions, as when unwell, confined to bed or occupied with some household task. Many gave complete co-operation on the simple understanding that it was "to help old people."

In only three instances was co-operation completely refused. A rather aggressive male refused to be interviewed with words to the effect that such enquiries were useless and everyone knew how old people got on. The other two consisted of a solitary elderly couple who had a grievance over the distribution of tickets for an Old Age Pensioners' treat.

In most cases the younger generation, when present, was interested and helpful. On several occasions relatives reported to the Health and Welfare Office with additional information for the record.

The interest shown and the amount of co-operation given by so many different people are indicative that the plight of the elderly is becoming well recognised by the public and that they are anxious to see attempts made to meet their needs and improve their lot.

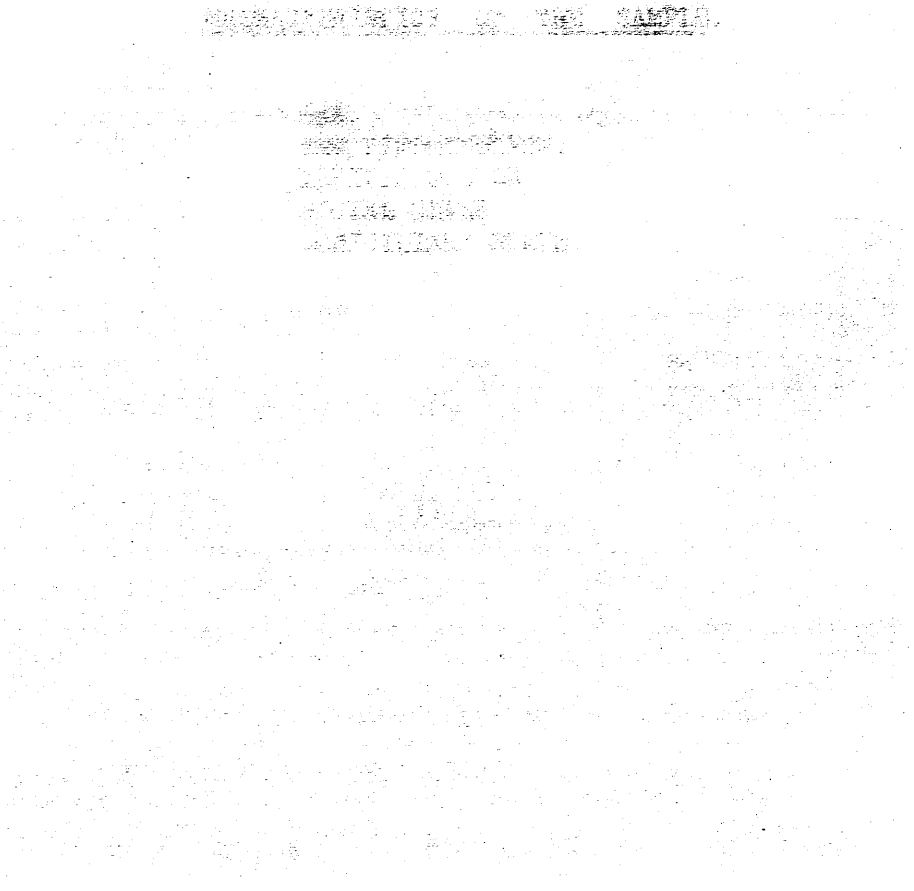
Summary.

The methods used in conducting the enquiry are described. The interviews were carried out by the one investigator who was accompanied by a health visitor. The value of a health visitor in such an enquiry is stressed.

The visits were, in almost every case, unexpected. Nevertheless a high standard of co-operation was obtained. It is concluded that unexpected visitation is a practicable procedure.

The form of the interview and the questionnaire used are described.

It is concluded that the amount of co-operation obtained from both old and young alike indicates the general public's awareness of the problems of the elderly.



CHAPTER 5.

CHARACTERISTICS OF THE SAMPLE.

SEX.
AGE DISTRIBUTION.
MARITAL STATUS.
SOCIAL CLASS.
DOMICILIARY STATE.

Interviews were obtained with 347 elderly persons living alone and 704 not living alone. Both groups came from the same environmental background. Certain characteristics of these groups are worthy of notice.

The Elderly Who Lived Alone.

This sample consisted of 347 elderly persons who were the sole occupants and householders of the houses visited.

Sex.

Most of those who lived alone were females. Of the 347 persons interviewed, 286 (82.4 per cent.) were female and 61 (17.6 per cent.) were male. Excluding females under the age of 65, there were four times as many women as men.

Table 5.

The Distribution of 347 Elderly Persons Living Alone by Age and Sex.

Age in Years	Male	Female	Total	Ratio of Females to Males
60-64	-	28 (9.8%)	28 (8.1%)	-
65-69	15 (24.6%)	58 (20.3%)	73 (21.0%)	3.9
70-74	17 (27.9%)	75 (26.2%)	92 (26.5%)	4.4
75-79	22 (36.1%)	73 (25.6%)	95 (27.3%)	3.3
80-84	6 (9.8%)	38 (13.3%)	44 (12.7%)	6.3
85+	1 (1.6%)	14 (4.8%)	15 (4.3%)	14
Total	61 (100%)	286 (100%)	347 (99.9%)	4.7

As is shown in Table 5, the ratio of females to males never fell below 3.3 to 1 in any age group. In the age group 80-84 years the ratio was 6.3 to 1 and over the age of 85 it was 14 to 1.

Table 6.

The Distribution of the Elderly Population of the Govan Ward by Age and Sex. (From the Report of the 1951 Census.)

Age in Years	Male	Female	Total	Ratio of Females to Males
60-64	-	663 (33.4%)	663 (21.5%)	-
65-69	455 (41.3%)	532 (26.8%)	987 (31.9%)	1.2
70-74	357 (32.4%)	385 (19.4%)	742 (24.1%)	1.1
75-79	188 (17.1%)	249 (12.6%)	437 (14.2%)	1.3
80-84	82 (7.4%)	108 (5.4%)	190 (6.2%)	1.3
85+	20 (1.8%)	46 (2.3%)	66 (2.1%)	2.3
Total	1,102 (100%)	1,984 (99.9%)	3,086 (100%)	1.2

The elderly population of the Govan ward, as recorded in the 1951 Census, is shown in Table 6. While there are more females than males, the excess of females is much less than among the elderly who live alone. This table shows that the ratio of females to males never exceeds 1.3 to 1 in any age group below the age of 85. Over this age a ratio of 2.3 to 1 is reached.

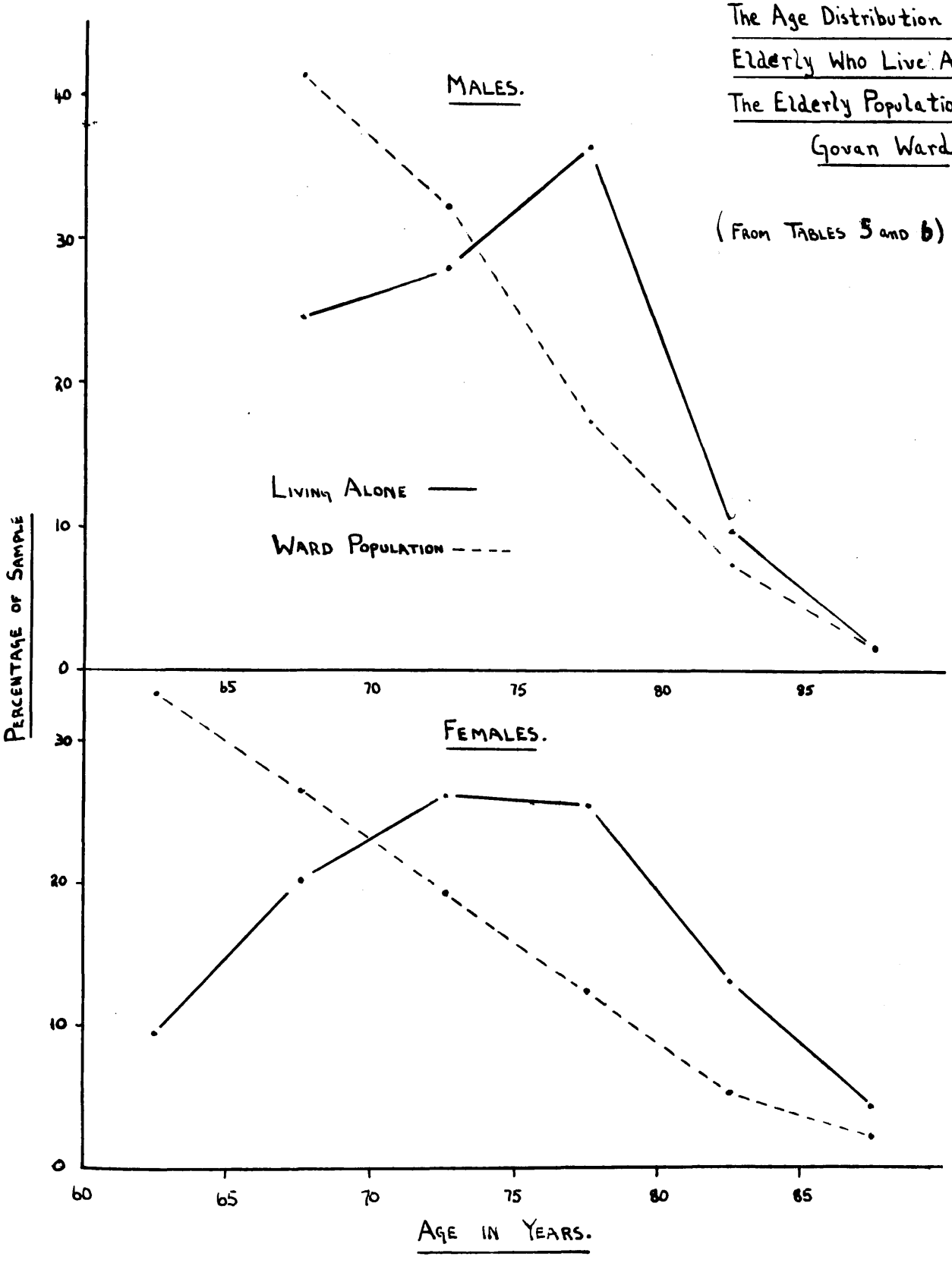
The large proportion of females amongst the elderly who live alone cannot be explained, therefore, in simple terms of an excess of females over males in the elderly population as a whole. Nor is it due to an excess of spinsters in the group. Thirty-nine (13.6 per cent.) of the females were spinsters and seven (11.5 per cent.) of the males were bachelors. There was, therefore, little difference in the percentages of the unmarried among males and females.

It may be suggested that the reason why a larger proportion of women live alone depends largely upon the normal woman's more intimate connection with housekeeping. Left alone, a woman is more likely to remain in her own home than a man. She is used to running a home and can keep

Figure 8

The Age Distribution of the Elderly Who Live Alone, and The Elderly Population of the Govan Ward.

(From Tables 5 and 6)



herself fully occupied with, and achieve satisfaction from, the task. A man, as a rule with little or no practice, is less able and less inclined to manage a home alone. It is probable also that females have more intense and more highly developed associations with and around their homes than have males. Consequently they are more likely to resist suggestions to remove to another household.

Further, because of the belief that a man is not able to care for himself, males are more likely to have greater pressure brought to bear upon them by their families to move to another household. They are also more likely to respond to that pressure than females. A daughter or a daughter-in-law is probably more willing to accept an elderly male into her house than an elderly female - especially an elderly female who has been used to running her own home.

That more females than males live alone has also been reported by Smith (1932), Curran et al (1946), Rowntree (1947), Simonds and Stewart (1954) and Cowan (1955).

Age Distribution.

Table 5 shows the age distribution of the sample. Of the 347 elderly persons interviewed, 187 (53.8%) were in the decade 70-79 years, 101 (29.1%) were under the age of 70, and 59 (17%) were over the age of 80. Only 28 (9.8%) of the females were within the age group 60-64 years.

The age distribution of the elderly population of the ward as a whole is shown in Table 6. Over the age of 80 were 8.3 per cent.; in the decade 70-79 were 38.3 per cent.; and 53.4 per cent. were under 70. One third of the females were in the age group 60-64 years.

It is seen that the age distribution of the group who lived alone is different from that of the elderly population of the ward as a whole. In the whole population the proportion of elderly in each age group decreased

steadily with each succeeding age group, irrespective of sex. Among the elderly who lived alone, the proportions increased to a peak in the decade 70-79 years, after which they fell with each succeeding age group. This is illustrated in Figure 8.

This difference in distribution is due to the small numbers in the earlier age groups living alone, particularly those in the age group 60-64 years. The small number in this age group is not surprising. At this age a person is still likely to be living with a spouse or have a member of the family living in the household. As age increases, so do the chances of being left alone by the inevitability of death or of family exodus.

The small number in this age group may also be a result of the methods used to obtain the sample. It may be that the younger members of the elderly who live alone do not reach the notice of the societies from which the working list was compiled. It is not thought, however, that this is a major source of error. Our interest lay particularly in those who lived alone and we asked about them specifically during the interviews. On several occasions we were directed to people who were too young to be included in the sample.

The much smaller number of people over the age of 80 is probably chiefly due to the normal toll of death. Also, as infirmity increases with age, so does the ability to remain living alone. This is particularly noticed in males living alone where, over the age of 80, the ratio of females to males increases markedly.

Marital Status.

The marital status of the group who lived alone is shown in Table 7. As might be expected, the majority were widowed. Thus, 84.4 per cent. of the group were widowed, 10.4 per cent. were unmarried, and 5.2 per cent. were separated from their spouses.

Table 7.

The Marital Status of 347 Elderly Persons Living Alone and 704 Elderly Persons Not Living Alone.

Marital Status	Male	Female	Total
Living Alone:			
Unmarried	7 (11.5%)	39 (13.6%)	46 (10.4%)
Widowed	47 (77.0%)	236 (82.5%)	283 (84.4%)
Separated	7 (11.5%)	11 (3.8%)	18 (5.2%)
Total	61 (100%)	286 (99.9%)	347 (100%)
Not Living Alone:			
Unmarried	22 (8.6%)	28 (6.2%)	50 (7.1%)
Widowed	60 (23.5%)	240 (53.5%)	300 (43.6%)
Separated	4 (1.6%)	6 (1.3%)	10 (1.4%)
Married	169 (66.3%)	175 (39.0%)	344 (48.9%)
Total	255 (100%)	449 (100%)	704 (100%)

Considered by sex, 82.5 per cent. of the females were widowed compared with 77 per cent. of the males; 13.6 per cent. of the females were unmarried as were 11.5 per cent. of the males; and 3.8 per cent. of the females were separated from their husbands against 11.5 per cent. of the males from their wives.

Of the 18 in the group who were separated from their spouses, five (27.8%) were separated because of physical or mental illness. The remainder were legally separated or had separated by mutual agreement.

Social Class.

An attempt was made to allocate the elderly persons interviewed to various social classes. This was based on the occupation of the person interviewed or, in the case of widows, the occupation of the late husband.

Great difficulty was experienced, however, in making an accurate assessment in the case of widows. Many did not know their husbands' exact

occupation, and phrases such as, "He worked in the yards," or "He was with Fairfield's," were often the best information that could be obtained. Thus, while it was clear that many did not belong to the professional or clerical classes, it was often impossible to decide whether the husband had been a skilled, semi-skilled or unskilled worker. As a result, no attempt has been made to analyse this large group by social class.

Table 8.

The Social Class of Males and Unmarried Females, Living Alone and Not Living Alone.

Social Class*	Living Alone		Not Living Alone	
	Male	Female	Male	Female
I	5 (8.2%)	3 (7.7%)	14 (5.5%)	2 (7.1%)
II	35 (57.4%)	10 (25.6%)	121 (47.4%)	5 (17.9%)
III	21 (34.4%)	12 (30.8%)	120 (47.1%)	9 (32.1%)
Housewife	- -	14 (35.9%)	- -	12 (42.8%)
Total	61 (100%)	39 (100%)	255 (100%)	28 (99.9%)

*Social Class I represents professional and clerical workers;
II represents skilled and semi-skilled workers; and
III represents unskilled workers.

The only groups in which a fair degree of accuracy could be ensured were males and unmarried females. The social class of these two groups is shown in Table 8 where, for simplicity, a modification of the social classification of the Registrar General is used. It is seen from this table that over 90 per cent. of those interviewed belonged to the skilled, semi-skilled and unskilled worker classes.

This enquiry, therefore, is concerned with the artisan and unskilled working classes. This is to be expected from the nature of the district in which the enquiry was conducted.

The Elderly Who Did Not Live Alone.

The composition of the group of old people who did not live alone by sex and age is shown in Table 9. Unlike the group of elderly who lived alone, there was no heavy preponderance of females. Thus, of the 704 subjects in the group, 449 (63.8%) were females and 255 (36.2%) were males. Excluding those females who were under the age of 65, the ratio of females to males was 1.4 to 1. This is only slightly greater than the ratio of females to males in the elderly population of the ward as a whole.

Table 9.

The Age and Sex Distribution of 704 Elderly Persons Not Living Alone.

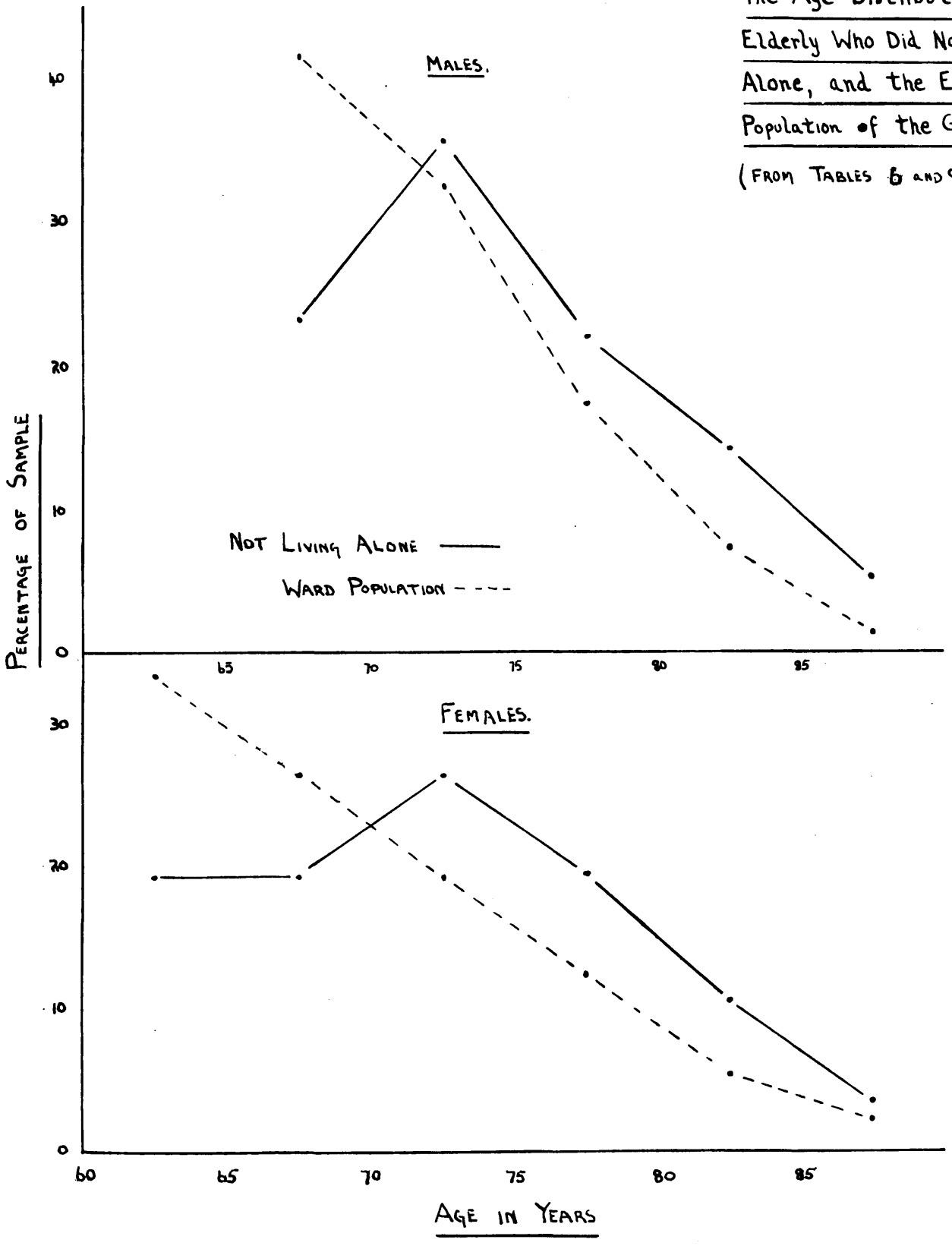
Age in Years	Males	Females	Total	Ratio of Females to Males
60-64	-	88 (19.6%)	88 (12.5%)	-
65-69	59 (23.1%)	88 (19.6%)	147 (20.9%)	1.5
70-74	91 (35.7%)	119 (26.5%)	210 (29.8%)	1.1
75-79	56 (22.0%)	89 (19.8%)	145 (20.6%)	1.3
80-84	36 (14.1%)	48 (10.7%)	84 (11.9%)	1.3
85+	13 (5.1%)	17 (3.8%)	30 (3.2%)	2.3
Total	255 (100%)	449 (100%)	704 (99.9%)	1.4

The age structure of the sample, however, differs from that of the elderly population of the ward as a whole. A smaller proportion of the younger people among the elderly have been interviewed than would have been expected considering the age structure of the elderly population of the ward. As with the elderly who lived alone, the proportions of elderly in the various age groups increased to a peak in the quinquennium 70-74 years, after which it fell. The age distribution of the group who did not live alone compared with that of the elderly population of the ward as a whole is illustrated in Figure 9.

FIGURE 9.

The Age Distribution of the Elderly Who Did Not Live Alone, and the Elderly Population of the Govan Ward.

(FROM TABLES 6 AND 9)



This difference is a result of the technique used to obtain the sample. The group was isolated by asking the elderly person living alone for the names of other elderly persons living on the same or adjacent entries. As a result only persons who were obviously elderly tended to be brought to our attention. This fault could not be remedied although we specified the lower age limit of those we wished to interview.

The group, however, was not intended to be an exact replica of the structure of the elderly population of the ward. It was designed as a group which could be used for the purposes of comparison with the group of the elderly who lived alone.

The age structure of the two groups of elderly persons is comparable and no gross differences exist. This is illustrated in Figure 10. In the same way, as is shown in Table 8, there is little difference in the distribution by social class. The difference in the distribution by sex is inherent in the nature of the group of the elderly who lived alone.

Domiciliary State.

The domiciliary state of the group of the elderly who were not living alone is shown in Table 10. Of the 704 persons interviewed, 267 (37.9%) were solitary old people living with their family; 151 (21.4%) lived with husband or wife and their family; and 193 (27.4%) lived solely with husband or wife. Forty-five (6.4%) lived with an elderly relative and 12 (1.7%) lived with an aged friend; 27 (3.8%) lived with lodgers and nine (1.3%) lived as lodgers.

FIGURE 10.

The Age Distribution of the Elderly Who Lived Alone and The Elderly Who Did Not Live Alone.

(FROM TABLES 5 AND 9)

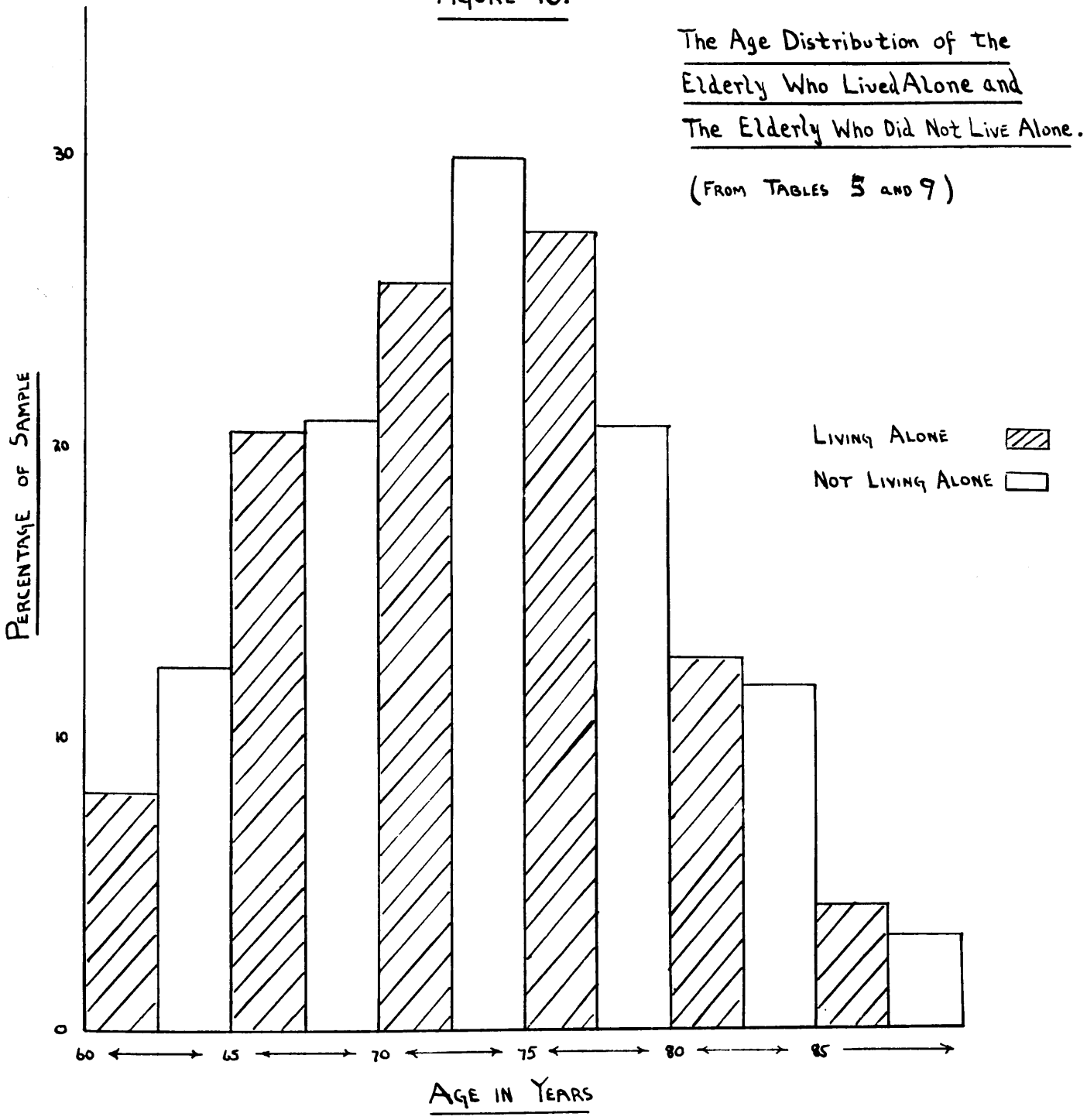


Table 10.

The Domiciliary State of 704 Elderly Persons Not Living Alone.

Domiciliary State	Male	Female	Total
Living with Spouse only	95 (37.3%)	98 (21.8%)	193 (27.4%)
With Spouse and Family	74 (29.0%)	77 (17.1%)	151 (21.4%)
Living with Family	44 (17.3%)	223 (49.7%)	267 (37.9%)
Living with Aged Relative	18 (7.1%)	27 (6.0%)	45 (6.4%)
Living with Aged Friend	6 (2.4%)	6 (1.3%)	12 (1.7%)
Living with Lodgers	11 (4.3%)	16 (3.6%)	27 (3.8%)
Living as a Lodger	7 (2.7%)	2 (0.4%)	9 (1.3%)
Total	255 (100.1%)	449 (99.9%)	704 (99.9%)

Three-fifths of this group, therefore, were living in a household which contained at least one member of a younger generation. Almost half of those interviewed were living with their husband or wife.

Marital Status.

The marital status of the group is shown in Table 7. This table shows that 48.9 per cent. were married, 43.6 per cent. were widowed, 7.1 per cent. were unmarried and 1.4 per cent. were separated. There were slightly fewer unmarried persons in this group than in the group who lived alone. The difference in proportion is not large. In the same way, there were rather fewer who were separated from their spouse.

Social Class.

As with the group of elderly who lived alone, only the males and the unmarried females were analysed by social class. The distribution by social class is shown in Table 8. Again, the majority in the group belonged to the artisan and unskilled working classes.

Summary.

The characteristics of the two samples of elderly people interviewed are described.

Most of the elderly who lived alone were females. Reasons are put forward to account for this.

The age distribution of the group of elderly who lived alone was compared with that of the elderly population of the ward. Reasons are put forward for differences. The age distribution is also compared with that of the elderly who did not live alone.

Most of those interviewed belonged to the artisan or unskilled working classes.

The composition of the elderly who did not live alone by age, sex, marital state and domiciliary state is also described.

CHAPTER 6.

HOUSING AMENITIES.

The housing conditions of the elderly in the Govan ward are much the same as the housing conditions of the ward as a whole and are similar to those found in many other parts of the city. They are part of the general problem of housing in Glasgow.

Nevertheless, conditions which may be no more than an inconvenience to younger people can be matters of serious consequence to the elderly, particularly to those who live alone.

In Glasgow, Curran and his colleagues (1946) commented on the housing conditions of the group of elderly they visited. Although they said that in many cases the conditions would not be endured by the investigators or by a younger generation, nevertheless they considered that the great majority were satisfactorily housed. Ferguson (1948), reviewing a series of elderly persons in receipt of attention from home nurses in Glasgow, stated that many of the houses were quite unsuitable for old people.

Sheldon, in Wolverhampton, while not describing housing conditions in detail, devoted much attention to the difficulties entailed in climbing and descending stairs. Exton-Smith (1952), writing of St. Pancras in London, considered that many of the dwellings of the elderly people he visited were manifestly unsuited to their needs.

Comments on the housing problems of the elderly have also been made by Greenlees and Adams (1950) from Sheffield, by Thomson (1950) from Birmingham, by Geffen and Warren (1954) from Hampstead, by those who conducted the Hammersmith survey, "Over Seventy" (1954), by Rowntree (1947) who described housing conditions in town and rural areas, and by Scott and Williams (1954) who described the drawbacks of rural housing in Oxfordshire.

Unsuitable housing and lack of amenities are often the cause of

removal to hospital of an elderly person who, in better surroundings, might well have been treated at home. According to Evans (1955), unsuitable housing is a common cause of failure in elderly people to continue an independent existence. While it might not be agreed that it is a common cause, it is undoubtedly an important factor affecting the ability of the elderly who live alone to maintain their independence.

In this section, certain of the housing conditions of the elderly who live alone are described. Some criterion may be set up by describing features considered desirable in a house for the elderly, so that some ideal may be envisaged.

Briefly, such a house should have a pleasant aspect and a small garden. It should not be uphill nor difficult to reach. It should be easily managed and not burdened with complicated devices. It must be adequately heated and well lit. The cooking facilities must be safe, easy to manage and easy of access. There must be a good supply of hot water, and fuel should be stored inside so that the elderly person need not go outside in inclement weather. All open fires must have a fire-guard.

The basins and sinks are better high in order to prevent backache. There should be an indoor toilet and bath, the latter having a handrail. Floors should not be polished and are better covered with non-skid material. All cupboards, shelves and meters should be within easy reach of the house-holder when standing on the floor. If there are stairs they ought to be well lighted, easy to climb, non-skid and have a handrail as well as banisters.

The ideal house is small. For a single person or married couple, a living room, a bedroom which may be of the living room annexe type, a

kitchen-scullery and a toilet and bath are desirable. An additional room in which visitors might stay the night has not met with universal approval.

In every case the dwelling should be near shops, churches and the cinema; not far from public transport so that the elderly may visit and be visited with ease; near to young people and not one of a community of elderly persons' houses. (From Rowntree, 1947; "Age is Opportunity," 1949; and Mackintosh, 1952.)

Needless to say, the housing conditions of most of those visited in the present enquiry fell far below these ideals. Many of the houses visited illustrated the difficulties which may exist for an elderly person in an old property in a large city.

Type of House.

Three-hundred-and-seven (88.5%) of the elderly who lived alone lived in tenement flats, 25 (7.2%) in local authority flatted houses, 10 (2.9%) in terraced houses and five (1.4%) in "four-in-a-block" houses.

The preponderance of tenement dwellings is to be expected when the nature of the housing conditions of the Govan ward of Glasgow is considered. The scarcity of elderly persons living alone in flatted houses and "four-in-a-block" houses is due to the fact that most of such houses are owned by the local authority. In such houses priority is given to young and middle-aged couples with families.

This enquiry, therefore, is concerned mainly with the elderly who lived in tenement properties.

The Size of the House.

The sizes of the houses occupied by the elderly who lived alone are shown in Table 11. Ninety-four (27.1%) occupied a single-apartment house, 203 (58.5%) a two-apartment house, 42 (12.1%) a three-apartment house,

and the remaining eight (2.3%) occupied a house of four apartments or over. Of the last, two had more than six apartments and one had ten.

Table 11.

The Size of the Houses Occupied by 347 Elderly Persons Living Alone, and 704 Elderly Persons Not Living Alone.

Number of Apartments	Living Alone	Not Living Alone
1	94 (27.1%)	33 (4.7%)
2	203 (58.5%)	351 (49.9%)
3	42 (12.1%)	211 (30.0%)
4	4 (1.2%)	96 (13.6%)
5	2 (0.6%)	8 (1.1%)
6 and over	2 (0.6%)	5 (0.7%)
Total	347 (100.1%)	704 (100%)

Only eight (2.3%) persons were living in houses which were excessively large for their needs. At most, if those who occupied three-apartment houses are included, only 50 (14.4%) could be said to be occupying more space than was necessary for a single person.

It cannot be suggested, therefore, that the elderly who lived alone in the Govan ward were keeping overcrowded families out of larger houses, and it is unlikely that much housing space would be freed by the transfer of elderly people living alone to smaller accommodation.

A similar conclusion was reached in Hammersmith ("Over Seventy," 1954) with regard to the elderly in general. Opposing views have been put forward by Greenlees and Adams (1950) with regard to Sheffield, and by Black and Read (1947) with regard to Merseyside. Gray and Beltram (1950), in Hamilton, concluded that the elderly were "under-crowded" as far as detached, semi-detached and terraced houses were concerned but not in tenement and flatted houses. Sheldon (p. 161) found that in most of the homes he visited, the house had become too large and inconvenient for the old people to run.

As might be expected, those who did not live alone usually lived in larger houses. Thus, only 4.7 per cent. of those who did not live alone occupied a single-apartment house compared with 27.1 per cent. of those who lived alone. Houses of three apartments or more were occupied by 45.5 per cent. of those who did not live alone compared with 14.4 per cent. of those who lived alone.

This difference might be due to families in larger houses being more willing to accept their elderly parents or relatives; or to the elderly in larger houses having the space to accommodate their married children. It is not thought to be due to solitary elderly couples moving from larger to smaller accommodation as such transfers were rarely mentioned in interviews.

The Position of the House.

The position of the houses occupied by those who lived alone is shown in Table 12. Only 74 (21.3%) did not have to climb stairs to enter the house. One-hundred-and-twenty-six (36.3%) lived on the first floor, 89 (25.6%) lived on the second floor, 56 (16.1%) lived on the third floor and two (0.6%) lived on the fourth floor.

Fifty-seven (64.4%) of the elderly who lived on the second floor were over the age of 70 and 12 (13.5%) were over the age of 80. Of those who lived on the third floor, 45 (80.4%) were over the age of 70 and eight (14.3%) were over the age of 80. Three (5.3%) were over the age of 85.

Four-storied tenements were uncommon in this survey. Nevertheless, two elderly persons were interviewed who lived alone on the upper floor of such a tenement, one, a male aged 68, and the other a female aged 77.

The possibility that the elderly who lived alone might gravitate from upper to lower floors was considered. This could not be clearly demonstrated. The proportions on the ground floor belonging to the later

age groups were not greater than the proportions of the younger age groups; and the proportions on the third floor of later age groups were not smaller than the younger age groups (Table 12).

On the first and second floors, however, a trend with age seemed to exist. The proportion of each age group living on the first floor increased steadily with each succeeding age group, and the proportion on the second floor decreased steadily. This finding suggests that a tendency might exist for the elderly to migrate to houses on the first floor (Table 12).

It is well recognised that stairs present difficulties to a great many of the elderly. Many writers have commented on the strain that stairs impose on the elderly and the way in which their free passage to and from the home may be limited by them. (Exton-Smith, 1952; Chalke and Benjamin, 1953; Geffen and Warren, 1954; Amulree, 1955, etc.)

Sheldon (p. 35) found that 38.5 per cent. of his group had difficulty with stairs, and Gray and Beltram (1950) stated that 35 per cent. of their sample had similar difficulty. Exton-Smith (1952) considered that stairs were the cause of the high proportion of the elderly in his group being confined to the house. In the present enquiry, the question of difficulty with the stairs was not investigated. It was, however, mentioned on several occasions by the elderly persons interviewed. Cases were found where stairs presented real difficulty and hardship to those concerned. Comments were frequently passed on the effort required to climb stairs and on the need for frequent pauses during the journey.

The following examples illustrate the problem:-

L.T., a widow, aged 78. She was met as she came up the second flight of stairs. Because of dyspnoea she was unable to speak for several minutes.

J.C., a widow, aged 70, badly crippled with rheumatoid arthritis.

Table 12.

The Position of the Houses Occupied by 347 Elderly Persons Living Alone, by Age.

Position of the House	Age in Years						All Ages
	60-64	65-69	70-74	75-79	80-84	85+	
Ground Floor	6 (21.4%)	19 (26.0%)	17 (18.5%)	21 (22.1%)	9 (20.5%)	2 (13.3%)	74 (21.3%)
First Floor	6 (21.4%)	26 (35.6%)	32 (34.8%)	34 (35.8%)	21 (47.7%)	7 (46.7%)	126 (36.3%)
Second Floor	13 (46.4%)	19 (26.0%)	22 (23.9%)	23 (24.2%)	9 (20.5%)	3 (20%)	89 (25.6%)
Third Floor	3 (10.7%)	8 (11%)	21 (22.8%)	16 (16.8%)	5 (11.4%)	3 (20%)	56 (16.1%)
Fourth Floor	-	1 (1.4%)	-	1 (1.1%)	-	-	2 (0.6%)
Total	28 (99.9%)	73 (100%)	92 (100%)	95 (100%)	44 (100.1%)	15 (100%)	347 (99.9%)

She had to descend the stairs one at a time facing the wall and holding on to it, and often has to be helped to ascend the stairs.

J.G., a widow, aged 73, stated that she takes half-an-hour to climb the three flights of stairs to her house, due to the need for frequent rests.

Sheldon and Mair et al (1956), however, found that few elderly persons wished a change of house because of the inconvenience of stairs. While no figures are available, a similar impression was formed in this enquiry. Stairs, while frequently complained of, seemed to be accepted probably because they are a commonplace in Glasgow housing, and few expressed a wish for a change of house because of them. Some, indeed, on upper floors expressed a preference for height as they thought the air was better and that there was less noise.

It cannot be assumed that the elderly who live alone prefer ground floor houses. Many do not, because of the noise of the street, the nuisance of children in the back court, the fear of intruders and the additional work involved in keeping the common entry clean.

Lavatory Accommodation.

An evil feature of older tenement properties in Glasgow is the outside lavatory. It is usually situated on the same landing as the house or on a semi-landing reached only by descending stairs. It is rarely for the sole use of one household but usually has to be shared by all the families on the one floor. This may range from two to four families and sometimes more.

In a recent survey carried out by Mr. W.B. Easton, Divisional Sanitary Inspector of the South-Western Division of Glasgow, 3,962 (44%) of the 9,054 houses in the Govan ward were found to be without an inside water-closet. Further, it was found that of the 1,366 outside water-

closets, 709 (51.9%) were each shared by three households, 316 (23.1%) by four households, 35 (2.6%) by five households and 11 (0.8%) by six households. (W.B. Easton, 1955, personal communication.)

In the present enquiry it was found that 185 (53.3%) of the elderly who lived alone had no inside water-closet.

An outside water-closet is a disadvantage to any household, but to the elderly it may prove a real hardship. The journey is often disagreeable, especially when stairs have to be negotiated. This is particularly so in cold weather and at night. In winter the lavatory may be bitterly cold. It may be occupied when they reach it and the journey has to be repeated.

Many such lavatories are not kept clean and there is the risk of contracting dysentery, which is more or less endemic in Glasgow. Some elderly persons have to be assisted to the lavatory, and in this respect the elderly who live alone are at a disadvantage.

In times of illness an outside toilet adds greatly to the burden of nursing. Some patients who could reach an inside lavatory are quite unable to make the journey to an outside one.

An impression was formed during this enquiry that outside lavatories, in the case of those who lived alone, lead to the formation of insanitary habits; the use of the kitchen sink for urination, for example, and the use of chamber pots which lie for considerable periods before being emptied. This view has also been expressed by Banks (1953).

There is a definite need for indoor chemical closets for at least the more infirm of the elderly who live alone, with a scheme for the emptying of such closets.

Some outside lavatories are illustrated in the Appendix. In one an additional hazard is illustrated - a bicycle left on the semi-landing.

Baths and a Hot Water Supply.

The absence of a bath in the house appeared to be accepted with complacency. During the course of the enquiry it was noticed that only those houses which had a piped supply of hot water were likely to have a bath. These were the larger houses and the relatively recently built local authority houses.

It was found that not more than twelve per cent. of those who lived alone had a bath in the house. In Dundee, Mair et al (1956) found that a bath was a rarity, but in Hamilton, Gray and Beltram (1950) were able to state that only 31 per cent. of their group were without a bath in the house.

While a fixed bath in the house is a great advantage to the elderly it is much outweighed by the advantage of having an inside lavatory. Many of the elderly interviewed complained of not having an inside lavatory but only one of not having a fixed bath. The impression was formed that very few of the elderly who lived alone regularly took a bath, as through the long years of their lives they had become accustomed to living in houses without baths. The position might have been quite different if a fixed bath had been commonplace.

Only 39 (11.2%) of those who lived alone had a piped supply of hot water in the house. The remainder had to heat it as it was required. Lack of a ready supply of hot water is a hindrance to the maintenance of personal and household hygiene. Nevertheless, it was not considered to be of great importance in regard to the cleanliness of those interviewed. As is shown in a later section, despite the absence of piped hot water the great majority of those interviewed were clean, as were their homes.

The great disadvantage of not having a hot water supply is that it

causes increased expense and trouble to those who try to maintain a high standard of cleanliness. It also allows the heat from the common coal fires to be imperfectly utilised.

Illumination.

Of the 347 houses occupied by the elderly who lived alone, 279 (80.4%) were illuminated by electricity, 65 (18.7%) by gas, and three (0.9%) which had neither gas nor electricity were lighted by paraffin lamps or candles.

It was surprising to find, in this day and age, that 68 (19.6%) of those who lived alone should be without electricity. Electricity, however, has to be installed at the expense of the householder. If it has not been installed before the onset of old age, it is unlikely to be put in afterwards, although in some cases it had been installed by the family.

Of the three who had neither gas nor electricity, one had had the gas fittings removed after an incident in which she was almost gassed. The remaining two had had their gas cut off for such a long period for non-payment of accounts that they could be said to be permanently without it.

Commentary.

It is difficult to assign to housing alone its proper share in the production of ill health although Ferguson and MacPhail (1954) have shown that a patient's ultimate health and activity are influenced as much by his home conditions as by the medical treatment he receives.

Unsuitable housing and lack of amenities add further difficulties to those elderly people who are attempting to maintain an independent existence. Nevertheless, the great majority tend to accept their housing conditions; many grumble but few attempt any positive action.

Most of those who live alone would rather put up with a steep stair

and an outside lavatory than face the physical and emotional upset of a change to new surroundings. This is particularly so if the change would be to an elderly persons' hostel. This tendency on the part of the elderly to resist moving from their home has been commented on by several authors (Sheldon, p. 42; Rowntree, 1947, p. 37; Amulree, 1951, p. 70).

In point of fact, it is difficult to see what could be done even if the elderly person did want to change to more suitable accommodation. In Glasgow there is certainly not enough accommodation available in local authority housing schemes or elderly persons' hostels to rehouse more than a very small proportion of those who are in unsuitable accommodation.

In privately owned buildings the transfer from larger to smaller houses, while desirable for the elderly who live alone, is not commonly practised. Such transfers almost always mean an exchange of households. The house factor with instructions to sell his houses prefers to await the vacancy of the elderly person's flat through natural causes.

Rowntree (1947) stated that the elderly as a whole were not worse housed than the average of their class. The post-war period, however, has been one of intense building activity unassociated with any major attempt to remove bad properties. As of June, 1954, two million new houses had been built since the end of the war. Of these, five-eighths had been built by local authorities (Brockington, 1955). Almost all of this local authority housing has been devoted to the needs of young and middle-aged married couples with families. The elderly do not participate in this rehousing to any great extent, except when they move as part of a larger family unit.

As a result of the post-war housing drive, the housing conditions of married couples with families have tended to rise, but those of the elderly have largely remained static. Consequently the elderly tend to have

relatively lower housing standards than the average of their class. This will continue so long as the present policy of building without clearance of bad properties continues.

Some examples of housing conditions are illustrated in the Appendix.

Summary.

Some of the housing amenities of the elderly who lived alone are discussed.

The lack of certain amenities is considered.

There was no evidence that the elderly who lived alone were "under-crowded."

CHAPTER 7.

THE DOMESTIC AND PERSONAL CLEANLINESS OF THE ELDERLY LIVING ALONE, WITH SPECIAL REFERENCE TO THE PROBLEM OF THE ELDERLY PERSON IN A DIRTY HOUSE.

Each house visited was classified from the point of view of cleanliness into three categories: clean, fairly clean, and dirty. The assessment was made in each case by the one investigator.

These categories are not easy to define. The standard of cleanliness was not made impossibly high but was simply that expected of an average home. A house had to be exceedingly unclean before it was classified as dirty. Such houses had an accumulation of months, if not years, of dirt and debris. Windows, floor, bedclothes and fixtures showed dirt, neglect and lack of simple measures of cleanliness. Houses classified as fair were not clean but were not sufficiently unclean to be classified as dirty.

Table 13.

The State of Cleanliness of the Houses Occupied by the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

State of Cleanliness	Living Alone	Not Living Alone
Clean	272 (78.4%)	540 (76.7%)
Fair	50 (14.4%)	127 (18.0%)
Dirty	25 (7.2%)	37 (5.3%)
Grand Total	347 (100%)	704 (100%)

The state of cleanliness of the houses occupied by those who lived alone is shown in Table 13. Two-hundred-and-seventy-two (78.4%) of the 347 houses were classified as clean, 50 (14.4%) were classified as fairly clean, and 25 (7.2%) were considered dirty.

There was no great difference in the standard of cleanliness when compared with the elderly who did not live alone. Thus, 76.7 per cent. of those who did not live alone occupied houses classified as clean, 18 per cent. houses classified as fairly clean, and 5.3 per cent. houses

considered to be dirty (Table 13).

The standard of cleanliness of those who lived alone was, therefore, high. Many of the houses visited were in a state of cleanliness which could not have been bettered by younger housewives.

The standard of cleanliness of males living alone was very much lower than that of the females. This is shown in Table 14, where it is seen that 85 per cent. of the females were in a clean house compared with only 47.6 per cent. of the males. Only 3.1 per cent. of the females lived in a dirty house compared with 26.2 per cent. of the males; and 11.9 per cent. of the females were in houses classified as fairly clean compared with 26.2 per cent. of the males.

Table 14.

The State of Cleanliness of the Houses Occupied by the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Sex.

State of Cleanliness	Living Alone		Not Living Alone	
	Male	Female	Male	Female
Clean	29 (47.6%)	243 (85%)	185 (72.5%)	355 (79.1%)
Fair	16 (26.2%)	34 (11.9%)	52 (20.4%)	75 (16.7%)
Dirty	16 (26.2%)	9 (3.1%)	18 (7.1%)	19 (4.2%)
Grand Total	61 (100%)	286 (100%)	255 (100%)	449 (100%)

There is no doubt that when the male is left to his own devices he is very much less cleanly than the female. Such a situation reflects the male's relative lack of interest in routine housework and domestic cleanliness.

There was a slightly higher standard of domestic cleanliness amongst women living alone than women not living alone. Thus, 85 per cent. of the females who lived alone occupied houses classified as clean compared with 79.1 per cent. of females not living alone. Similarly, 3.1 per cent.

of the females who lived alone occupied a house classified as dirty compared with 4.2 per cent. of those who did not live alone.

The influence of age upon domestic cleanliness was examined. For this purpose, the elderly who lived alone were divided into two groups by sex, those who were over and those who were under the age of 75, the group of females in the quinquennium 60-64 years being excluded to eliminate bias.

Table 15.

The State of Cleanliness of the Houses Occupied by 319 Elderly Persons Living Alone, in Two Age Groups, by Sex.

State of Cleanliness	Males		Females	
	65-74 Years	75+ Years	65-74 Years	75+ Years
Clean	15 (46.8%)	14 (48.3%)	115 (86.4%)	103 (82.4%)
Fair	7 (21.9%)	9 (31.0%)	15 (11.3%)	17 (13.6%)
Dirty	10 (31.3%)	6 (20.7%)	3 (2.3%)	5 (4.0%)
Total	32 (100%)	29 (100%)	133 (100%)	125 (100%)

The state of domestic cleanliness in the two groups is compared in Table 15, which shows that 46.8 per cent. of the males who were under the age of 75 lived in a clean house compared with 48.3 per cent. of those over that age. Of the females, 86.4 per cent. of those who were under the age of 75 lived in a clean house compared with 82.4 per cent. of those who were over that age.

It seems, therefore, that age does not much influence the ability to maintain a clean house.

Table 16.

The State of Cleanliness of the Houses Occupied by the Elderly Who Lived Alone, by Number of Apartments and Sex.

State of Cleanliness	Male			Female			
	1 Apt.	2 Apts.	3 Apts.	1 Apt.	2 Apts.	3 Apts.	4 Apts. and Over
Clean	7 (30.4%)	18 (56.3%)	4 (66.7%)	55 (77.5%)	152 (88.9%)	32 (88.9%)	4 (50%)
Fair	9 (39.1%)	7 (21.9%)	-	14 (19.7%)	15 (8.8%)	2 (5.6%)	3 (37.5%)
Dirty	7 (30.4%)	7 (21.9%)	2 (33.3%)	2 (2.8%)	4 (2.3%)	2 (5.6%)	1 (12.5%)
Total	23 (99.9%)	32 (100.1%)	6 (100%)	71 (100%)	171 (100%)	36 (100.1%)	8 (100%)

The cleanliness of the house according to its size is shown in Table 16. From this table it is seen that, of the males, 30.4 per cent. of the one-apartment houses were clean, 56.3 per cent. of the two-apartment houses and 66.7 per cent. of the three-apartment houses. There were no men living in larger houses.

Such a trend may be indicative of the social class and environment of the male concerned. Three-apartment houses are, on the whole, in better properties than single-apartment houses and carry higher rents. On the other hand, no such trend was evident with regard to dirty houses; there was as large a proportion of dirty houses in the three-apartment houses as in the single apartments.

Considering women occupants, 77.5 per cent. of the one-apartment houses were clean, 88.9 per cent. of the two-apartment houses, 88.9 per cent. of the three-apartment houses and 50 per cent. of the houses with four apartments or over. In the same way, 2.8 per cent. of the single apartments were dirty, 2.3 per cent. of the two-apartment houses, 5.6 per cent. of the three-apartment houses and 12.5 per cent. of the houses of four apartments and over.

It is only when the size of the house exceeds three apartments that the standard of cleanliness falls. For houses of less than four apartments, the size of the house does not appear to affect the ability of the occupant to keep it clean.

These considerations are based on the assumption that the elderly person did his or her own cleaning. This was not always so. In some instances the house was cleaned, or the elderly person was assisted, by the family.

Personal Cleanliness.

The personal cleanliness of each elderly person interviewed was

assessed and allocated to one of three categories - clean, fairly clean or dirty.

As with the cleanliness of the house, these categories are not easy to define. The standard of cleanliness was simply that expected of an average person interviewed unexpectedly in his or her own home. An elderly person had to be obviously unclean before being classified as dirty. Such a person usually had not washed for a long time, the hands and face were dirty and the clothes were badly in need of washing. Frequently these people were unpleasantly odorous.

The group classified as fairly clean were not clean to casual observation but were not sufficiently unclean to be classified as dirty.

Table 17.

The State of Personal Cleanliness of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

State of Cleanliness	Living Alone	Not Living Alone
Clean	283 (81.5%)	578 (82.1%)
Fair	45 (13.0%)	104 (14.8%)
Dirty	19 (5.5%)	22 (3.1%)
Total	347 (100%)	704 (100%)

The standard of personal cleanliness of the elderly who lived alone is shown in Table 17. Two-hundred-and-eighty-three (81.5%) were classified as clean, 45 (13.0%) were classified as fairly clean, and 19 (5.5%) were considered to be dirty.

There was no appreciable difference between the standard of cleanliness of those who lived alone and that of those who did not live alone. Thus, 82.1 per cent. of those who did not live alone were classified as clean, 14.8 per cent. as fairly clean, and 3.1 per cent. were considered to be dirty.

The general standard of personal cleanliness was, therefore, high.

Table 18.

The State of Personal Cleanliness of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Sex.

State of Cleanliness	Living Alone		Not Living Alone	
	Male	Female	Male	Female
Clean	35 (57.4%)	248 (86.7%)	202 (79.2%)	376 (83.7%)
Fair	16 (26.2%)	29 (10.1%)	42 (16.5%)	62 (13.8%)
Dirty	10 (16.4%)	9 (3.1%)	11 (4.3%)	11 (2.5%)
Total	61 (100%)	286 (99.9%)	255 (100%)	449 (100%)

As might be expected, the males who lived alone were less clean than the females. This is shown in Table 18 where 57.4 per cent. of the males were classified as clean compared with 86.7 per cent. of the females. Similarly, 26.2 per cent. of the males were classified as fairly clean compared with 10.1 per cent. of the females; and 16.4 per cent. of the males were considered to be dirty compared with 3.1 per cent. of the females.

The standard of cleanliness of males not living alone was slightly lower than that of females (Table 18). A slightly larger proportion of females living alone were classified as clean, compared with females who did not live alone, but the difference was not large.

The effect of age on the personal cleanliness of those who lived alone was examined. For this purpose, the elderly were divided into two age groups by sex, those who were over the age of 75 and those who were under that age. The group of females in the quinquennium 60-64 years were excluded to eliminate bias.

Table 19.

The State of Personal Cleanliness of 319 Elderly Persons Living Alone, in Two Age Groups, by Sex.

State of Cleanliness	Males		Females	
	65-74 Years	75+ Years	65-74 Years	75+ Years
Clean	17 (53.1%)	18 (62.1%)	118 (88.8%)	104 (83.2%)
Fair	9 (28.1%)	7 (24.1%)	12 (8.9%)	16 (12.8%)
Dirty	6 (18.8%)	4 (13.8%)	3 (2.3%)	5 (4.0%)
Total	32 (100%)	29 (100%)	133 (100%)	125 (100%)

The state of personal cleanliness of the two groups is shown in Table 19. Females in the older age group were less clean than those in the younger age group. Thus, 83.2 per cent. of the females over the age of 75 were classified as clean compared with 88.8 per cent. of those in the younger age group; four per cent. of those in the older age group were considered to be dirty compared with 2.3 per cent. in the younger age group. The differences in proportion, however, are neither large nor significant. These figures suggest that in the groups surveyed age was not a factor of importance in the maintenance of personal cleanliness in females.

As for males, those in the younger age group had the lower standard of personal cleanliness. Thus, 53.1 per cent. of the males below the age of 75 were classified as clean compared with 62.1 per cent. of those over that age; and 18.8 per cent. of the younger age group were considered to be dirty compared with 13.8 per cent. of the older age group. The difference in proportion is not large and is not significant. Nevertheless such a situation suggests that males who maintain a good standard of personal hygiene may have a better chance of continuing to live alone.

Table 20.

The State of Personal and Domestic Cleanliness of the Elderly Who Lived Alone, by Sex.

State of Cleanliness	Males		Females	
	Domestic	Personal	Domestic	Personal
Clean	29 (47.6%)	35 (57.4%)	243 (85.0%)	248 (86.7%)
Fair	16 (26.2%)	16 (26.2%)	34 (11.9%)	29 (10.1%)
Dirty	16 (26.2%)	10 (16.4%)	9 (3.1%)	9 (3.1%)
Total	61 (100%)	61 (100%)	286 (100%)	286 (99.9%)

As might be expected, the standard of personal cleanliness is closely associated with that of domestic cleanliness. This is shown in Table 20 where the standard of personal cleanliness of the elderly who lived alone is compared with the standard of cleanliness of their homes.

This table shows that as far as males are concerned the standard of personal cleanliness is better than that of domestic cleanliness. Thus, 57.4 per cent. of the males were classified as being personally clean but only 47.6 per cent. of their homes were so classified. In the same way, 16.4 per cent. of the males were considered to be personally dirty but 26.2 per cent. of their homes were classified as dirty.

Reverting to the females, there was almost no difference in the standards of personal and domestic hygiene. Thus, 86.7 per cent. were classified as being personally clean and 85 per cent. were classified as living in clean houses; 3.1 per cent. were classified as being personally dirty and 3.1 per cent. of their homes as being dirty.

These figures suggest that, where men are concerned, domestic cleanliness is lost before personal cleanliness, but with women the difference between personal and domestic cleanliness is negligible. These

findings suggest that when personal and domestic neglect occur, they occur together.

Vermin.

Only five of the elderly persons interviewed were noticed to be verminous. Three (0.9%) lived alone and two (0.3%) did not live alone. Four of the five were females.

As none of the elderly who were interviewed was given a physical examination, and as no specific search was made for head or body lice, these figures may well be an under-statement of the actual incidence. The five subjects mentioned were heavily infested and their condition was obvious.

No attempt was made to assess the prevalence of fleas but they were encountered not infrequently.

During the course of the enquiry the investigator was infested with body lice on one occasion and by fleas on several.

The Dirty House.

The dirty house, as defined in the previous section, is rarely referred to in the literature dealing with the elderly. More often it is encountered in studies concerning problem families. Nevertheless, an elderly person in a dirty house is met with not infrequently and the problems such cases present are by no means easy to solve.

The house itself is a serious nuisance. It begets unpleasant odours and may detract from the amenities of the surrounding homes. It is occasionally a breeding place for vermin which may invade surrounding houses.

With these old people the dirty house is part of a situation in which domestic neglect and personal neglect form a vicious combination. One leads to and encourages the other. A state may be reached in which the elderly person is dirty, ragged and surrounded by unpleasant smells.

As personal neglect continues, nutrition becomes inadequate and

small illnesses, neglected, lead to major disabilities. A point is reached where the elderly person can no longer maintain an independent existence and has to be removed to hospital or to an institution.

In this enquiry 62 (5.9%) of the elderly interviewed were classified as living in a dirty house and 41 (3.9%) were classified as being personally dirty. It should be noted, however, that due to the technique of recording, the actual number of dirty houses encountered is rather less than 62. An elderly couple living in a dirty house would each be recorded as living in a dirty house.

The survey carried out by Geffen and Warren (1954) is one of the few that recorded the cleanliness of the home. Twenty-two per cent. of their subjects were living in a dirty or an insanitary house. These writers, however, were concerned with elderly people who had been referred to their authority for assistance, and in this respect their sample was biased. In the Hammersmith survey, "Over Seventy" (1954), seven (7%) of the elderly were living under conditions which were described as "poor" or "appalling." A descriptive account of elderly people in dirty houses is given by Stephens (1946).

Table 21.

The Domiciliary State of 62 Elderly Persons Who Were Living in a Dirty House.

Domiciliary State	Living in a Dirty House	Total Interviewed
Living Alone	25 (7.2%)	347
With Spouse Only	5 (2.6%)	193
With Spouse and Family	4 (2.6%)	151
With Family Only	16 (6.0%)	267
With Aged Relative or Friend	9 (15.8%)	57
With a Lodger	3 (11.1%)	27
As a Lodger	-	9
Total	62 (5.9%)	1,051

In this enquiry dirty houses were encountered not solely amongst the elderly who lived alone but, as is shown in Table 21, in almost every domiciliary state. With 20 (32.3%) of the elderly so classified a younger person was living with them.

Whenever a dirty house was encountered, some attempt was made to remedy the situation. The welfare officer and the sanitary inspector for the district were consulted and attempts were made to have the house cleaned.

When there was a family unit which included the presence of a younger and more able-bodied person, they were asked to undertake the task. Many such families were of the "problem family" type. In spite of repeated visitations and exhortations by the parties concerned, the results on the whole were unsatisfactory.

The most difficult problem was when the house was occupied solely by an elderly person or persons. In many such cases it was obvious that the lack of personal and domestic cleanliness was a result of a breakdown in the ability to maintain an independent existence. It had then to be decided if a home help would answer their needs or whether hospitalisation or transfer to an old persons' hostel was the only satisfactory solution.

There was always difficulty in securing the services of a home help in such cases, as a home help will not enter a dirty house. By her conditions of service, a home help will not clean up accumulated dirt and rubbish but will only attend to that which would be normal in a house unoccupied for a few days. In fairness, no one would ask a home help to enter any of the houses classified as dirty. Thus before a home help could be obtained an attempt had to be made to have the house cleaned.

The first step was to secure the co-operation of the elderly person concerned. This was invariably difficult. Many have no desire to have

their house cleaned and resist any suggestions that they and their house should be made clean. Squalor makes no great impression on them.

There are two principal methods of securing co-operation in dealing with a dirty house: moral persuasion and legal action. The latter, it must be stated immediately, is of no value in dealing with the elderly. The very mention of legal action is more likely to antagonise than to secure co-operation. It may have a place where there is a young and able-bodied person in the house, but even then its value is doubtful.

There are three main Acts under which proceedings can be taken: the Public Health (Scotland) Act, 1897; the Burgh Police (Scotland) Act, 1892; and, in Glasgow, the Glasgow Corporation Order Confirmation Act, 1929. In Glasgow, only the latter is used. The former two, by usage, are confined to landward areas of counties and certain small burghs.

Only one elderly person in this enquiry was taken to court and the inability of legal action to enforce co-operation is illustrated.

G.G., aged 78, a widower. He lived in a two-roomed ground floor house in a poor tenement property. With him were his daughter, separated from her husband, and her three children, one a baby.

The house was very dirty. Each room was crammed full of rubbish, boxes, sacks, old tradesmen's tools and various miscellaneous objects. All were covered with the accumulation of years of dust.

There was neither gas nor electricity. Entry to the house was by a long narrow passage, so packed with rubbish and junk that the entrant had to walk sideways. The kitchen was in a state of permanent gloom. The windows were dirty, tightly closed, and many missing panes had been replaced by cardboard.

The daughter and her three children slept together in one bed in the front room which apart from a passage from the door to the bed was crammed

full of assorted boxes and rubbish. The old man slept on a broken armchair in the other room, covered with old clothes. He had a large varicose ulcer of the leg which was covered by a dirty bandage. The daughter and her three children were fairly clean although the latter were marked with flea bites. The old man had obviously not washed for a long time.

The daughter stated that she was willing to clean the house but her father would not let her. Repeated attempts to persuade the old man, including a visit from the parish priest, were to no avail. As a last resort, for the sake of the children, he was charged under the 1929 Act in the hope that co-operation would at last be secured.

His case was deferred on six occasions. Each time he was ordered to co-operate and each time he refused. Finally he was fined ten shillings, but his house remained unchanged.

Simple persuasion is the most important and indeed the only way to secure the co-operation of the elderly. When this was accomplished it was frequently the result of repeated visits during which time the elderly person was getting to know the callers. Gentleness and good humour were necessary although a firm line had always to be taken about the state of the house.

If, after repeated visits, co-operation was still refused, there was in practice little to be done. Theoretically it would have been possible to apply Section 47 of the National Assistance Act, 1948 (as amended 1951). This Act states that anyone who is suffering from a grave chronic disease and/or is aged, infirm and/or physically incapacitated and is living in insanitary conditions and is unable to devote to himself or herself proper care and attention may be removed to hospital under a Sheriff's warrant. The house could then be cleaned by virtue of the 1929 Act.

In practice, this is never done. Section 47 of the National Assistance Act is, in Glasgow, reserved for such elderly persons who are

very ill but who refuse to go to hospital and are in need of care and attention.

When co-operation was persistently refused, the method adopted was to institute regular calls by a health visitor, a welfare officer or a sanitary inspector. In this way it was thought that increasing frailty or early illness would be detected and further methods employed to treat the altered situation.

Even when co-operation was secured many difficulties remained. The major difficulty was in finding people to do the cleaning. There is no organisation within the framework of the Glasgow Public Health service designed to do such work. Satisfactory arrangements, however, are available for the washing of bedclothes and wearing apparel, disinfection and disinfestation, and, strangely enough, the white-washing of walls.

In practice, office cleaners undertake the task. For this they receive a higher rate of pay. This arrangement, however, is quite voluntary on the part of the cleaners and depends entirely upon their goodwill. By no means invariably would they undertake the task and occasionally they refused.

An attempt was made to enrol the help of other organisations and this was partly successful. Houses were cleaned on two occasions by a local church youth club and in a further case by social science students. Twice relatives carried out the work. The use of voluntary organisations, however, had its difficulties. They were not always available at the times they were needed and being composed of young people, could not always be fairly asked to enter really dirty houses.

For restoring personal cleanliness, the best results were obtained by securing admission to a geriatric unit for a few days. Whenever possible, this was arranged so that the house could be cleaned during the occupant's absence.

Many of the folk concerned, however, were unwilling to go to hospital for this purpose, and again much persuasion was required. The hospital, in turn, was not always willing to accept such old people, especially if they were verminous, and it, too, had to be persuaded. Part III accommodation, while suitable for some of these elderly persons, was not suitable for others, particularly those who were verminous or frail.

When admission to hospital could not be arranged, those who were in need of and agreeable to cleaning were accompanied to the local disinfector station. Baths are available there and an arrangement was made to have their clothes cleaned while they were having the bath.

The treatment of the elderly verminous patient is at present unsatisfactory. There are no definite arrangements for this service within the framework of the Glasgow Public Health service. During the period of this investigation the health visitor supervised or carried out the disinfestation. This arrangement proved satisfactory if accompanied by a disinfestation of the house. A follow-up visit was paid one month later.

In other parts of the city, however, there is no such arrangement. Many health visitors are reluctant to do more than instruct and to supply the special shampoo. Difficulty is frequently experienced in securing the admission to a geriatric unit of the verminous elderly person in order that they may be cleaned.

Some examples of dirty houses are illustrated in the Appendix.

Commentary.

The elderly person in a dirty house presents a very real problem in care and treatment. The making clean of such a house and, when necessary, the elderly persons themselves, may put a stop to the cycle of personal and

domestic neglect. In almost every case, however, it must be accompanied by additional help. If such assistance can be given then these people can often maintain their independence in their own home. If such assistance cannot be obtained, as, for example, when the services of a home help are refused, then conditions tend to revert to their former state in spite of regular visitation.

The treatment of the elderly person in a dirty house is at present unsatisfactory. This is particularly so when they are verminous. Better facilities are needed to deal with the situation.

The following recommendations are made:-

(a) There is a need for a squad of cleaners who would clean houses too dirty to allow the entry of a home help. Such cleaners should be provided with protective clothing and be paid a special rate of pay.

(b) Closer co-operation is needed with the various voluntary organisations. They are often willing to undertake this type of work within their own parish or district. They would form a useful adjunct to a squad of cleaners.

(c) There is a need for the local authority to provide a reception house for the elderly who are in need of being cleansed.

(d) More definite arrangements are needed with the geriatric units for these neglected old people. They need be admitted for only a few days, and the temporary investment in bed space might prevent a bed from being occupied for a longer period later.

(e) There is a need to form a group of women who would clean the elderly person in the home.

(f) An arrangement is needed for the treatment of the elderly verminous person. A health visitor in every district should be allocated

the task as part of her duties. Suitable protective clothing should be provided. The geriatric unit should consider admitting such persons, especially those who are frail.

Selected Cases.

G.F., a bachelor, aged 71. He was drawn to our attention by another elderly man who said, "Something should be done about him." He lived in a one-apartment house which was very dirty. Ashes were scattered on the floor and dirty clothes lay on chairs. The table was encrusted with food remains. He was unclean and his clothes were ragged and dirty.

He was persuaded to enter hospital for cleaning and his home was cleaned by office cleaners. An arrangement was made with the local Old Age Club to provide him with meals twice per week. The National Assistance Board agreed to give him an extra grant to pay for a neighbour to keep his home clean. Regular visitation by the health visitor was arranged.

M.McD., a widow, aged 90. This old lady was very frail. She lived in a two-apartment house which was very dirty. The furniture was old, broken and dirty. The bedclothes were badly in need of washing.

The house was cleaned by office cleaners and some of her personal clothing was washed by the Corporation washing service. A home help was provided who kept the old lady clean and tidy.

H.B., a spinster, aged 72. This was a lady of independent means. She lived in a five-apartment terraced house which she owned. Each room was filled to an astonishing degree with bric-a-brac, boxes, rubbish, etc. She had been collecting furniture, napery, clothes, carpets, books, tools, newspapers, and materials of every description for many years. The conglomeration was stacked in every room, and in one it rose above eye level. Newspapers and magazines were in abundance - some were over 30 years old.

She ate from a small card table in the crowded living room and cooked beside it on a small paraffin stove. The house was in bad repair and there was a large hole in the floor of the sitting room. In view of her method of cooking and the highly combustible material in the house, the fire prevention officer was asked to call. He considered the situation to be highly dangerous and was alarmed at the potential danger to the old lady and the adjacent properties.

The old lady, although irascible, was quite sane. In spite of pressure from her lawyer and a niece she refused to do anything about the house. In spite of regular visitation, the situation to date has remained unchanged.

E.C., a spinster, aged 79. She lived in a two-apartment house in a condemned property. The house was exceedingly unclean, as was the old lady herself. The room in which she lived was permanently in semi-darkness. She had three cats which fouled the room and created unpleasant odours. She was very frail and was barely able to manage. She had no relatives. At the third visit she was persuaded to enter an elderly persons' hostel.

P.L., a bachelor, aged 79. He lived in a poverty stricken house of one apartment. There were few articles of furniture - a table, a chair and a bed. The floor was bare boards covered by newspapers. The house and the old man were both very dirty. The bedclothes had not been washed for a long time.

The old man was apathetic, under-nourished and was suspected of having scurvy. He was unwilling to let his house be cleaned. "What's the use?" he said. An arrangement was made for him to have his meals at the local Old Age Club and the health visitor called regularly. A church group became interested in his welfare and they later cleaned his house and donated some furniture.

W.B., a widower, aged 69. He lived with his two sons in a three-roomed local authority house. The house was dirty due to neglect and lack of elementary housekeeping. The bedclothes had not been washed for a long time and the walls and floor were very dirty. The latter was scattered with accumulated rubbish, ashes and food remains.

The sons were told that they were in danger of being reported as unsatisfactory tenants. The welfare officer and the health visitor paid regular calls, and in this way the house was cleaned. The elderly man, however, remained dirty in spite of the regular visitations.

A HOUSE BEFORE AND AFTER BEING CLEANED

BY OFFICE CLEANERS.

Before Cleaning.

After Cleaning.

CHAPTER 8.

THE ABILITY OF SOLITARY OLD PEOPLE TO MANAGE THEIR HOMES.

An attempt was made to assess the ability of the elderly who lived alone to manage their own homes. This was done by enquiring of each person interviewed if they were able to do certain household tasks.

The tasks selected were: ability to leave the house, ability to cope with the shopping, ability to cope with the washing and with the cooking. They were also asked if they received any help with the last three tasks. The ability to keep the house clean has been assessed in a previous chapter.

In previous enquiries the ability or inability of the elderly to cope with certain household tasks has been the subject of isolated comment rather than actual analysis. An exception was the enquiry carried out by Gray and Beltram (1950). They asked their group if they had, or would have, any difficulty in carrying out certain domestic duties. The duties they selected included shopping, cleaning, cooking and washing. Their results, however, must be interpreted with caution as an elderly person's own assessment of what he or she might be able or unable to do does not necessarily correspond with what they would be capable of doing if they were forced by circumstances into attempting the tasks.

Sheldon (p. 156) assessed the proportion of females in his sample who were entirely responsible for the housework. He found that 50 per cent. of those not over the age of 75 were so responsible and 40 per cent. of those not over the age of 79. He did not, however, indicate what the housework entailed.

Mair et al (1956), in Dundee, assessed the ability of their group of elderly persons to do certain household tasks by asking them what tasks they would like assistance with in the home.

Ability to Leave the House.

The ability of the elderly to leave the house is shown in Table 22. It is seen from this table that 81.5 per cent. were able to leave the house daily, or several times a week, 4.3 per cent. were able to leave occasionally and 14.1 per cent. were confined to the house.

Table 22.

The Ability of the Elderly Who Lived Alone to Leave the House, by Sex.

Ability to Leave the House	Male	Female	Total
Daily or Several Times a Week	54 (88.5%)	229 (80.1%)	283 (81.5%)
Occasionally	-	15 (5.2%)	15 (4.3%)
Unable	7 (11.5%)	42 (14.7%)	49 (14.1%)
Total	61 (100%)	286 (100%)	347 (99.9%)

A large proportion, therefore, of the group were able to leave the house regularly. Such a finding is not unexpected as those who live alone are, on the whole, maintaining an independent existence.

Slightly more men than women were able to leave the house regularly. Thus, 88.5 per cent. of the men were able to leave the house daily or several times a week compared with 80.1 per cent. of the women (Table 22).

Slightly more women than men were house-bound. Thus, 14.7 per cent. of the women were confined to the house compared with 11.5 per cent. of the men. The question of the house-bound is considered in a later section.

Table 23.

The Ability of the Elderly to Leave the House by the Position of the House.

Ability to Leave	Ground Floor	First Floor	Second Floor	Third Floor +
Daily or Several Times per Week	64 (86.5%)	99 (78.6%)	69 (77.5%)	51 (88.0%)
Occasionally	3 (4.1%)	8 (6.4%)	4 (4.5%)	-
Unable	7 (9.5%)	19 (15.1%)	16 (18.0%)	7 (12.1%)
Total	74 (100.1%)	126 (100.1%)	89 (100%)	58 (100.1%)

The influence of the stairs on the ability to leave the house regularly was considered. The ability of the elderly to negotiate the stairs regularly from various floors is shown in Table 23. A slightly smaller proportion of those on the first and second floors were able to leave the house regularly compared with the proportion on the ground floor, but the difference was not large. A slightly larger proportion of those on the third floor or higher were able to leave the house regularly than the proportion on the ground floor.

It does not appear from this enquiry, therefore, that stairs interfered with the ability to leave the house regularly.

When the disability of age is considered it was found that the ability to leave the house regularly decreased steadily with advancing years as far as females were concerned. No such trend could be shown for males. This is shown in Table 24 and for females Figure 11.

The Ability to do the Shopping.

Those interviewed were asked if they were able to do their own shopping. The result of this enquiry is shown in Table 25.

FIGURE 11

(BASED ON TABLE 24).

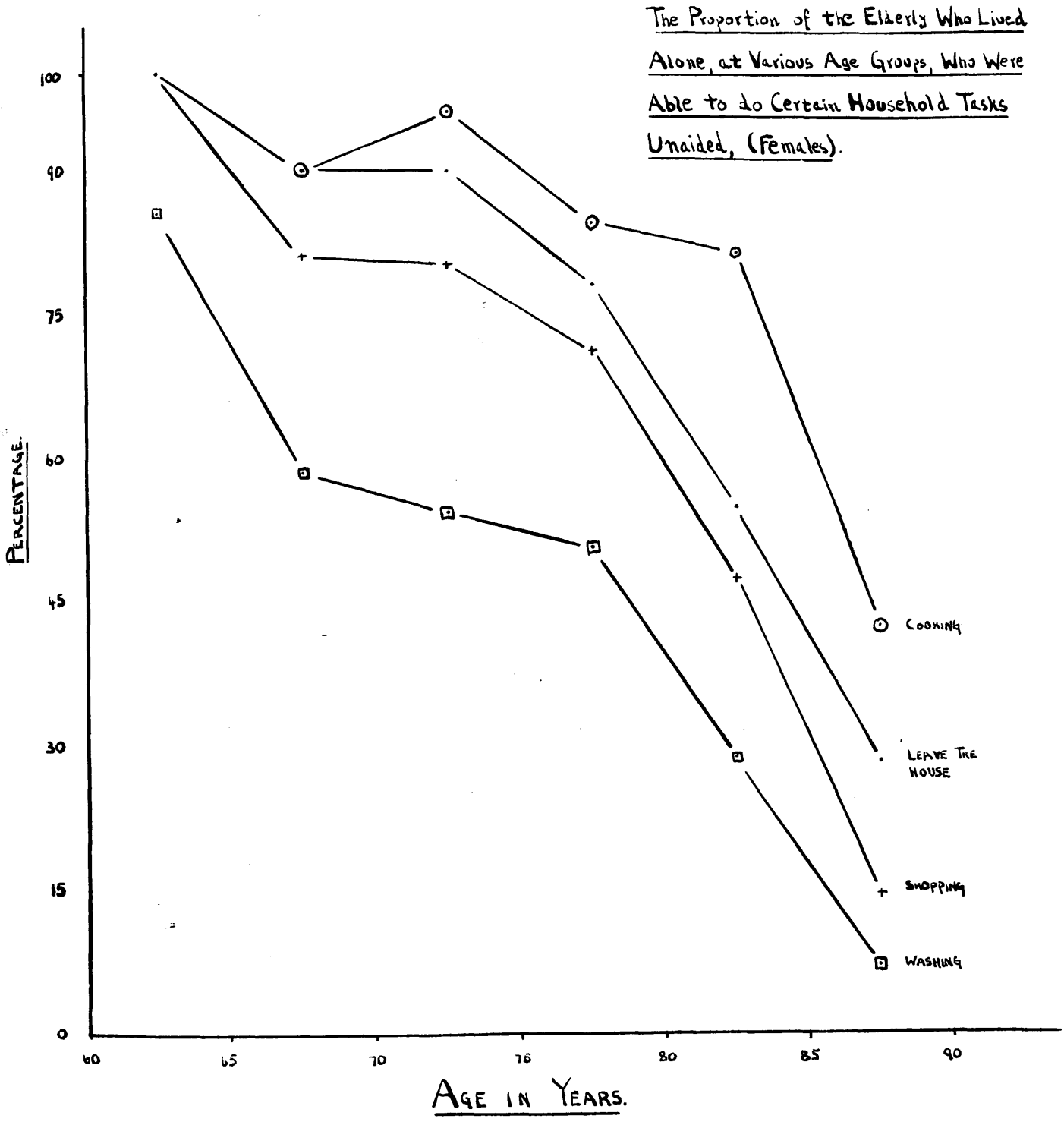


Table 24.

The Ability of the Elderly Who Lived Alone to do Certain Household Tasks Unaided, by Age and Sex.

Household Task	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Male						
To Leave House	-	11 (73.3%)	15 (88.2%)	22 (100%)	5 (83.5%)	1 (100%)
To Do Shopping	-	8 (53.3%)	11 (64.7%)	16 (72.7%)	3 (50%)	-
To Do Cooking	-	11 (73.3%)	11 (64.7%)	21 (95.4%)	4 (66.7%)	1 (100%)
To Do Washing	-	5 (33.3%)	7 (41.2%)	11 (50%)	3 (50%)	-
Total in Each Age Group	-	15	17	22	6	1
Female						
To Leave House	28 (100%)	52 (89.7%)	67 (89.3%)	57 (78.1%)	21 (55.3%)	4 (28.6%)
To Do Shopping	28 (100%)	47 (81.0%)	60 (80.0%)	52 (71.2%)	18 (47.4%)	2 (14.3%)
To Do Cooking	28 (100%)	52 (89.7%)	72 (96.0%)	62 (84.9%)	31 (81.6%)	6 (42.9%)
To Do Washing	24 (85.7%)	34 (58.6%)	41 (54.7%)	37 (50.7%)	11 (29.0%)	1 (7.1%)
Total in Each Age Group	28	58	75	73	38	14

Table 25.

The Ability of the Elderly Who Lived Alone to do Their Own Shopping, by Sex.

Ability to Shop	Male	Female	Total
Able to do Own Shopping	38 (62.3%)	207 (72.4%)	245 (70.6%)
Received Help	14 (23.0%)	26 (9.1%)	40 (11.5%)
Unable	9 (14.8%)	53 (18.5%)	62 (17.9%)
Total	61 (100.1%)	286 (100%)	347 (100%)

Altogether, 70.6 per cent. did their own shopping entirely; 11.5 per cent. stated that they were able but received some help and 17.9 per cent. that they were unable to do their own shopping.

More women than men did their own shopping entirely, and a larger proportion of males received help with the shopping. Thus, 72.4 per cent. of the women did their own shopping entirely compared with 62.3 per cent. of the men; and 23 per cent. of the men received help with their shopping compared to 9.1 per cent. of the women (Table 25).

Increasing age in women was found to diminish the ability to do the shopping unaided. This is shown in Table 24 and Figure 11. Increasing age in men apparently made little difference. The reasons given by the 62 elderly persons for not being able to do their own shopping were not tabulated but included illness, difficulty in walking, difficulty with the stairs, fear of traffic and "dizzy turns."

The great majority of the elderly who lived alone did their own shopping entirely or did some of it. In this their task was made more easy by the small shops which are to be found in or near every street in Govan. The value of such shops to the elderly is great. They are convenient and in them the elderly person is known, helped and talked to. As has been pointed

out by Sheldon, the replacement of the small shop by large multiple stores would be a definite disadvantage to the elderly.

In Hamilton, where 16 per cent. of those who were interviewed stated that they were, or would be, unable to do their own shopping, easy shopping facilities headed the list of amenities considered necessary by the elderly persons interviewed (Gray and Beltram, 1950).

For many of the elderly who live alone, shopping is an important part of their social life. It maintains contact with the outer world. For this reason, many struggle to do their own shopping in the face of physical disability in spite of offers of assistance.

The Ability to Do the Cooking.

Those interviewed were asked if they were able to do their own cooking. The result of this enquiry is shown in Table 26, which shows that 86.2 per cent. were able to do their cooking unaided, 4.9 per cent. did some of it but received some help, and 8.9 per cent. were unable to do their own cooking.

Table 26.

The Ability of the Elderly Who Lived Alone to Do Their Own Cooking, by Sex.

Ability to do the Cooking	Male	Female	Total
Able to do Own Cooking	48 (78.7%)	251 (87.8%)	299 (86.2%)
Received Help	6 (9.8%)	11 (3.8%)	17 (4.9%)
Unable	7 (11.5%)	24 (8.4%)	31 (8.9%)
Total	61 (100%)	286 (100%)	347 (100%)

Naturally more women than men did their own cooking and more men received help with the cooking. Thus, 87.8 per cent. of the women managed to do their own cooking without help compared with 78.7 per cent. of the men;

and 9.8 per cent. of the men received help with their cooking compared with 3.8 per cent. of the women (Table 26).

When age was considered it was seen that, as far as women were concerned, the ability to do the cooking unaided tended to decrease with advancing years. This is shown in Table 24 and Figure 11. No such trend could be shown for men.

The ability to do the cooking is probably the last of the household tasks to be given up by the elderly who live alone when overtaken by physical disability. It was the household task which the smallest proportion were unable to do and also was the task in which help was given least. Such a situation is understandable, as once the elderly person becomes unable to cook, he or she becomes completely dependent on others.

The causes of inability to cook were almost always illness or mental deterioration. Many elderly people, however, in spite of disability and frailty still managed to do their own cooking, simple though it might be, and thus maintained their independence.

The Ability to Do the Household Washing.

The group of elderly persons interviewed were asked if they were able to do the household washing. The result of this enquiry is shown in Table 27.

Table 27.

The Ability of the Elderly Who Lived Alone to Do Their Own Washing, by Sex.

Ability to do the Washing	Male	Female	Total
Able to do the Washing	18 (29.5%)	92 (32.2%)	110 (31.7%)
Able with Help of Laundry	8 (13.1%)	56 (19.6%)	64 (18.5%)
Received Help	28 (45.9%)	98 (34.3%)	126 (36.3%)
Unable	7 (11.5%)	40 (14.0%)	47 (13.6%)
Total	61 (100%)	286 (100.1%)	347 (100.1%)

It is seen from this table that 31.7 per cent. were able to do the household washing unaided and a further 18.5 per cent. managed to do the washing with the help of the laundry or the laundrette. Help with the washing was received by 36.3 per cent. and 13.6 per cent. stated that they were quite unable to do the washing.

More women than men were able to do the household wash, either alone or with the help of the laundry or laundrette, and more men received help with the washing. Thus, 51.8 per cent. of the women managed to do the household wash either alone or with help from the laundry compared with 42.6 per cent. of the men; and 45.9 per cent. of the men received help with the washing compared with 34.3 per cent. of the women (Table 27).

The women's ability to do the household wash, either unaided or with the help of the laundry, decreased with advancing years. This is shown in Table 24 and Figure 11. No such trend could be shown for men.

Without doubt the household task which gives the most trouble to the elderly who live alone is the household washing. It is hard work. It was the task least able to be done unaided and also the task in which the greatest help was given. This is also found when Gray and Beltram's figures are examined.

The difficulties of the elderly in carrying out the household washing, and the need to provide help with the task, have been pointed out by Sheldon (p. 162), Chalke and Benjamin (1951, 1953), and the report, "Over Seventy," (1954). In Dundee, Mair et al (1956) found that help with the washing was the service most requested by the elderly people they interviewed.

It is worth stating that only one of the elderly persons who lived alone received help from the local authority laundry service.

Commentary.

The ability of the elderly persons interviewed to manage the house varied, but if the household wash is excluded, it was on the whole surprisingly satisfactory.

Women were better able to cope with the household tasks investigated than the men, and as might be expected, more men than women received help with the tasks.

The ability of the women to manage the household tasks unaided fell as the age increased (Figure 11) but no such trend could be shown for men. This may indicate that only the more robust males manage to continue to live alone and that men tend to relax effort and give up their independent existence when overtaken by physical disability. Women, on the other hand, being used to household tasks, tend to persist for as long as is humanly possible.

A small group were quite unable to manage the household tasks considered and were completely dependent on others. The effect of advancing years on this group was particularly noticeable. This is shown in Figure 12 and Table 28.

Many elderly persons were interviewed who were continuing to manage their home with little or no help in spite of frailty and frank

Figure 12

(Based on Table 28).

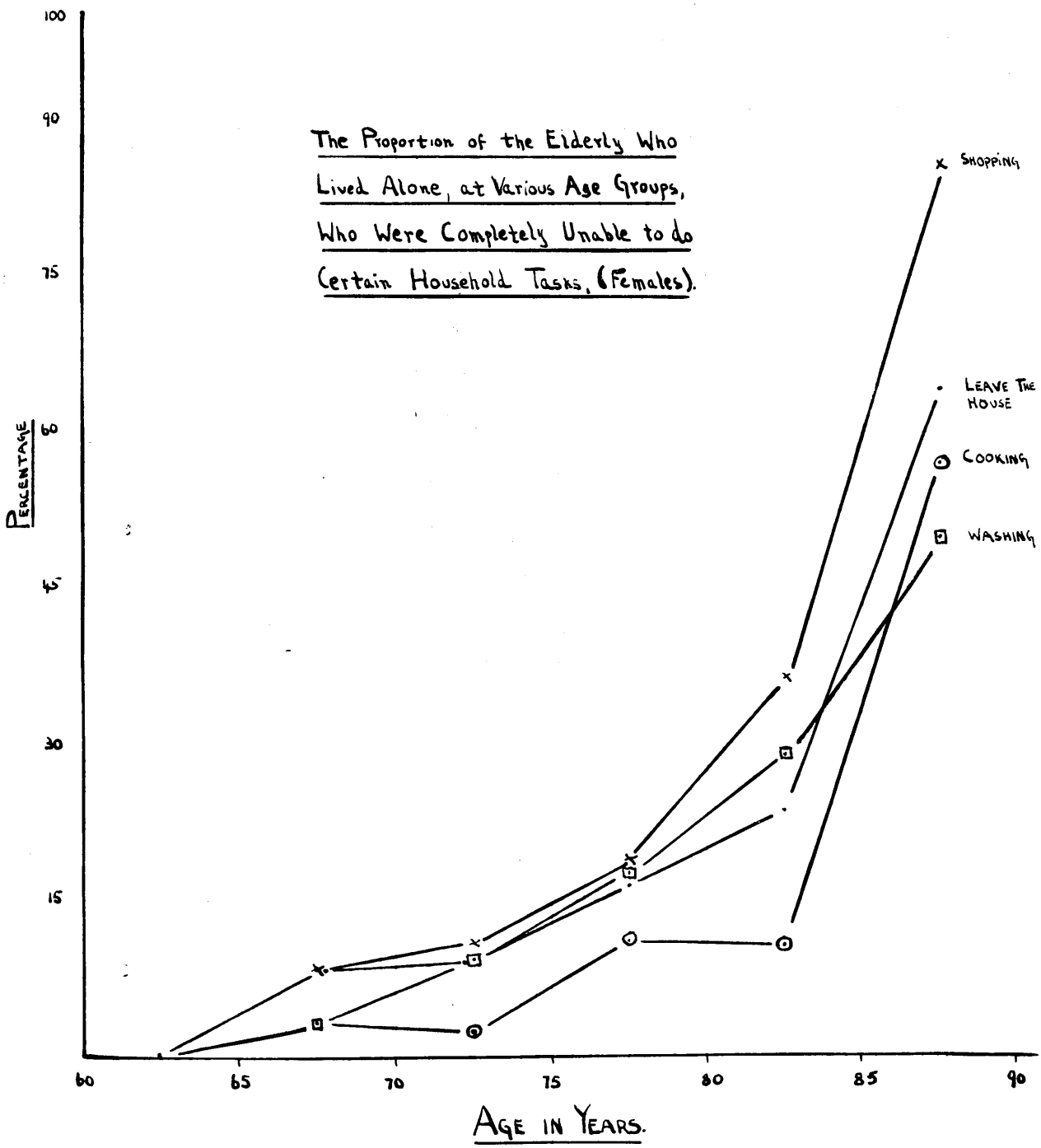


Table 28.

The Elderly Who Lived Alone Who Were Completely Unable to Do Certain Household Tasks, by Age and Sex.

Household Task	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Male						
To Leave House	-	4 (26.7%)	2 (11.8%)	-	1 (16.7%)	-
To Do Shopping	-	4 (26.7%)	3 (17.7%)	1 (4.5%)	1 (16.7%)	-
To Do Cooking	-	2 (13.3%)	3 (17.7%)	-	2 (33.3%)	-
To Do Washing	-	3 (20%)	2 (11.8%)	-	1 (16.7%)	1 (100%)
Total in Each Age Group	-	15	17	22	6	1
Female						
To Leave House	-	5 (8.6%)	7 (9.3%)	12 (16.4%)	9 (23.7%)	9 (64.3%)
To Do Shopping	-	5 (8.6%)	8 (10.7%)	14 (19.2%)	14 (36.8%)	12 (85.7%)
To Do Cooking	-	2 (3.5%)	2 (2.7%)	8 (11.0%)	4 (10.5%)	8 (57.1%)
To Do Washing	-	2 (3.5%)	7 (9.3%)	13 (17.8%)	11 (29.0%)	7 (50.0%)
Total in Each Age Group	28	58	75	73	38	14

disability. Their courage and determination were of a high order.

While help with various household tasks would be an advantage, it is difficult to see how this could be provided short of supplying a home help. Official help should always be considered carefully before being recommended. In some cases the need for assistance may lie more in the eyes of the observer than in the thoughts of the elderly person concerned

It is better to see an old woman who is managing with difficulty but who is active, than one who is slowly dying in her chair while someone else does her work. The running of the home is to many who live alone the mainstay of their existence. Many are kept alive and interested because of the routine household tasks. As Margaret Hill (1952) states: "No continued activities are so valuable or so health giving as the necessary acts involved in living alone and independently."

The one task for which help is needed is that of the household wash. There is an excellent local authority washing service which is free of charge. This service is devoted to the washing and disinfection of the clothes and bed-linen of patients with infectious disease. It is not officially available for the help of the elderly, although from time to time, at the discretion of the Divisional Medical Officer, it may be used for this purpose.

There is a need for a re-appraisal of this service in the light of modern conditions. Some of this service might well be devoted to the needs of the elderly, particularly the elderly who live alone. In this way it could better serve the needs of the community.

Summary.

The ability of the elderly who lived alone to manage their own homes, as judged by their ability to do certain household tasks, has been described.

With the exception of the household washing, their ability to cope with the household tasks was surprisingly satisfactory.

Women were better able to manage than men, and more men than women received help with the tasks.

The ability to cope with the household tasks decreased as the age increased.

It is recommended that help with the household washing should be made available to the elderly who live alone.

CHAPTER 9.

THE HELP RECEIVED IN THE HOME BY THESE OLD PEOPLE, WITH REFERENCE TO THE HOME HELP SERVICE.

The ability of the elderly who live alone to carry out certain domestic tasks was discussed in the previous section, and it was found that while many were able to carry out the tasks unaided, others needed help.

The help that they received was further considered. Those interviewed were asked if they received any assistance in the running of their homes and, if so, from whom. The nature of the help was tabulated with respect to help with the shopping, help with the cooking, help with the cleaning, and help with the household washing.

The help which the elderly receive from their family and neighbours has received the attention of several authors, although many have been concerned primarily with the help given in times of illness.

Sheldon (p. 156) concluded that 40 per cent. of his sample were dependent, to a greater or less extent, on the help given by their children and relatives, and (p. 178) that the help given by the neighbours in times of illness was of the greatest importance.

In the Hammersmith survey, "Over Seventy," it was found that 17 per cent. of the group reviewed received help from their family and that 18 per cent. received help from friends and neighbours.

Simonds and Stewart (1954), in Dorset, concluded that in the vast majority of cases any work which was required to be done for the elderly was in fact being done and was being done by the relatives and friends. Chalke and Benjamin (1953) investigated the ability of the relatives to give help and concluded that not much more could be given by them.

The statement is frequently heard in conversation and occasionally encountered in medical literature that family responsibility for the care of the elderly is weakening (Bligh, 1951; Oliver, 1952; O'Sullivan, 1952; Cook et al, 1952).

This conception, however, is not echoed by those who have conducted investigations into the care of the elderly in their own homes. On the contrary, many workers have paid tribute to the great help given by the family and neighbours. The following are a few of the phrases used:

> "A perusal of these case reports illustrates . . . . . the weight of the burden that family affection will sustain." Sheldon, 1949.
>
> "Nevertheless, as a practising physician, I am still prepared to declare a strong faith in the existing sense of family loyalty." Sheldon, 1954.
>
> "The impression of family ties was one of unity and strength, not irresponsibility and weakness." "Over Seventy," 1954.
>
> "We can no longer confirm the belief that services are no longer being rendered freely by good neighbours." Social contacts in old age, 1953.
>
> "It has been the experience in Hampstead that tenants, friends and neighbours often keep an eye on the old person." Geffen and Warren, 1954.
>
> "The alleged negligent 'spirit of the age' is in reality a factor of minor importance." Chalke and Benjamin, 1953.

Similar impressions were received in the present enquiry.

The Nature of the Help Received.

The nature of the help received by the elderly who lived alone varied from help with a single task to help with all the four tasks considered. This is shown in Table 29. This table has been simplified as the answers to the question included so many combinations that classification was impracticable.

Table 29.

The Nature of the Help Received by the Elderly Who Lived Alone.

Nature of Help		Number of Persons
No Help		119 (34.3%)
One Task		106 (30.5%)
Cooking Only	4	
Cleaning Only	17	
Shopping Only	24	
Household Wash Only	61	
Two Tasks		46 (13.3%)
Three Tasks		28 (8.1%)
Shopping, Cooking, Cleaning and Washing		48 (13.8%)
Total		347 (100%)

It is seen from Table 29 that 34.3 per cent. received no help in the running of their homes. An examination of the case sheets of this group revealed that 86.6 per cent. did not require any help as judged by their ability to carry out the domestic tasks concerned. The remaining 13.4 per cent. would have benefited by help with the shopping, cleaning or washing.

Many in this group, however, would have had their domestic life made more easy by help with the household washing, which in many cases was a heavy burden on their energies.

Altogether 65.7 per cent. of the elderly who lived alone received some form of assistance in the running of their homes. Help with one household task was received by 30.5 per cent., help with two was received by 13.3 per cent., help with three was received by 8.1 per cent., and 13.8 per cent. received help with four household tasks.

The group who received help with all four tasks comprised a series of elderly persons who were completely dependent on others not only for the running of their home but for their ability to be at home and not in a hospital or institution.

The commonest single task for which help was given was the household wash, followed by help with the shopping. The four persons who received help with the cooking only were men.

The Source of Help.

The sources from which help was given to the elderly who lived alone, together with the help given, are shown in Table 30.

Table 30*.

The Source and Nature of the Help Given to 228 Elderly Persons Living Alone.

Nature of Help	Source of Help		
	Family	Neighbours	Home Help
One Task	68	38	-
Shopping Only	12	12	-
Cooking Only	1	3	-
Cleaning Only	10	7	-
Household Wash Only	45	16	-
Two Tasks	34	21	-
Three Tasks	20	8	-
Shopping, Cooking, Cleaning and Washing	25	7	21
Total	147	74	21

* The number of persons being assisted is greater than 228, as some of those being helped received assistance from more than one source.

This table shows that of the 228 persons who were in receipt of domestic assistance, 147 (64.5%) were being helped by their family, 74 (32.5%) were being helped by their neighbours, and 21 (9.2%) were being helped by the home help service. Some of those who had a home help were also being helped by their family or neighbours, but this assistance has not been taken into account in the present analysis.

Almost two-thirds of the elderly who received help in the home received that help from their family. As the amount of care required

increased, so did the part played by the family. Thus, of those who were helped with one task, 64.2 per cent. were helped by the family; of those being helped with two tasks, 61.8 per cent. were helped by the family; of those being helped with three tasks, 71.4 per cent. were being helped by the family. The proportion being helped by the family in four tasks cannot be determined because of the share done by the home help. In all these categories the help given by the neighbours was still considerable.

Only 9.2 per cent. of those who were in receipt of help received that help from official sources. This illustrates the fact that when help is needed by the elderly who live alone the help is given mainly by the family and the neighbours, with the family bearing the larger share.

Forty-eight elderly persons received help from various sources with all four household tasks. Of that group, 21 (39.6%) had the use of a home help, 20 (37.7%) were helped solely by their family, five (9.4%) were helped by their family and neighbours, and two (3.8%) were helped solely by their neighbours.

Thus, even when a great deal of help was needed, the family played a greater part than the home help service, and again, the part played by the neighbours was considerable. It is worth stating again that in two instances help came solely from the neighbours.

Commentary.

That as many as two-thirds of the elderly who lived alone were being given some form of domestic assistance is quite striking. While the assistance given varied in type and amount, nevertheless it indicates that much interest is shown in the welfare of the elderly who live alone. Further, this interest is of a practical nature.

No attempt was made in this enquiry to assess how much more help could have been given than was actually being given. Although occasionally

an elderly person was being neglected by the family, the over-all impression received was that the families concerned were interested in the welfare of their elderly solitary relatives. In this respect, the difficulties of families rehoused in parts of the city far removed from their elderly relative was often encountered. In such cases frequent visitation was often impossible and regular visitation difficult.

The part played by the neighbours in caring for the elderly who lived alone was considerable and was greater than the figures suggest. It was a matter of surprise to see the extent to which certain neighbours gave help to their elderly neighbours. One particular case is worth quoting. This was a young married woman who took the trouble to learn the deaf and dumb alphabet in order that she might converse with her deaf and dumb elderly neighbour.

This neighbourliness is a feature of tenement life and it may not be so rich in other housing conditions. Nor may it be so rich in future generations when, as has been pointed out by Cook et al (1952) and Selwyn-Clarke (1956), the younger women of to-day are developing a way of life which involves their going out to work after marriage.

There was little evidence revealed by enquiry that the elderly who lived alone were being neglected by their families and neighbours. On the contrary, the amount of time and effort devoted to their welfare appeared to be extensive.

The Home Help.

It has been recognised by almost every local authority that to keep certain elderly persons active in their own homes and to reduce the need for hospital beds, some form of domestic assistance must be provided.

In Glasgow, a home help scheme for maternity cases had started in the 1920's but had lapsed with the advent of war. The scheme was re-

introduced in 1944 with 19 home helps and enlarged steadily until in 1950 the number of home helps had to be limited to one thousand on financial grounds. Those helped over the age of 60 increased from 98 in 1945 to 3,031 in 1954 (the Annual Reports of the Medical Officer of Health). The growth of the home help scheme in Glasgow, together with the numbers of older people helped, is shown in Figure 13 and Table IV of the Appendix.

The home help was at first allocated on a temporary basis but it soon became obvious that in certain cases this was insufficient. In 1947 a scheme was started to provide a home help for certain elderly people for an indefinite period. There are no figures available to illustrate the total numbers of elderly people helped under this "extended aid" scheme in any one year, but the number of 'new' cases granted this aid has increased steadily with the years (Figure 13).

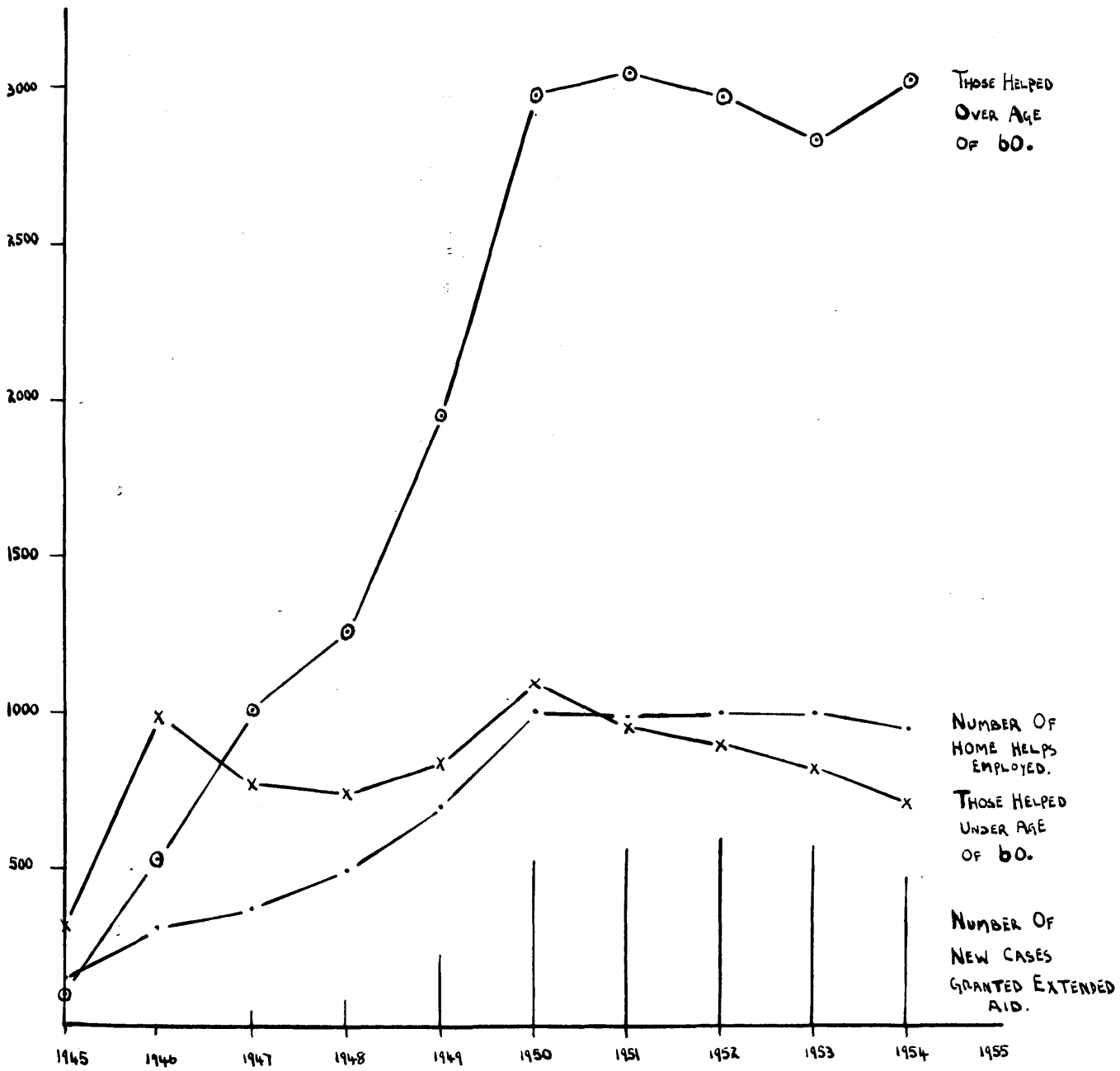
Basically the home help is a domestic worker who comes to the elderly person six days a week in order to clean, shop, cook and do the household washing. As a rule each home help looks after two households, devoting four hours per day to each.

The home help is not a substitute for family responsibility. In order to underline this point, help under the "extended aid" scheme is given only to those who fulfil certain conditions regarding the proximity of the family. Special cases, such as the elderly who have been virtually abandoned by their family, are considered sympathetically.

Four males and 17 females living alone were found in this survey who were receiving the services of a home help. All were being helped under the extended aid scheme. Six of the females were partially confined to bed and one was completely confined to bed. All four males were active and ambulant. Four females and two males had families living in the city; the remainder were without immediate family.

Figure 13

The Glasgow Home Help Service, 1945 - 1954.



The main reasons for the need of a home help were lack of mobility, frailty and illness. Thus, there were nine cases of general frailty, two cases of total blindness, two cases of cardiac failure, two cases of severe arthritis, two cases of hemiplegia, one case of restricted mobility following a fractured femur and one case of mental deterioration. No illness or disability was observed in two male cases.

Of the elderly who did not live alone, home helps were attending six elderly couples and three elderly females who had living with them a solitary younger male relative. In these cases the reason for the home help was frank illness of the female. This included rheumatoid arthritis and extensive carcinomatosis. In one instance both elderly partners were unwell and partially confined to bed.

In all thirty instances, the home help was doing her job well and many were doing more than was expected of them. Three were visiting their elderly charges on Sundays to see that they were well and to make a meal for them.

There appeared to be no abuse of the service. Those who had a home help were all in definite need of the service. The two elderly men who were not ill had home help for its preventive value.

An extension of the hours of service would have been an advantage in two cases - one an elderly couple of whom the woman had extensive carcinomatosis, and the other an elderly woman living alone who was completely confined to bed. In these cases the hours of service were extended at our suggestion.

Many of the elderly who were in receipt of a home help were left alone for most of the day and all of the night. This situation leaves much to be desired. There is a need to link voluntary effort in such circumstances. This has been done, to a limited degree, by Wilson (1954),

who enlisted the resources of the Women's Voluntary Service. There is a need to enrol a small corps of night helpers under the home help scheme. Such helpers are needed to assist elderly persons who are ill and who are awaiting admission to hospital. They are also necessary to afford some rest to the relative who is bearing the burden of the nursing of those who do not live alone.

It seemed that many of the home helps were being brought in rather late when there was little hope of employing the preventive aspects of their work. This is to some extent unavoidable when the demand exceeds the supply and the person in greatest need gets the highest priority. It is suggested that whenever possible the home help should be brought in early so that the preventive aspect of her work can bear fruit.

Home helps are frequently sent to people who require much nursing and many are expected to undertake some of the nursing. As Laidlaw (1950) pointed out, home helps are coming to be regarded as auxiliary nurses. This is not part of their duties although in several instances the home help was undertaking such tasks as changing dressings and bed-bathing. In this respect there was a great lack of co-ordination with the home nursing service. Only seven of the thirty cases which had a home help were being visited by the district nurse. It is suggested that all people who receive a home help should be notified to the home nursing service in order that nursing attention can be given if required.

It is important that the home help who is intended to give extended aid to the elderly person should be chosen with some care. Some home helps do not get on with old people. Others expect facilities, such as ample cleaning materials, which cannot be provided out of a pension and are unwilling to improvise.

The home help who is to be allocated to an elderly person should be patient, even-tempered and understanding of the difficulties of the elderly. Some attempt should be made to match their respective personalities. When this is done the home help becomes, as Chalke and Benjamin (1953) point out, not merely a domestic worker but a friend and companion to the elderly person.

The home help should never be withdrawn from an elderly person living alone without informing the Divisional Medical Officer or the welfare officer. At present a home help can be withdrawn without this safeguard and it may lead to difficulty and indeed tragedy, as the following case note illustrates:-

M.McD., aged 87. She quarrelled with the home help and told her to leave. The home help was withdrawn and no one was informed of the action. Five days later the old lady was found beside her bed in a moribund condition.

The value of the home help as a social worker has only recently been recognised but some authorities have started to train their home helps along these lines (Walton and Evans, 1952). This is to be commended. Not only will it increase the interest of her work but it would be an advantage if the home help could report such cases as would benefit by extended hours, voluntary visitation, home nursing and night help.

An attempt should be made to lighten the task of the home help. This is particularly needed in the case of the heavy washing. A central washing service has been introduced by Gillet (1954) in Rotherham and has proved to be of great value. With such a scheme, the home help brings her washing to a centre in which are installed electric washing machines and then takes it back to the house in which she attends.

During the course of the enquiry other cases were encountered whose need was as great as those receiving a home help but who had not the benefit

of this service. In some of these cases arrangements were made for a home help to be supplied. Some of these people had not heard of the home help service and almost all were unsure of the details of the service, particularly the charges. Not a few, however, were quite unwilling for a home help to call.

It would help to bring serious cases of need to light if, as has been suggested by Banks (1954), greater publicity could be given to the home help scheme for the elderly. A notice in post offices where the elderly collect their pension, giving an address to which to write or report, would help to accomplish this.

Summary.

The nature and source of the help received in the home by the elderly who lived alone have been described.

It was found that much interest was taken in the welfare of the elderly living alone, especially by their families, and the part played by the neighbours was considerable.

The part played by the home help service in the welfare of the elderly was described.

The home help service is performing excellent work and is not being abused. Certain aspects of the scheme could be improved and greater co-ordination is needed with the home nursing service, the voluntary agencies and the Divisional Medical Officer.

CHAPTER 10.

MENTAL HEALTH, WITH SPECIAL REFERENCE TO THE QUESTION OF LONELINESS.

An attempt was made to assess the mental health of the elderly persons interviewed. Such an assessment is not easy in practice and is subject to error and limitations. The writer has had no special training in psychiatry and his assessment might well be very different from that of a trained observer. The assessment had to be made on the strength of one interview - a conversation between two strangers - and this may be a possible source of error.

There was no way of estimating the elderly person's previous intelligence and what might be interpreted as impaired mental faculties might be the unimpaired lower grade intelligence of the person interviewed. The fact that in such an enquiry much of the elderly person's behaviour pattern is self-reported may, as has been pointed out by Lewis (1955), be a source of further error.

Nevertheless it is hoped that, as the interviews were all carried out by one person, the findings are comparable.

The classification of the mental state of the elderly persons interviewed was rather arbitrary. These people were classified from the point of view of mental health into three groups: normal, impaired and senile. This approximates to the classification adopted by Sheldon (p. 116) except that eccentrics with normal intelligence were not considered separately in this enquiry.

The question of loneliness is also considered.

Normal:

Those classified as normal had a good grasp of everyday affairs. They were rational and had a reasonable memory. As far as was physically possible they were able to manage their own affairs.

Three-hundred-and-thirteen (90.2%) of the elderly who lived alone were considered to be normal, as were 628 (89.2%) of those who did not live

alone. Sheldon, in his investigation, considered that 81.8 per cent. of his elderly persons were fully normal.

Table 31.

The Mental State of 347 Elderly Persons Living Alone, and 704 Elderly Persons Not Living Alone, by Sex.

Mental State	Males	Females	Total
Living Alone:			
Normal	52 (85.3%)	261 (91.2%)	313 (90.2%)
Impaired	5 (8.2%)	21 (7.3%)	26 (7.5%)
Senile	4 (6.6%)	4 (1.4%)	8 (2.3%)
Total	61 (100.1%)	286 (99.9%)	347 (100%)
Not Living Alone:			
Normal	229 (89.8%)	399 (88.9%)	628 (89.2%)
Impaired	20 (7.8%)	34 (7.6%)	54 (7.7%)
Senile	6 (2.4%)	16 (3.6%)	22 (3.1%)
Total	255 (100%)	449 (100.1%)	704 (100%)

When examined by sex, as is shown in Table 31, 85.3 per cent. of the men and 91.2 per cent. of the women who lived alone were normal. Of those who did not live alone, 89.8 per cent. of the men and 88.9 per cent. of the women were considered to be normal.

The proportion of normals is slightly higher in women than in men living alone but the difference is neither large nor statistically significant. When compared with their counterparts who did not live alone, little difference existed.

The mental state in various age groups is shown in Table 32. Irrespective of domiciliary state, the proportion of normals tended to fall over the age of 75, with the exception of men living alone, when the proportion fell only after the age of 80.

The outstanding feature of this group is its size. It reveals

Table 32.

The Mental State of 347 Elderly Persons Living Alone, and 704 Elderly Persons Not Living Alone, by Age and Sex.

Part I - Living Alone.

Age in Years	Normal	Impaired	Senile	Total
Males:				
60-64	-	-	-	-
65-69	13 (86.7%)	1 (6.7%)	1 (6.7%)	15 (100.1%)
70-74	14 (82.4%)	2 (11.8%)	1 (5.9%)	17 (100.1%)
75-79	21 (95.5%)	-	1 (4.5%)	22 (100%)
80-84	4 (66.7%)	1 (16.7%)	1 (16.7%)	6 (100.1%)
85+	-	1 (100%)	-	1 (100%)
Females:				
60-64	27 (96.4%)	1 (3.6%)	-	28 (100%)
65-69	55 (94.8%)	3 (5.2%)	-	58 (100.1%)
70-74	72 (96%)	3 (4%)	-	75 (100%)
75-79	62 (84.9%)	8 (11%)	3 (4.1%)	73 (100%)
80-84	34 (89.4%)	4 (10.6%)	-	38 (100%)
85+	11 (78.6%)	2 (14.3%)	1 (7.1%)	14 (100%)

Table 32.

The Mental State of 347 Elderly Persons Living Alone, and 704 Elderly Persons Not Living Alone, by Age and Sex.

Part II - Not Living Alone.

Age in Years	Normal	Impaired	Senile	Total
Males:				
60-64	-	-	-	-
65-69	57 (96.6%)	2 (3.4%)	-	59 (100%)
70-74	88 (96.7%)	3 (3.3%)	-	91 (100%)
75-79	48 (85.7%)	8 (14.3%)	-	56 (100%)
80-84	28 (77.8%)	3 (8.3%)	5 (13.9%)	36 (100%)
85+	8 (61.5%)	4 (30.8%)	1 (7.7%)	13 (100%)
Females:				
60-64	85 (96.6%)	2 (2.3%)	1 (1.1%)	88 (100%)
65-69	84 (95.5%)	3 (3.4%)	1 (1.1%)	88 (100%)
70-74	108 (90.8%)	8 (6.7%)	3 (2.5%)	119 (100%)
75-79	76 (85.4%)	11 (12.4%)	2 (2.2%)	89 (100%)
80-84	34 (71.1%)	8 (16.4%)	6 (12.5%)	48 (100%)
85+	12 (70.6%)	2 (11.8%)	3 (17.6%)	17 (100%)

that the over-all mental health of the elderly is good and, further, that the mental health of the elderly who live alone is in no way inferior to that of those who do not live alone. This is not unexpected as the urge to maintain an independent existence is probably associated with a good basic level of mental health.

As the proportion of normals amongst those living alone is little different from those not living alone, this would suggest that the state of living alone, as such, is not an important factor in the deterioration of mental health. This must be interpreted cautiously, however, as those who show signs of mental deterioration when living alone are more liable to be transferred to a hospital, an institution or to their family, than are those who do not live alone. In this way a tendency may exist for only those in better mental health to remain living alone.

On the other hand, while the factors making for a sense of isolation are greater amongst those who live alone, their untoward effects on mental health may be offset by the mental stimulation needed to maintain an independent existence. As Batchelor and Napier (1953) point out, social integration cannot be expressed merely by stating the living conditions; many who live alone are not lonely while a member of a family group may feel isolated.

The mental vigour of many of those who lived alone and their ability to cope with life and circumstance, often with a keen sense of humour, were a pleasure to encounter and were a stimulating experience.

Impaired:

Those classified as impaired were considered to be showing early signs of mental deterioration. They were rational but had major faults of memory, or showed marked apathy or depression, or had a diminished grasp of everyday affairs. In some, it was a subjective assessment based on the

conduct of the elderly person during the interview. On the whole, this group were still able to manage their own affairs.

Twenty-six (7.5%) of those who lived alone were classified as impaired, as were 54 (7.7%) of those who did not live alone. Sheldon considered that 11.2 per cent. of his group showed signs of early mental impairment.

When examined by sex, as is shown in Table 31, 8.2 per cent. of the men and 7.3 per cent. of the women who lived alone were classified as impaired. Of those not living alone, 7.8 per cent. of the men and 7.6 per cent. of the women were so classified. There was little difference, therefore, between the proportions encountered in the men and women who lived alone and from their counterparts who did not live alone.

When examined by age, as is shown in Table 32, the proportions of those classified as impaired in the various age groups increased noticeably over the age of 75, except in the case of the men living alone where no such influence could be demonstrated. Altogether, 16 (61.5%) of those living alone were found to be over the age of 75, as were 36 (66.7%) of those who did not live alone. This confirms the general impression that when mental deterioration occurs in the elderly it tends to occur in the later age groups.

An attempt was made to find any factors which might have had an aetiological bearing on those living alone who were classified as impaired. This is discussed in the following chapter.

Senile:

The term senile in this context is meant to include all forms of mental deterioration occurring in the elderly.

Those classified as senile showed signs of marked mental deterioration and included those who suffered from confusion, hallucinations,

severe memory loss and extreme variability of mood and demeanour. This group were either unfit or barely fit to manage their own affairs.

Eight (2.3%) of those who lived alone and 22 (3.1%) of those who did not live alone were classified as senile. Sheldon in his survey found that 3.8 per cent. of his group showed signs of severe mental deterioration.

When examined by sex, as is shown in Table 31, 6.6 per cent. of the men and 1.4 per cent. of the women who lived alone showed signs of marked mental deterioration. Of those who did not live alone, 2.4 per cent. of the men and 3.6 per cent. of the women were similarly classified.

Although the differences are not great, the highest proportion of those showing signs of marked mental deterioration occurred in men living alone and the lowest in women living alone. These findings are not in agreement with the view held by Post (1951) that mental deterioration is more common in females living alone than in males living alone or in males and females not living alone.

When examined by age, as is shown in Table 32, the proportions of those classified as senile tended to increase in the later age groups. Altogether six (75%) of those living alone classified as senile were over the age of 75, as were 17 (77.3%) of those who did not live alone. This again confirms the impression that when mental deterioration occurs in the elderly it tends to occur in the later age groups.

The burden that an elderly mentally deteriorated person may be, when living with the family, is by now well appreciated, and this particular problem has been described by Sheldon and Cook et al (1952).

That an elderly person with marked mental deterioration can still manage to live alone is less well appreciated. Such cases do occur, as is shown by the eight persons encountered in this enquiry. As a group they are never numerous, as sooner or later their actions and habits lead to a

demand for action - sometimes from their family and sometimes from neighbours or police.

There is often a reluctance to seek help in such cases. Some are without family and the neighbours are unwilling to take the first step. The families themselves are often reluctant to face the situation. The elderly person is often obstinate and refuses to transfer to the family home; the family, in turn, are often unwilling to take a difficult and sometimes unclean old person into their home. This, together with a fear of the stigma of mental certification, often causes the situation to be left as it is.

The elderly mentally deteriorated person living alone is a danger to himself and others. Gassing and burning accidents are far from uncommon and difficult situations may arise in the case of the agitated or aggressive-suspicious type of senile dement. Removal from their home to a hospital is, in most cases, the only way of effectively dealing with the situation.

For various medical and social reasons, and over a period of time, the medical officer caused seven of the eight elderly persons in this group to be removed to hospital, two by mental certification.

A few cases are described in order to illustrate the problem.

Living Alone.

W.McF., a widower, aged 67. This man was without a family and lived in a dirty house. He had visual and auditory hallucinations and was aggressive. He was being "looked after" by an unscrupulous neighbour who was robbing him of much of his pension and had pawned some of his belongings. He was dirty and undernourished. At our request he was certified.

M.S., a widow, aged 88. She lived in a rather unclean house and was visited daily by a daughter who lived in Clydebank. Mostly she was cared for by the neighbours. The old lady was confused, agitated and disorientated. She walked about the streets in the early hours of the morning. On two occasions she had left the gas on unlit. She had had many falls and was bruised at the time of the interview. She was examined at our request, with a view to mental certification, but this was refused. After a long delay, during which time she fractured her wrist, she was admitted to a ward for senile dements.

J.O'R., married, aged 72. This man had lived alone for the first time during the previous six months while his wife was in hospital. Towards the end of that time he began to show signs of mental deterioration. He developed dirty habits, started to drink to excess and failed to eat regularly. At the time of the interview he was confused, dirty and undernourished. At our request he was admitted to a geriatric unit.

W.J., a bachelor, aged 77. A retired seaman, he had been clean and tidy in his habits and in part-time employment. Following what was probably a small cerebral haemorrhage, he developed dirty habits. He was confused at times and wandered the streets. He reported regularly to his old job although he had been given his notice. On one occasion he accidentally set fire to his house. He was being looked after by a neighbour. At our request he was admitted to a geriatric unit.

J.McC., a spinster, aged 78. This woman lived in a fairly clean house but was markedly depressed and her speech tended to ramble. She repeatedly talked of taking her own life. She had no relatives and had no interests, and was looked after by two of her neighbours. At our request she was admitted to a geriatric unit and later transferred to an old persons' home.

Living with Family.

L.T., a widow, aged 79. She lived with her daughter and her schoolboy grandson, and was confused, completely disorientated and incontinent. Her daughter had given up her job and taken part-time employment so that she could be at home for longer periods. When out at work, the daughter tied the old lady to a chair with a rope to prevent her wandering. All offers of help were refused by the daughter.

J.M., a widower, aged 73. This old man was a confused, agitated senile dement. He lived with his daughter, her husband and their family. He would not sit or lie for any length of time and wandered about the house. The door of the house had to be kept locked at all times to prevent him wandering out into the streets. The family took it in turns to stay at home in the evenings.

Commentary.

There is a high level of mental health amongst those who live alone; over 85 per cent. of those interviewed were considered to be normal. The proportions in the three categories of mental health did not differ greatly from those who did not live alone or from the proportions found by Sheldon in his enquiry.

When mental deterioration was examined by age, no definite trend could be shown although, as might be expected, more cases occurred over the age of 75 than under it. When the two sexes were compared, no significant difference could be demonstrated.

It would seem that the state of living alone of itself is not a factor of importance in the deterioration of mental health, although as has been pointed out previously, it may be that those who show deterioration of their mental faculties quickly fail to maintain their independent existence and are transferred to other accommodation.

Nevertheless if the state of living alone, as such, was an important factor, a greater proportion of those showing early signs of mental deterioration would have been expected to occur in those who lived alone when compared with those who did not. This was not the case; again the proportions were very similar.

It may be that the mental stimulation and mental energy involved in maintaining an independent existence overcome to a great extent the untoward mental effects of loneliness and isolation - at least until advanced ages, when failing physical powers make the effort burdensome. A more prolonged study of the elderly who live alone is needed to settle this question.

Seven out of the eight elderly persons who were showing definite signs of mental deterioration were caused to be removed from their homes by the investigator, two by mental certification. With the exception of the two who were transferred to a mental hospital, some difficulty was experienced in securing hospital admission for this group. This was due to inadequate facilities existing for the treatment and investigation of this type of case outside of the mental hospital.

The need for such provision and the iniquity of having to treat senile dements as lunatics in order to obtain hospital accommodation have been pointed out by many authors (Laidlaw, 1950, 1951; Daley, 1953; Warren, 1950, 1954; Report of the Geriatrics Sub-Committee of the British Medical Association, 1955; Peters, 1956; Bickford, 1956).

Little can be added to this point except to agree wholeheartedly with the above authors. Nevertheless it must be faced that for the mentally deteriorated elderly person living alone who is failing to look after himself and who is a danger to himself and others, in the absence of suitable accommodation, mental certification is the only practicable way at present

of dealing with the situation.

That such elderly persons should be under psychiatric care, at least in the first instance, is universally recognised. This is particularly so as the outlook for the elderly who have mental disorders has become much more hopeful in recent years. The affective disorders particularly, as has been shown by Roth and Morrissey (1952), Roth (1952), Norris and Post (1954), and Robertson and Browne (1953) are especially amenable to treatment.

It has been shown by Roth and Morrissey (1952) that half of all the elderly patients admitted to their care suffered from depression, and a quarter from senile psychosis. Sixty-seven per cent. of those with depression and fourteen per cent. of those with senile psychosis were eventually discharged after treatment. The outlook for the true senile dement is, of course, unfavourable; the path is invariably downhill.

Arising out of these different prognoses has come the need for accurate diagnosis and careful assessment in mental disorders of the elderly. This has been stressed by Thomson and Nagley (1955), Mayer-Gross (1954), O'Connell (1954) and Roth and Hopkins (1953).

One particular aspect is worthy of emphasis. It is now more fully realised that an elderly person can react to toxic and bio-chemical changes by confusion and mental upset (Kay and Roth, 1955; Exton-Smith, 1955; Anderson, 1955; and Hill, 1955), and once the toxic element has been removed the outlook, as has been pointed out by Allison (1952), may be excellent. Amulree and Exton-Smith (1951) have also pointed out the improvement which may result in an elderly person's mental state with simple general care, and along these lines Cosin (1954), in Oxford, has achieved excellent results with his "Day Hospital."

The extent to which mental deterioration can be prevented in the elderly who live alone is difficult to determine. The main need is to overcome loneliness and the sense of isolation which may be present in those who live alone. Every effort should be made to encourage the elderly person to take as full a part as possible in the social life which is available and of particular value are the old age clubs.

Regular visitation by the family and the right type of voluntary worker is an immense help. A scheme by which a family could "adopt" an elderly person who has no family of his or her own would help to overcome the sense of isolation and being unwanted. The great difficulty, however, is in contacting these elderly people in order to arrange this help.

There is a need for mental health education in relation to the preparation for old age and retirement. This is particularly so as Riesman (1954) suggests that mental attitudes in old age are related to mental outlook and interests, especially in relation to work, in younger years.

The question of mental health education and preparation for old age is a very wide one and outside the scope of this enquiry, but it is along these lines that the best results in the prevention of mental deterioration in the elderly may eventually be obtained.

Loneliness.

An attempt was made to investigate the question of loneliness in those who lived alone. The elderly persons interviewed were asked if they ever felt lonely and, according to their answers, were classified into three groups: rarely lonely, lonely at times, and very lonely.

The assessment of loneliness on the strength of one interview has its limitations and is subject to error. The pattern of loneliness is self-reported and under the stimulus of an interview the elderly person might report that they were never lonely; conversely, having a sympathetic

audience, they might exaggerate any feelings of loneliness which they might have.

The state of the weather plays a part. In the middle of winter, when the elderly person is more confined to the house, complaints of loneliness are more frequent than in the spring and summer when they are able to move about more freely. As the interviews were spread out over a year it is hoped that this source of error has been modified.

The state of loneliness of those interviewed is shown in Table 33. In this analysis, those subjects who were classified as senile have been excluded as it was thought that their answers might be unreliable.

Table 33.

The State of Loneliness of 339 Elderly Persons Living Alone, and 682 Elderly Persons not Living Alone, by Sex.

State of Loneliness	Males	Females	Total
Living Alone:			
Rarely lonely	36 (63.2%)	167 (59.2%)	203 (59.9%)
Lonely at times	14 (24.6%)	85 (30.1%)	99 (29.2%)
Very lonely	7 (12.3%)	30 (10.6%)	37 (10.9%)
Total	57 (100.1%)	282 (99.9%)	339 (100%)
Not Living Alone:			
Rarely lonely	232 (93.2%)	400 (92.4%)	632 (92.7%)
Lonely at times	3 (1.2%)	6 (1.4%)	9 (1.3%)
Very lonely	14 (5.6%)	27 (6.2%)	41 (6.0%)
Total	249 (100%)	433 (100%)	682 (100%)

Two-hundred-and-three (59.9%) of the elderly who lived alone stated that they were rarely lonely, compared with 632 (92.7%) of those who did not live alone. Ninety-nine (29.2%) of those who lived alone stated that they were lonely at times, as did nine (1.3%) of those who did not live alone. Of those who lived alone, 37 (10.9%) stated that they were very lonely compared with 41 (6%) of those who did not live alone.

As might be expected, complaints of loneliness were much more frequent amongst those who lived alone. It would seem, as far as those not living alone are concerned, that either they are very lonely or they are not lonely at all, there being very few in the intermediate grade.

That some elderly people who do not live alone should feel very lonely is, at first sight, rather surprising; and this group was further examined.

Of the 41 elderly persons in this group, 16 (39%) lived with their family, ten (24.4%) lived with husband or wife and family, eleven (26.8%) lived with spouse alone, two (4.9%) lived with an aged friend, and two (4.9%) as lodgers.

It is surprising to find that over half of this group lived with their families. This confirms Batchelor and Napier's (1953) contention that social integration cannot be assessed simply by stating the living conditions and that an elderly person living with the family might still feel isolated. This seems to have been the case in the 26 subjects in this group.

An examination of the case sheets of the elderly persons who lived with husband or wife alone revealed that the commonest causes were physical illness, either of the subject or the spouse, and failing mental powers. The fact that two of the elderly persons who were in lodgings were very lonely is not surprising; many such elderly persons live under very isolated conditions.

When examined by sex, as is shown in Table 33, 14 (24.6%) of the men and 85 (30.1%) of the women living alone stated that they were lonely at times, and seven (12.3%) of the men and 30 (10.6%) of the women that they were very lonely.

Although not statistically significant, these findings tend to follow the situation found by Sheldon (p. 132) that men were more liable to severe loneliness than females but that females were more liable to attacks of loneliness.

Such results, however, were not found amongst those who did not live alone. In this group, 14 (5.6%) of the men and 27 (6.2%) of the women stated that they felt very lonely, and three (1.2%) of the men and six (1.4%) of the women that they were lonely at times.

On the whole it would seem that no one sex is much more liable to loneliness than the other, whether living alone or not living alone.

The age incidence of the state of loneliness for those who lived alone is shown in Table 34.

Table 34.

The State of Loneliness of 339 Elderly Persons Living Alone, by Age.

State of Loneliness	Age					
	60-64	65-69	70-74	75-79	80-84	85+
Rarely lonely	16 (57.2%)	40 (55.6%)	58 (63.7%)	55 (60.4%)	24 (56.8%)	10 (71.4%)
Lonely at times	9 (32.1%)	21 (29.2%)	27 (29.7%)	26 (28.6%)	14 (32.6%)	2 (14.3%)
Very lonely	3 (10.7%)	11 (15.3%)	6 (6.6%)	10 (11%)	5 (11.6%)	2 (14.3%)
Total	28 (100%)	72 (100.1%)	91 (100%)	91 (100%)	43 (100%)	14 (100%)

From this table it is seen that no age trend can be demonstrated and that the proportions of those in the later age groups suffering from loneliness are not much different from those in the younger.

Perhaps the most appreciated feature of the elderly who live alone is their liability to loneliness, and it is often assumed that living alone is synonymous with loneliness. This is not the case. While the proportion of those complaining of loneliness is much higher amongst those living alone

than amongst those who do not, nevertheless over half of those who lived alone stated that they rarely suffered from loneliness. This is true of every age group.

It was noticed, however, that some solitary elderly women complained of nervousness when living alone, especially at night. Almost all the women took special precautions to see that the doors were locked at night. Some stated that they did not open the door at all after dark, and others that they did so only in response to a pre-arranged signal-knock. A few rose during the night to ensure that the door was locked, and many were able to quote tales of elderly women being attacked and robbed when they opened their doors at night.

Cowan (1955) stated that some of the solitary elderly people whom he had examined complained of an "eerie" feeling when living alone and a feeling of someone else being in the house. Such statements were not encountered in this enquiry.

Many elderly people who live alone are well integrated socially and many live alone from choice rather than necessity. It was noted that under similar circumstances some elderly people are lonely while others are not. It must be concluded that loneliness is not a simple result of certain environmental factors but a complicated response which involves the reaction of the elderly person's own personality to external circumstances.

The causes of loneliness are multiple but the experience gained in this enquiry suggests that the greatest single factor is a sense of isolation and of not being wanted; and this may occur even when the family is quite near. As one lonely woman said, "My family would give me anything except their time."

Loneliness and a sense of isolation may have grave effects on the personality of the elderly person living alone. It may lead to the

formation of unclean habits, both personal and domestic; it may lead to self-neglect and inadequate dietary habits; and it may be a factor in the causation of mental deterioration - an aspect which is discussed in the following chapter.

Warren (1950) has suggested that loneliness may be a cause of incontinence in the elderly, and its place as a cause of suicide and attempted suicide in the elderly has been pointed out by Batchelor (1955), Batchelor and Napier (1953) and Saintsbury (1951).

Most of those who lived alone were aware of the danger of loneliness and many had taken active measures to prevent it. The commonest, perhaps, was to engage in outside pursuits such as visiting, walks, and attending group functions such as old age or religious club meetings. Also noticed was the keeping of pets, the commonest being cats and then budgerigars, although dogs and a parrot were encountered.

A wireless in the house is a great boon and many spoke of its value in preventing loneliness. Some examples were: "I sing with it;" "It's on all day;" "I have some great arguments with it."

A strong religious faith is active in the prevention of loneliness. One old lady said in reply to the question on loneliness, "I am never lonely when Jesus is near." In the same way, some elderly persons were noted to be regularly attending religious meetings, particularly of the mission type, when they were not interested in old age clubs.

Regular visitation by the family and, where no family exists, by a friend is perhaps the greatest prophylactic against loneliness that exists. It is an event to which old people eagerly look forward, and for it they often prepare both themselves and their house. The value of such visits cannot be over-stated, particularly to the elderly who do not have a family of their own.

A frequent phrase at the end of our interview was, "When will you be back?" and a return visit had to be promised in many cases before we left. The impression was formed during the enquiry that many elderly people who lived alone would welcome regular visitation, particularly those who had few family visits. Such regular visitation by the right type of person can, if started early, prevent loneliness and the ill-effects that come from it.

Commentary.

Loneliness in the elderly who live alone is not such a common feature as is generally supposed, but when it occurs it may produce great unhappiness and untoward effects on the elderly person's character and way of life. In many cases its onset is prevented by the elderly persons themselves, but in some cases assistance from voluntary and official sources would be of great value.

CHAPTER 11.

SOME FACTORS IN THE AETIOLOGY OF MENTAL DETERIORATION IN OLD PEOPLE LIVING ALONE.

Sheldon (p. 127) in his study of the mental health of elderly persons attempted to find any environmental factors which might be associated with mental deterioration. Following his example, I tried to find any factors which might have a bearing on the causation of mental deterioration in the elderly who lived alone.

Certain attributes of the 26 elderly persons living alone who were showing signs of early mental deterioration - the group classified as "impaired" - were examined and compared with those of the 313 elderly persons who were considered to be normal.

Except for particular instances, the eight elderly persons classified as senile have been excluded from this analysis. This has been done because the number is small and the answers received may have been unreliable, although as far as possible the answers were checked.

I. Physical Factors.

A comparison was made of certain physical factors in the two groups. These are shown in Table 35.

Age:

The relationship of age to mental deterioration has been referred to in the previous chapter. Of the 26 elderly persons classified as impaired, 16 (61.5%) were over the age of 75 years compared with 132 (42.9%) of the normals. The fact that those who were showing signs of early mental deterioration tended to be older than those who were normal will have a bearing on certain of the factors considered hereafter.

Difficulty with Locomotion:

Difficulty of locomotion was complained of by 21 (80.8%) of those classified as impaired compared with 134 (42.8%) of the normals; and two (7.7%) of those classified as impaired were unable to walk at all compared with three (1%) of the normals. One-hundred-and-seventy-six (56.2%) of

Table 35.

Certain Physical Factors of 339 Elderly Persons Living Alone, by Mental State.

Physical Factors	Normal	Impaired
Age:		
Over seventy-five	132 (42.9%)	16 (61.5%)
Under seventy-five	181 (57.1%)	10 (38.5%)
Difficulty with Locomotion:		
No difficulty	176 (56.2%)	3 (11.5%)
Complaint of difficulty	134 (42.8%)	21 (80.8%)
Unable to walk	3 (1%)	2 (7.7%)
Ability to Leave the House:		
Daily/several times week	265 (84.7%)	14 (53.9%)
Occasionally	13 (4.2%)	1 (3.8%)
Not at all	35 (11.2%)	11 (42.3%)
State of Hearing:		
Good	259 (82.8%)	17 (65.4%)
Poor	38 (12.1%)	6 (23.1%)
Very deaf	16 (5.1%)	3 (11.5%)
Physical Illness:		
No complaint	67 (21.4%)	3 (11.5%)
Complaint	246 (78.6%)	23 (88.5%)
Position of the House:		
Ground floor and first floor	182 (58.1%)	14 (53.9%)
Second floor and over	131 (41.9%)	12 (46.2%)

the normals and three (11.5%) of those classified as impaired had no difficulty of locomotion.

A much higher proportion of those who were showing signs of early mental deterioration had difficulty with locomotion than those considered normal and the difference is significant (standard error of difference, 20).

Difficulty in getting about in an elderly person restricts outside activities and in the presence of other factors may make for a sense of isolation.

Ability to Leave the House:

Eleven (42.3%) of those classified as impaired were house-bound compared with 35 (11.2%) of the normals. One (3.8%) of those classified as impaired was able to leave the house only occasionally, as were 13 (4.2%) of the normals.

Two-hundred-and-sixty-five (84.7%) of the normals were able to leave their home daily or several times a week compared with 14 (53.9%) of those classified as impaired.

The proportion of those house-bound was significantly greater amongst those showing signs of early mental deterioration (standard error of difference, 19.9). It may be, however, that failing mental powers in themselves are factors in the inability to leave the house although most of the subjects had adequate physical reasons for being house-bound.

State of Hearing:

It had been suggested by Affleck (1947) and confirmed, although only as an impression, by Adams and Cheeseman (1951) that deafness and mental deterioration in old people were associated.

In this analysis, nine (34.6%) of those classified as impaired were very deaf or had poor hearing compared with 54 (17.2%) of the normals.

Although the proportion of those with difficulty of hearing is suggestively higher in those showing signs of early mental deterioration than in the normals, the difference is not statistically significant (standard error of difference, 19.1).

Physical Health:

Because of the multiplicity of complaints encountered and the difficulty of their relative evaluation, no attempt was made in this enquiry to assess the general state of the health of the elderly persons interviewed. However, several of the elderly persons interviewed had no complaints of physical illness and none was observed, and they could be taken as a group enjoying good physical health.

Of the group classified as impaired, three (11.5%) seemed to be in good physical health compared with 67 (21.4%) of the normals.

While the proportion of those with good physical health was higher in the group considered to be normal, the difference was not significant (standard error of difference, 13.4).

Position of the House:

It had been suggested by Laidlaw (1954) that the elderly who lived alone in houses on the upper floors were more subject to mental deterioration than those who lived on lower floors.

In this analysis, 12 (46.2%) of the group classified as impaired lived in houses on the second floor and over, compared with 131 (41.9%) of the normals.

Of those classified as senile, four (50%) lived in houses on the second floor or over and four (50%) lived in ground floor or first floor houses.

While the proportion of those showing signs of mental deterioration living on upper floors was slightly higher than the normals, the difference

was not large and not statistically significant.

Laidlaw's suggestion, therefore, cannot be confirmed by this enquiry.

II. Family Visitation.

A comparison was made of the frequency of family visitation in the two groups. This is shown in Table 36.

Twelve (46.3%) of those classified as impaired were without a family compared with 51 (16.3%) of the normals. The high proportion of those without a family in the former group is very striking and the difference is significant (standard error of difference, 20).

Table 36.

The Frequency of Family Visitation of 347 Elderly Persons Living Alone, by Mental State.

Family Visitation	Normal	Impaired	Senile
Without a family	51 (16.3%)	12 (46.3%)	1 (12.5%)
With a family -			
Family does not visit	11 (4.2%)	2 (14.3%)	2 (25%)
Infrequent Visits:			
Family visits occasionally	14 (5.3%)	1 (7.1%)	2 (25%)
Family visits monthly	8 (3.1%)	1 (7.1%)	-
Frequent Visits:			
Family visits fortnightly	10 (3.8%)	-	-
Family visits once or more per week	100 (38.2%)	3 (21.4%)	-
Family visits daily	119 (45.4%)	7 (50%)	3 (37.5%)
Total	313	26	8

The frequency of family visitation amongst those who had a family was compared in the two groups.

As is shown in Table 36, two (14.3%) of those classified as impaired received no visits from their family, compared with 11 (4.2%) of the normals. The difference is again noticeable, although not statistically

significant (standard error of difference, 13.9).

The remainder can be divided into two main groups: those who were visited frequently and those who were visited infrequently. Of those classified as impaired, two (14.2%) received infrequent visits from their family compared with 22 (8.4%) of the normals. Frequent visitation occurred in 239 (87.4%) of the normals compared with 10 (71.4%) of those classified as impaired.

It is seen, therefore, that even when a family existed, those classified as impaired were less fortunate from the point of view of family visitation than those considered normal.

It is interesting to note that of the eight subjects classified as senile, one (12.5%) had no family, two (25%) received no visits from their family, and two (25%) were visited only occasionally.

It would appear, therefore, that lack of a family is associated with early mental deterioration in the elderly who live alone. Such a situation may give rise to a feeling of isolation and what has been called by Cottam (1954) and Grant (1955) "unwantedness," which may contribute to the cause of the deterioration.

While not proved statistically, a poor standard of family visitation may also be a factor in the causation of mental deterioration in the elderly who live alone.

III. Group Activities and Interests.

A comparison was made of certain group activities and interests in the two groups. This is shown in Table 37.

Membership of an Old Age Club:

Five (19.2%) of those classified as impaired were or had been members of an old age club compared with 100 (32.1%) of the normals.

Table 37.

Certain Group Activities and Interests of 339 Elderly Persons Living Alone, by Mental State.

Interest or Activity	Normal	Impaired
Membership of an Old Age Club:		
Member	100 (32.1%)	5 (19.2%)
Non-Member	212 (67.9%)	21 (80.8%)
Member of a Church:		
Member	248 (79.3%)	19 (73.1%)
Non-Member	65 (20.8%)	7 (26.9%)
Attends a Church:		
Attends	156 (58.9%)	5 (35.7%)
Does not attend	109 (41.1%)	9 (64.3%)
Outside Activities:		
Nil	49 (15.7%)	12 (46.2%)
Shopping only	31 (13.8%)	8 (57.1%)
Shopping, visits, walks	93 (23.7%)	3 (21.4%)
Varied	140 (62.5%)	3 (21.4%)
Possession of a Radio:		
Yes	197 (63.0%)	9 (34.4%)
Yes (broken)	12 (6.8%)	-
No	104 (33.2%)	17 (65.6%)

A much smaller proportion of those showing signs of early mental deterioration had been associated with this form of community participation although the difference is not statistically significant (standard error of difference, 16.3).

Attendance at Church:

Two-hundred-and-forty-eight (79.3%) of the normals and 19 (73.1%) of those classified as impaired stated that they were members of a church.

Excluding those elderly persons who were completely or partially confined to their home, five (35.7%) of the remainder classified as impaired attended church compared with 156 (58.9%) of the remaining normals.

The lack of church attendance is noted in the group showing signs of mental deterioration and suggests that while little difference exists with regard to church membership there is a lack of this form of community participation in those showing signs of mental deterioration, although the difference is not statistically significant (standard error of difference, 26.7).

Outside Activities:

Twelve (46.2%) of those classified as impaired and 49 (15.7%) of the normals had no outside activities. This group consists almost entirely of those who were confined to the house either wholly or partially and, to eliminate bias, are excluded from the following comparison.

Of the remainder, eight (57.1%) of those classified as impaired had outside activities limited to shopping only, compared with 31 (13.8%) of the normals. Three (21.4%) of those classified as impaired had varied outside activities compared with 140 (62.5%) of the normals. Ninety-three (23.7%) of the normals and three (21.4%) of those classified as impaired had modified outside interests.

The proportion of those whose outside activities were limited to shopping is significantly higher in the group classified as impaired (standard error of difference, 26.8).

There is, therefore, a lack of outside activities in the group of elderly who were showing early signs of mental deterioration. Whether this restriction is due to failing mental powers or whether lack of outside interests is a factor in the cause of mental deterioration is difficult to assess.

Possession of a Radio:

Seventeen (65.6%) of those classified as impaired did not possess a radio compared with 104 (33.2%) of the normals.

The difference is quite striking and is statistically significant (standard error of difference, 19.4).

The absence of a radio may indicate a personality which is not interested in the happenings of the outside world or it may be a factor helping to cause a sense of isolation. Economic factors, however, have not been considered and it may be that a radio was wanted but could not be afforded.

A radio, too, might have been bought by the family and left behind when the family left the home; or it might have been a gift from the family to an elderly person feeling lonely. The fact that almost half of those who were showing signs of early mental deterioration did not have a family would leave them at a disadvantage in this respect.

IV. Loneliness.

A comparison was made of the state of loneliness in the two groups. This is shown in Table 38.

Table 38.

The State of Loneliness of 339 Elderly Persons Living Alone, by Mental State.

State of Loneliness	Normal	Impaired
Rarely lonely	196 (62.6%)	7 (26.9%)
Lonely at times	93 (29.7%)	6 (23.1%)
Very lonely	24 (7.7%)	13 (50%)
Total	313 (100%)	26 (100%)

It is seen from Table 38 that 13 (50%) of those classified as impaired stated that they were very lonely, compared with 24 (7.7%) of the normals.

Seven (26.9%) of those classified as impaired stated that they were rarely lonely, compared with 196 (62.6%) of the normals; and six (23.1%) of those classified as impaired and 93 (29.7%) of the normals stated that they were lonely at times.

It is seen, therefore, that those who were classified as impaired suffered more from loneliness than did those considered to be normal. The high proportion of those suffering from severe loneliness in the former group is very striking and the difference is significant (standard error of difference, 19.8).

It is not always easy to assess whether loneliness causes mental deterioration or whether failing mental powers make for a reaction of loneliness. As has been stated previously, loneliness is an individual reaction to certain circumstances and what causes loneliness in one person fails to do so in another.

The impression gained, however, was that loneliness and a sense of isolation were causes rather than effects of mental deterioration in the

elderly who live alone and this is supported by the high incidence in those with signs of early mental deterioration of factors previously discussed which tended to cause a sense of isolation.

Commentary.

Sheldon (p. 139) as a result of his studies concluded that the following factors were associated with mental deterioration in the elderly: the widowed state, loneliness, domestic anxiety and a tendency to sub-normal physique and restriction of movement.

From a consideration of the factors previously discussed it is concluded that the following are associated with mental deterioration in the elderly who live alone: confinement to the house, difficulty in locomotion and possibly defective hearing; lack of a family and infrequent family visitation; lack of community participation; and loneliness and a sense of isolation, which may be caused or aggravated by these other factors.

The lack of social contact would suggest that the "bad mixers" and those who are shy are more liable to mental deterioration when left alone than those able to mix freely, as when loneliness and isolation occur they are unable to seek new friends and interests to overcome it.

While physical factors such as restriction to the house are associated with mental deterioration in the elderly who live alone, it is probable that they would assume only moderate importance if there was frequent family visitation and social contacts in the home.

In the opinion of the investigator, the most important factor in the causation of mental deterioration in those who live alone is the lack of a family and the lack of frequent family visitation. This gives rise to a sense of "alone-ness" and isolation which has probably very deep effects on the personality of an elderly person living alone.

CHAPTER 12.

DEAFNESS.

Difficulty in hearing, to a greater or less extent, is a well-known disability of old age and some degree of deafness is regarded as being virtually normal in the elderly.

The incidence of deafness in the elderly has been determined by several authors. In almost every case the standard adopted has been the response to the spoken voice. The extent to which the voice had to be raised determined the degree of deafness. Such a method is of good practical value but it makes comparisons difficult, as does the diversity of standards employed.

Sheldon (p. 87) classified deafness into three states: total, severe and moderate. He found that 31 per cent. of his group had various degrees of deafness, of which approximately two-thirds was moderate deafness. Hobson and Pemberton (1955), using a similar classification, found that 52.6 per cent. of the men and 30.7 per cent. of the women had some degree of defective hearing. Almost 16 per cent. of the men and nine per cent. of the women were seriously or totally deaf.

The incidence of deafness has also been ascertained in other enquiries. In the Hammersmith survey, "Over Seventy" (1954), ten per cent. of the group were considered to be "deaf or hard of hearing;" Mair et al (1956) stated that 23 per cent. of their subjects were "deaf;" Scott and Williams (1954) considered that six (5.6%) of their group were "deaf;" Adams and Cheeseman (1951) stated that ten (1.3%) of their series were "totally deaf;" Walker (1947) listed 16 (7.9%) of his group as complaining of "deafness;" Simonds and Stewart (1954) stated that 30.7 per cent. of the males and 26.9 per cent. of the females suffered from "deafness;" Sargaison (1954) observed that the amount of total deafness in her group was "surprisingly low."

Obviously, then, the incidence of deafness among old people has varied considerably in various enquiries.

In the present enquiry the standard of hearing was assessed under three categories: normal, poor and very deaf. The standard was again the response to the voice of the interviewer. The subject being interviewed was classified as "normal" if he responded to the conversational, or slightly raised voice of the interviewer. He was classified as "poor" if the voice had to be raised to shouting pitch; and he was classified as "very deaf" if, even at this pitch, little was heard.

Table 39.

The State of Hearing of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

State of Hearing	Male	Female	Total
Living Alone:			
Normal	38 (62.3%)	244 (85.3%)	282 (81.3%)
Poor	16 (26.2%)	28 (9.8%)	44 (12.7%)
Very Deaf	7 (11.5%)	14 (4.9%)	21 (6.1%)
Total	61 (100%)	286 (100%)	347 (100.1%)
Not Living Alone:			
Normal	154 (60.4%)	381 (84.9%)	535 (76%)
Poor	72 (28.2%)	51 (11.4%)	123 (17.5%)
Very Deaf	29 (11.4%)	17 (3.8%)	46 (6.5%)
Total	255 (100%)	449 (100.1%)	704 (100%)

The state of hearing of the elderly persons interviewed is shown in Table 39. It is seen from this table that of those who lived alone, 81.3 per cent. were classified as normal, 12.7 per cent. as poor, and 6.1 per cent. as very deaf. Of those who did not live alone, 76 per cent. were classified as normal, 17.5 per cent. as poor, and 6.5 per cent. as very deaf.

While the standard of hearing was slightly better amongst those who lived alone, the difference was small and was not significant. The over-all incidence of deafness approximates more to that found by Sheldon

than to that found by Hobson and Pemberton, although because of the varying standards used comparisons are difficult.

Impaired hearing is more common in men than women. Thus, 37.7 per cent. of the men who lived alone were classified as having impaired hearing compared with 14.7 per cent. of the women. Of those who did not live alone, 39.6 per cent. of the men had impaired hearing compared with 15.2 per cent. of the women (Table 39). These differences in proportion are statistically significant (standard error of difference, 13.1; 7).

That men are more subject to deafness than women has also been noted by Sheldon, Hobson and Pemberton, and Simonds and Stewart. The reason may lie in the industrial background of the men. In the present enquiry, many of the men had worked in the local shipyards and it is probable that in many the excessive noise had had an adverse effect upon their hearing.

Table 40 shows that, irrespective of whether living alone or not, the incidence of deafness tended to increase as the age increased. This would suggest that defective hearing is a simple effect of the process of growing old.

Defective hearing can be a serious drawback to the elderly and the part it plays in producing loneliness and a sense of isolation is well known. It has been suggested by Amulree (1955), Warren (1953), and Exton-Smith (1955) that defective hearing leads to depression, moroseness and suspicion, as those afflicted feel shut off from their fellows. Hobson and Pemberton suggest that it may even lead to paranoid tendencies. In this enquiry the incidence of impaired hearing was suggestively higher in those who showed signs of early mental deterioration (see Chapter 11).

Table 40.

The State of Hearing of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age.

State of Hearing	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Normal	27 (96.4%)	64 (87.7%)	73 (79.4%)	73 (77.0%)	32 (72.7%)	13 (86.7%)
Poor	1 (3.6%)	5 (6.8%)	12 (13.0%)	16 (16.7%)	8 (18.2%)	2 (13.3%)
Very Deaf	-	4 (5.5%)	7 (7.6%)	6 (6.3%)	4 (9.1%)	-
Total	28 (100%)	73 (100%)	92 (100%)	95 (100%)	44 (100%)	15 (100%)
Not Living Alone:						
Normal	82 (93.2%)	122 (83.0%)	160 (76.2%)	102 (70.4%)	52 (61.9%)	17 (56.7%)
Poor	6 (6.8%)	15 (10.2%)	37 (17.6%)	34 (23.4%)	21 (25%)	10 (33.3%)
Very Deaf	-	10 (6.8%)	13 (6.2%)	9 (6.2%)	11 (13.1%)	3 (10%)
Total	88 (100%)	147 (100%)	210 (100%)	145 (100%)	84 (100%)	30 (100%)

Most of the elderly who had impaired hearing seemed to accept the condition as a natural accompaniment of increasing age. Few had taken any steps to be examined medically on this account. It would seem reasonable to suggest routine medical examination of those who had difficulty of hearing. Although deafness in old age is attributed to a cochlear lesion, many still do obtain an improvement in hearing by using a hearing aid (Watkyn-Thomas, 1953; Exton-Smith, 1955). Cowan (1955) was able to relieve deafness in four out of eight cases examined by the simple expedient of removing impacted wax.

A few of the elderly who had impaired hearing had doorbells which caused a light to shine rather than a bell to ring, and this was of help in letting them know that they had a caller. The majority, however, had no such device, and the presence of a dog, mentioned by Sheldon as a similar aid, was rarely encountered. In most cases it was a neighbour appearing from an adjacent house who warned the elderly person of their callers. This was often done by strenuous banging on the door or by knocking on a wall or window.

Hearing Aids:

Sheldon found that 6.2 per cent. of his subjects with defective hearing had a hearing aid. Hobson and Pemberton stated that less than two per cent. of their deaf subjects had a hearing aid. Sargaison observed only five (1.3%) in 371 interviews of elderly men.

In the present enquiry, eight (12%) of the 65 subjects with defective hearing who lived alone had hearing aids, and of the 169 who did not live alone, ten (5.9%).

Although not statistically significant, there appeared to be a greater use of hearing aids amongst the deaf who lived alone. This may be

due to the fact that the elderly who do not live alone have someone in the home who is accustomed to raising the voice. Those who live alone are without this advantage and may therefore have to take more active steps to combat deafness.

In spite of the incidence of deafness being highest in the older age groups, hearing aids were more commonly encountered in the younger age groups. Thus, 12 (66.7%) of those who had hearing aids were below the age of 75 and no one had a hearing aid who was over the age of 80. It may be that only the younger members of the elderly appreciate the value of a hearing aid or that the older members are unable to adapt themselves to the idea.

The number of hearing aids encountered was small and was probably far below that which could have been usefully employed, although a warning against over-optimism in their use in the elderly has been made by Silverman and Taylor (1947). Nevertheless it was felt that many more should have had the opportunity of a test. Once a hearing aid has been supplied to the elderly, Geffen and Tracy (1955) have shown that it is kept in use and not put to one side.

There seemed to be a great lack of knowledge about hearing aids. Few of those who had defective hearing seemed to know how to go about obtaining one and few had made enquiries about them. Some were under the impression that they had to be paid for, if not in whole at least in part.

Many of those with defective hearing seemed to be complacent about their defect, regarding it as an inevitable accompaniment of old age. They did not seem interested when the subject of hearing aids was mentioned to them.

Commentary.

Probably much more could be done to relieve deafness in the elderly. There is a need to alter the attitude of taking impaired hearing for granted in elderly people. Routine examination of the ears of the elderly who complain of deafness would be an advantage, and there is a need to make the elderly more aware of the value of a hearing aid than they are at present.

Summary.

The state of hearing of the elderly who lived alone has been described.

Impaired hearing was present in 18.8 per cent. of the group, and men were affected more commonly than women.

The incidence of impaired hearing increased with age.

The state of hearing did not differ significantly from the elderly who did not live alone.

Few of the elderly with impaired hearing possessed a hearing aid.

It is concluded that more could be done to relieve deafness in the elderly.

CHAPTER 13.

SIGHT.

Defective vision is a common disability of the elderly. The gradual sclerosis of the lens with advancing years commonly results in the need for spectacles. The other common conditions which result in defective vision in the elderly are senile macular degeneration, senile cataract and chronic glaucoma (Sorsby, 1953, 1956; Marshall and Seiler, 1942).

The incidence of defective vision in elderly people has been reported on by various authors. Sheldon (p. 75) found that only 6.3 per cent. of his sample had normal sight without the use of spectacles and that one per cent. of his group were totally blind.

Simonds and Stewart (1954) stated that 47 per cent. of their males and 58 per cent. of their females had impaired sight. In the Hammersmith survey, "Over Seventy" (1954), three per cent. of the group were considered to be "partly blind;" Mair et al (1956) described 14 per cent. of their group as "blind or part blind;" Walker (1947) stated that one (0.5%) of his sample was totally blind and that nine (4.2%) had "failing sight;" Adams and Cheeseman (1951) stated that two per cent. of their group were totally blind; and Sargaison (1954) stated that 15.6 per cent. of the elderly men she interviewed had failing sight.

Hobson and Pemberton (1955) reported on the detailed ophthalmological examination of 324 elderly persons of their group. They found that 0.4 per cent. of their group were totally blind and that 2.5 per cent. were near blind.

In the present enquiry the state of vision of the elderly persons interviewed was assessed under four categories: satisfactory, poor vision, almost blind and totally blind. The assessment was based on the state of vision when spectacles were worn.

The quality of vision in the first two categories is self-reported and thus is subject to error. An attempt was made to differentiate between

those who were almost blind and those who were totally blind. The former had a certain amount of vision and their movements were less restricted.

Table 41.

The State of Vision of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

State of Vision	Male	Female	Total
Living Alone:			
Satisfactory	44 (72.1%)	203 (71.0%)	247 (71.2%)
Poor Vision	15 (24.6%)	74 (25.9%)	89 (25.6%)
Almost Blind	2 (3.3%)	7 (2.4%)	9 (2.6%)
Totally Blind	-	2 (0.7%)	2 (0.6%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Satisfactory	177 (69.9%)	300 (67.1%)	477 (68.1%)
Poor Vision	64 (25.3%)	112 (25.1%)	176 (25.1%)
Almost Blind	4 (1.6%)	22 (4.9%)	26 (3.7%)
Totally Blind	8 (3.2%)	13 (2.9%)	21 (3%)
Total	253 (100%)	447 (100%)	700 (99.9%)
Not Stated	2	2	4

The state of vision of the elderly persons interviewed is shown in Table 41. Of those who lived alone, 71.2 per cent. stated that their vision was satisfactory and 25.6 per cent. complained of poor vision. A further 2.6 per cent. were almost blind and two (0.6%) were totally blind.

Of those who did not live alone, 68.1 per cent. stated that their vision was satisfactory and 25.1 per cent. complained of poor vision. A further 3.7 per cent. were almost blind and three per cent. were totally blind.

Except for total blindness, there was little difference in the incidence of defective vision in the two groups. As might be expected, the incidence of total blindness in the group who lived alone was small.

Due to the difference in the standards employed it is difficult to compare the over-all state of vision of the elderly who lived alone with that of other enquiries. The incidence of total and near blindness, however, is not dissimilar from that found in many of the enquiries previously quoted.

There was little difference in the incidence of defective vision in the two sexes. Thus, of those who lived alone, 71 per cent. of the women stated that they had satisfactory vision compared with 72.1 per cent. of the men; and 25.9 per cent. complained of poor vision compared with 24.6 per cent. of the men (Table 41). There was also little difference in the incidence of defective vision in the two sexes not living alone (Table 41).

The incidence of defective vision in the various age groups is shown in Table 42. Defective vision increased sharply after the age of 70 but did not increase again until after the age of 85. The incidence of near blindness, however, increased steadily with advancing years, with a sharp increase after the age of 85. With the elderly who did not live alone, the incidence of defective vision increased steadily with advancing years.

It would not appear that failing vision is a common cause of ceasing to live alone - at least until the stage of almost total blindness is reached. Even with near blindness, nine elderly persons managed to live alone and the proportions in the two groups who were almost blind did not differ greatly.

That anyone who was totally blind should still live alone is surprising. Two such persons were encountered in the enquiry. Although both were being assisted by a home help, neither was really able to manage and one was in distressing circumstances.

Obviously such elderly persons should not be left to live alone. The provision of a home help does not relieve the situation as they are

Table 42.

The State of Vision of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age.

State of Vision	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Satisfactory	26 (92.9%)	59 (80.8%)	63 (68.5%)	64 (67.3%)	30 (68.2%)	5 (33.3%)
Poor Vision	2 (7.1%)	13 (17.8%)	27 (29.4%)	27 (28.4%)	13 (29.5%)	7 (46.7%)
Almost Blind	-	1 (1.4%)	2 (2.2%)	3 (3.2%)	-	3 (20%)
Totally Blind	-	-	-	1 (1.1%)	1 (2.3%)	-
Total	28 (100%)	73 (100%)	92 (100.1%)	95 (100%)	44 (100%)	15 (100%)
Not Living Alone:						
Satisfactory	73 (83.0%)	115 (78.3%)	153 (72.8%)	92 (63.8%)	39 (48.2%)	5 (16.7%)
Poor Vision	12 (13.6%)	27 (18.3%)	47 (22.4%)	42 (29.2%)	33 (40.7%)	15 (50%)
Almost Blind	3 (3.4%)	3 (2.0%)	6 (2.9%)	4 (2.8%)	4 (4.9%)	6 (20%)
Totally Blind	-	2 (1.4%)	4 (1.9%)	6 (4.2%)	5 (6.2%)	4 (13.3%)
Total	88 (100%)	147 (100%)	210 (100%)	144 (100%)	81 (100%)	30 (100%)
Not Stated				1	3	

still left alone for the greater part of every day. They are subject to burning and other accidents and are often very lonely. Cases such as these should be admitted to an elderly persons' hostel where they can be cared for properly.

These were the conditions of the two totally blind people who lived alone:

R.G., a spinster, aged 79. This woman had been totally blind for over a year. She was without a family but had had a married couple as lodgers who looked after her. The couple had emigrated and she had been alone for the past four months. She was being assisted by a home help who attended for four hours daily and by her neighbour.

The front door was left unlocked except at night. When she was interviewed she was seated in front of a very large fire with a shovel in her hand which was intended to prevent falling coals. The fire, left by the home help, was to last until early evening when a neighbour visited her. She was left alone for the greater part of the day and all of the night.

She was unhappy and lonely and was able to leave the house only on occasion, when assisted by a neighbour. She had a healing abrasion of the leg caused by stumbling into furniture. After several visitations she agreed to enter an elderly persons' hostel.

J.McF., a widow, aged 82. She had become totally blind only within the last few months. She had a bachelor son who only visited her weekly. A home help attended her for four hours per day but she received little assistance from the neighbours.

The front door was not locked when we called and we found her in a distressing position. Her home help had failed to appear and she was crawling about the floor looking for food she had dropped. She was unable to find her clothes and had been unable to start a fire to warm herself.

Her nightdress was wet with urine as she had been unable to find the bedside commode.

She was partly deaf and had not adjusted to her blindness. She was quite unfit to live alone and without difficulty was persuaded to enter an elderly persons' hostel. This was done shortly after our visit.

Spectacles.

Sheldon, writing before the inception of the National Health Service, found that the position in the elderly with regard to the rectification of visual defects with spectacles was distressing. Almost three per cent. of his sample needed spectacles but had none, and 30.6 per cent. had spectacles which were unsatisfactory. Seventeen per cent. of those with spectacles had never had their eyes tested and one-third of the spectacles in use had either no effect or were positively harmful.

Following the inception of the National Health Service the provision of proper spectacles for the elderly improved immensely. Hobson and Pemberton reported that approximately 50 per cent. of their sample had had spectacles since the start of the service. Nevertheless, after a detailed ophthalmological examination which included tests of visual acuity, they still found that 4.6 per cent. required spectacles for near vision and that 5.5 per cent. needed spectacles for distant vision. They also considered that approximately 13 per cent. of the spectacles worn were unsatisfactory.

In the present enquiry an attempt was made to assess the position of the wearing of spectacles by the elderly. The enquiry was not extensive and did not involve the use of tests. The assessment was based on the replies given to the investigator.

Information regarding the use of spectacles was tabulated for 324 elderly people living alone and 679 elderly people not living alone.

Table 43.

The Use of Spectacles by the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

The Use of Spectacles	Male	Female	Total
Living Alone:			
Not required	2 (3.5%)	12 (4.5%)	14 (4.3%)
Reading only	35 (61.4%)	124 (46.5%)	159 (49.1%)
Distance only	1 (1.8%)	6 (2.2%)	7 (2.2%)
Both	17 (29.8%)	112 (41.9%)	129 (39.8%)
None, but needed	2 (3.5%)	13 (4.9%)	15 (4.6%)
Total	57 (100%)	267 (100%)	324 (100%)
Not stated or not applicable	4	19	23
Not Living Alone:			
Not required	12 (4.9%)	48 (11.1%)	60 (8.8%)
Reading only	158 (64.5%)	203 (46.7%)	361 (53.3%)
Distance only	2 (0.8%)	9 (2.1%)	11 (1.6%)
Both	56 (22.9%)	150 (34.6%)	206 (30.3%)
None, but needed	17 (6.9%)	24 (5.5%)	41 (6.0%)
Total	245 (100%)	434 (100%)	679 (100%)
Not stated or not applicable	10	15	25

The use of spectacles by the elderly persons interviewed is shown in Table 43, where it is shown that 4.3 per cent. of those who lived alone and 8.8 per cent. of those who did not live alone stated that their vision was satisfactory without the use of spectacles. This compares with Sheldon's figure of 6.3 per cent. with normal sight without the use of spectacles.

It was estimated that 4.6 per cent. of those who lived alone had no spectacles but needed them, as did six per cent. of those who did not

live alone. These proportions are close to those found by Hobson and Pemberton but are slightly larger than the proportion found by Sheldon. It would appear that irrespective of whether there is an adequate scheme for the provision of spectacles or not, there will always be a residuum of elderly persons who need spectacles but who have none. The reasons for this are not easy to find but probably include apathy, a dislike of the wearing of spectacles, and those who would rather put up with the difficulties of defective vision than visit an optician.

Ninety-three per cent. of the men who lived alone possessed spectacles, as did 90.6 per cent. of the women. Of those who did not live alone, 88.2 per cent. of the men and 83.4 per cent. of the women possessed spectacles.

It is seen, therefore, that a slightly greater proportion of those who lived alone possessed spectacles. In both groups a slightly greater proportion of men had spectacles. Gray (1951) in an interesting study found little sex difference in the proportions of those over the age of 65 who had spectacles: in two of the four succeeding age groups of the elderly there were more males, and in two, more females.

Spectacles were used for reading by 91.2 per cent. of the men and 88.4 per cent. of the women who lived alone. Of those who did not live alone, reading spectacles were used by 87.3 per cent. of the men and 81.3 per cent. of the women.

Again a slightly greater proportion of those who lived alone possessed reading spectacles. These proportions are slightly lower than those found by Sheldon, and Hobson and Pemberton, and also differ in that these investigators found a slightly greater proportion of women with reading spectacles.

Spectacles for distance were used by 31.6 per cent. of the men who lived alone and by 44.2 per cent. of the women. Of those who did not live alone, 23.7 per cent. of the men and 36.6 per cent. of the women had spectacles for distant vision. These proportions are considerably lower than those found by Hobson and Pemberton.

Spectacles for both reading and distance were used by 29.8 per cent. of the men who lived alone and by 41.9 per cent. of the women. Of those who did not live alone, 22.9 per cent. of the men and 34.6 per cent. of the women had spectacles for near and distant vision.

There was a greater over-all use of spectacles by those who lived alone but the differences in proportion were not large.

The provision of free spectacles under the National Health Service has done much to relieve the conditions found by Sheldon. Although the question was not specifically asked in the enquiry, it was quite clear that the majority of the elderly who had spectacles had had them provided by the National Health Service. An occasional example was still found, however, of the elderly person who was using someone else's spectacles.

Nevertheless of those who had spectacles, 19.7 per cent. of those who lived alone and 14.2 per cent. of those who did not live alone stated that their glasses were not satisfactory. This compares with the 13 per cent. reported by Hobson and Pemberton, the 28 per cent. reported by Cowan (1955) and the 18 per cent. reported by Scott and Williams (1954).

What became clear in the enquiry was that few of the elderly persons interviewed had had another pair of spectacles since the ones they had received initially under the National Health Service. Many were continuing to wear spectacles which were no longer suitable because they did not know how to obtain their renewal or, when they did, that the cost was borne in many cases by the National Assistance Board.

While the proportion of those with unsuitable spectacles is not so great as that found by Sheldon, nevertheless the position has not improved as much as might have been expected. This may be due partly to a lack of information about the replacement and renewal of spectacles amongst the elderly. One of the commonest queries that had to be answered during the interviews was about ways of obtaining, and the financial implications of, a renewal of spectacles.

There is a need for better information regarding the renewal of spectacles to be made available to the elderly.

Summary.

The state of vision of the elderly living alone has been described.

Over 70 per cent. stated that their vision was satisfactory when spectacles were used.

The incidence of defective vision increased with age.

The state of vision of those who lived alone did not differ significantly from that of the group who did not live alone.

Nine of those who lived alone were almost blind and two were totally blind. It is manifestly unwise for those who are totally blind to be left living alone.

Over 90 per cent. of those who lived alone possessed spectacles. Of this group, 19.7 per cent. of the males and 14.2 per cent. of the females had spectacles which they considered to be unsatisfactory.

There is a need for better information to be made available to the elderly regarding the replacement and renewal of spectacles.

CHAPTER 14.

DENTAL CONDITIONS.

After the enquiry had been in progress some little time it was decided to obtain some information on the dental state of the elderly persons interviewed. This information was thought desirable because of the varying attitudes to the wearing of dentures.

The dental state of the elderly has been considered by Sheldon (p. 52) and by Hobson and Pemberton. The latter investigators had approximately 70 per cent. of their sample examined by dental surgeons.

In the present enquiry, information was obtained from 241 (69.5%) of the elderly who lived alone and from 553 (78.6%) of the elderly who did not live alone. The result of the enquiry is shown in Table 44.

Table 44.

The Dental State of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

Dental State	Male	Female	Total
Living Alone:			
Own Teeth	4 (10%)	17 (8.5%)	21 (8.7%)
Edentulous	12 (30%)	19 (9.5%)	31 (12.9%)
Dentures	24 (60%)	165 (82.0%)	189 (78.4%)
Total	40 (100%)	201 (100%)	241 (100%)
Not Stated	21	85	106 (30.5%)
Not Living Alone:			
Own Teeth	47 (23.5%)	34 (9.6%)	81 (14.6%)
Edentulous	32 (16.0%)	57 (16.1%)	89 (16.1%)
Dentures	121 (60.5%)	262 (74.3%)	383 (69.3%)
Total	200 (100%)	353 (100%)	553 (100%)
Not Stated	55	96	151 (21.4%)

It is seen from this table that 8.7 per cent. of the elderly who lived alone and 14.6 per cent. of those who did not live alone were still in possession of a fair number of their own teeth and did not possess dentures.

There was little difference in the proportion retaining their own teeth in the two sexes living alone. Thus, 10 per cent. of the men had retained their own teeth as had 8.5 per cent. of the women. More men than women not living alone had retained their own teeth. Thus, 23.5 per cent. of the men had retained their own teeth compared with 9.6 per cent. of the women (Table 44).

Table 45.

The Incidence of Dental Caries Amongst Those Who Possessed Their Own Teeth, Living Alone and Not Living Alone.

State of Teeth	Male	Female	Total
Living Alone:			
Teeth Reasonable	-	2 (11.8%)	2 (9.5%)
Teeth Carious	4 (100%)	15 (88.2%)	19 (90.5%)
Total	4 (100%)	17 (100%)	21 (100%)
Not Living Alone:			
Teeth Reasonable	4 (8.5%)	3 (8.5%)	7 (8.6%)
Teeth Carious	43 (91.5%)	31 (91.5%)	74 (91.4%)
Total	47 (100%)	34 (100%)	81 (100%)

The state of the teeth is considered in Table 45. Irrespective of whether living alone or not, over 90 per cent. of those who had retained their own teeth suffered from dental caries. In some cases the state of the teeth was extremely bad.

Hobson and Pemberton reported that 76.8 per cent. of all the remaining teeth of the old people they had examined were in need of extraction. McEwan and Laverty (1949), reporting on a series of the elderly in hospital, stated that 93.5 per cent. of those who had their own teeth suffered from dental caries. The incidence of dental caries encountered in the present enquiry, therefore, is comparable with that found by these authors.

When suggestions were made regarding a visit to the dentist for treatment few of those who suffered from dental caries were agreeable. Statements were made to the effect that "they (the teeth) had lasted until now and they would last a bit longer," or that "they were not causing any trouble." Many agreed that a visit to the dentist was long overdue. The main reasons for not seeking treatment seemed to be apathy, acceptance of the condition and the traditional fear of the dentist. Few seemed to be ignorant of the fact that the dental fee, in most cases, was payable by the National Assistance Board.

As is shown in Table 44, 12.9 per cent. of those who lived alone and 16.1 per cent. of those who did not live alone were either completely or practically edentulous. This group did not possess dentures.

Of those who lived alone there were more edentulous men than women. Thus, 30 per cent. of the men were edentulous compared with 9.5 per cent. of the women. There was no such difference amongst those who did not live alone. Thus, 16.1 per cent. of the women and 16 per cent. of the men were edentulous. The large proportion of males living alone who were edentulous is probably indicative of a lack of personal care and a lack of interest in personal appearance in this group.

The incidence of those who were edentulous and had not dentures varies slightly from that found in other enquiries. Sheldon stated that 9.6 per cent. of his sample were edentulous and were without dentures, with men more commonly represented than women. In the group described by Hobson and Pemberton, 12.1 per cent. of the males and 3.2 per cent. of the females were in this category. McEwan and Laverty reported that 28.6 per cent. of their series were edentulous and were without dentures.

Almost all of the elderly in this group reported that they were able to eat well without the use of teeth and some claimed that their

toughened gums were as good as teeth. A few had had to modify their diet, mainly in relation to meat, because of the absence of teeth. On the whole, the group seemed to do surprisingly well without teeth and seemed to have no desire to obtain dentures. As is shown in a later section, digestive upsets were not common in those who were without teeth.

Dentures.

The proportion of those interviewed who had dentures is shown in Table 44. Altogether 78.4 per cent. of those who lived alone and 69.3 per cent. of those who did not live alone possessed dentures.

Although the question was not asked specifically, the impression was received that most had been provided, or renewed, through the National Health Service.

More females than males possessed dentures. Thus, of those who lived alone, 82 per cent. of the women had dentures compared with 60 per cent. of the men. Of those who did not live alone, 74.3 per cent. of the women had dentures compared with 60.5 per cent. of the men (Table 44).

It is seen, therefore, that a slightly greater proportion of women living alone had dentures than had women not living alone.

The incidence of those who possessed dentures is comparable with that found by Hobson and Pemberton, and Simonds and Stewart. The former authors stated that 62 per cent. of the men in their group possessed dentures as did 86.8 per cent. of the women. Simonds and Stewart found that 64 per cent. of the males and 78.6 per cent. of the females in their group possessed dentures.

A greater proportion of people possessing dentures was found in this enquiry than was found by Sheldon who carried out his investigation before the inception of the National Health Service. Thus, Sheldon stated that 41.6 per cent. of the men and 67.2 per cent. of the women in his sample

possessed dentures. The difference is probably due to the provision of dentures under the National Health Service.

Irrespective of whether living alone or not, more women than men had dentures. This is probably due to a dislike for dentures on the part of the male and indifference to their cosmetic effect.

The possession of dentures was examined by age. This is shown in Table 46. It is seen from this table that no definite trend with age existed. It can be seen, however, that irrespective of whether living alone or not, the greatest proportion of those possessing dentures occurred in the quinquennium 60-64 years, and the smallest in the age group 85 years and over.

The fact that dentures were possessed, however, did not necessarily mean that they were worn. The distribution of the wearing habits of those who possessed dentures is shown in Table 47.

Of the 119 elderly persons living alone who possessed dentures, 113 (59.8%) wore them regularly, 34 (18%) wore them occasionally, 40 (21.2%) wore the upper set only, and two (1.1%) the lower set only.

Of the 383 elderly persons possessing dentures who did not live alone, 245 (64%) wore them regularly, 90 (23.5%) wore them but occasionally, 45 (11.7%) wore the upper set only and three (0.8%) the lower set only.

Approximately one-fifth of those who possessed dentures did not wear them other than occasionally. This compares with the 16 per cent. discovered by Sheldon to have a similar habit. In such cases the dentures were often used only for social occasions and not for the purposes of eating. One elderly lady would not allow us to start the interview until she had inserted her dentures.

Table 46.

The Possession of Dentures by Age, Living Alone and Not Living Alone.

	60-64	65-69	70-74	75-79	80-84	85+
Living Alone: Possessing False Teeth	19 (95.0%)	43 (81.1%)	47 (77.0%)	55 (77.5%)	21 (77.8%)	4 (44.4%)
Total in Each Age Group	20	53	61	71	27	9
Not Living Alone: Possessing False Teeth	55 (77.5%)	85 (75.2%)	122 (72.7%)	71 (62.8%)	41 (65.1%)	9 (36%)
Total in Each Age Group	71	113	168	113	63	25

Table 47.

The Wearing Habits of Those Who Possessed Dentures, Living Alone and Not Living Alone.

Wearing Habits of Dentures	Male	Female	Total
Living Alone:			
Worn regularly	16 (66.7%)	97 (58.8%)	113 (59.8%)
Worn occasionally	6 (25%)	28 (17%)	34 (18%)
Upper set only	1 (4.2%)	39 (23.6%)	40 (21.2%)
Lower set only	1 (4.2%)	1 (0.6%)	2 (1.1%)
Total	24 (100.1%)	165 (100%)	189 (100.1%)
Not Living Alone:			
Worn regularly	82 (67.8%)	163 (62.2%)	245 (64.0%)
Worn occasionally	26 (21.5%)	64 (24.4%)	90 (23.5%)
Upper set only	11 (9.1%)	34 (13%)	45 (11.7%)
Lower set only	2 (1.6%)	1 (0.4%)	3 (0.8%)
Total	121 (100%)	262 (100%)	383 (100%)

Some of the remarks made by the elderly who had dentures but rarely wore them were noted. A few are quoted: "I can't get used to them;" "They will not stay in;" "They make me vomit;" "They hurt my mouth;" "My gums are just as good."

It is seen from Table 47 that there was no significant difference in the wearing habits of dentures between those who lived alone and those who did not live alone. Nor did males possessing dentures wear them any less than females - if anything, they wore them slightly more regularly.

By and large, good use was made of their dentures by those who owned them. Approximately two-thirds of those interviewed wore them regularly.

Summary.

The dental state of the elderly who lived alone has been described.

Eight per cent. retained their own teeth and 12.9 per cent. were edentulous. The remainder owned dentures. Over 90 per cent. of those who had retained their own teeth suffered from dental caries.

The dental state of the elderly who lived alone did not differ significantly from that of those who did not live alone.

More women than men had dentures. Approximately two-thirds of those who had dentures wore them regularly.

CHAPTER 15.

MOBILITY AND LOCOMOTION.

Some degree of difficulty of locomotion is common in old age. The causes of this are many and include the various forms of arthritis, muscular rheumatism, conditions of the feet and general frailty.

While the state of locomotion is connected with the general mobility of the elderly, the relationship is not a direct one. Some elderly people who complain of difficulty of locomotion have a surprising amount of mobility and others whose locomotion is but little affected have restricted mobility from other causes.

In the present enquiry, an attempt was made to assess the proportion of the elderly who lived alone who had difficulty with locomotion. The assessment was made mainly on the replies to a question on this subject but was also made by observing the movement of the elderly person in the home.

The proportion of those interviewed who had difficulty with locomotion is shown in Table 48. Excluded from this analysis are 33 (9.5%) elderly persons living alone and 93 (13.2%) elderly persons not living alone who were completely or partially confined to bed.

It is seen from Table 48 that of those who lived alone, 57 per cent. had no complaint and appeared to have no difficulty with locomotion. The remaining 43 per cent. complained of poor or difficult locomotion. Of those who did not live alone, 65.1 per cent. had no complaint and appeared to have no difficulty; and 34.9 per cent. complained of poor or difficult locomotion.

More women complained of difficulty in moving around than men. Thus, of those who lived alone 44.4 per cent. of the women complained of poor or difficult locomotion compared with 35.8 per cent. of the men; and of those who did not live alone, 37 per cent. of the women complained of difficulty compared with 31.3 per cent. of the men (Table 48).

Table 48.

The State of Locomotion of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

State of Locomotion	Male	Female	Total
Living Alone:			
No Complaint	34 (64.2%)	145 (55.7%)	179 (57%)
Complaint of Poor or Difficult Locomotion	19 (35.8%)	116 (44.4%)	135 (43%)
Total	53 (100%)	261 (100.1%)	314 (100%)
Completely or Partially Confined to Bed	8	25	33
Not Living Alone:			
No Complaint	156 (68.7%)	242 (63%)	398 (65.1%)
Complaint of Poor or Difficult Locomotion	71 (31.3%)	142 (37%)	213 (34.9%)
Total	227 (100%)	384 (100%)	611 (100%)
Completely or Partially Confined to Bed	28	65	93

Irrespective of sex, complaint of difficulty was more common amongst those who lived alone. This may be due to the fact that, on the whole, those who live alone have to depend more upon their powers of getting about than do those who do not live alone. Any difficulty, therefore, will be felt more acutely.

While not strictly comparable, the incidence of those who had no difficulty is not unlike that found by Sheldon. In his sample 66 per cent. had unrestricted mobility (p. 33). The incidence found in this enquiry is slightly higher than that found by Hobson and Pemberton. These authors stated that over 50 per cent. of their group had unrestricted mobility.

Table 49.

The State of Locomotion of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age*

State of Locomotion	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
No Complaint	23 (82.1%)	47 (72.3%)	54 (62.8%)	42 (48.8%)	13 (34.2%)	-
Complaint of Poor or Difficult Locomotion	5 (17.9%)	18 (27.7%)	32 (37.2%)	44 (51.2%)	25 (65.8%)	11 (100%)
Total	28 (100%)	65 (100%)	86 (100%)	86 (100%)	38 (100%)	11 (100%)
Not Living Alone:						
No Complaint	61 (74.4%)	112 (83.6%)	132 (67.3%)	62 (53%)	27 (42.9%)	4 (21.1%)
Complaint of Poor or Difficult Locomotion	21 (25.6%)	22 (16.4%)	64 (32.7%)	55 (47%)	36 (57.1%)	15 (78.9%)
Total	82 (100%)	134 (100%)	196 (100%)	117 (100%)	63 (100%)	19 (100%)

* Excluded are the elderly who were completely or partially confined to bed.

The incidence of difficulty with locomotion in various age groups is shown in Table 49. The proportions of those who had difficulty increased steadily as the age increased. This was so whether the elderly lived alone or not.

As might be expected, there was a smaller proportion of those completely or partially confined to bed amongst the elderly who lived alone. These people are described in a later section.

Mobility.

In the present enquiry, mobility was considered from the point of view of the ability to leave the home. The classification is a functional one and was designed to give an indication of the ability of the elderly who lived alone to carry out the task of shopping and to reach social contacts.

Those interviewed were classified into three groups: those who could leave the house daily or several times a week, those who could leave only occasionally and those who were house-bound. The classification used here is not comparable with that used by Sheldon or by Hobson and Pemberton except in relation to the house-bound.

Table 50.

The Mobility of the Elderly Who Lived Alone and of the Elderly Who Did Not Live Alone.

Ability to Leave the Home	Male	Female	Total
Living Alone:			
Daily or several times per week	54 (88.5%)	229 (80.1%)	283 (81.5%)
Occasionally	-	15 (5.2%)	15 (4.3%)
Not at all	7 (11.5%)	42 (14.7%)	49 (14.1%)
Total	61 (100%)	286 (100%)	347 (99.9%)
Not Living Alone:			
Daily or several times per week	203 (79.6%)	301 (67.1%)	504 (71.6%)
Occasionally	16 (6.3%)	39 (8.6%)	55 (7.8%)
Not at all	36 (14.1%)	109 (24.3%)	145 (20.6%)
Total	255 (100%)	449 (100%)	704 (100%)

The mobility of the elderly persons interviewed from the aspect of the ability to leave the home is shown in Table 50. Of those who lived alone, 81.5 per cent. were able to leave the home daily or several times a week, 4.3 per cent. could leave only occasionally and 14.1 per cent. were house-bound. Of those who did not live alone, 71.6 per cent. were able to leave the house daily or several times per week, 7.8 per cent. were able to leave occasionally and 20.6 per cent. were house-bound.

When compared by sex it was found that more men were able to leave the home daily or several times a week than women. Thus, 88.5 per cent. of the men were so classified compared with 80.1 per cent. of the women; and of those who did not live alone, 79.6 per cent. of the men were able to leave the house daily or several times a week compared with 67.1 per cent. of the women (Table 50).

This situation compares with the finding of Hobson and Pemberton that males had a greater degree of unrestricted mobility than females. This was particularly noted of men living alone. They seemed either able to leave the home frequently or were unable to leave it at all. The greater mobility of the males may be due to the fact that men are less willing to remain at home than women and thus make a greater effort to leave; or that arthritis, muscular rheumatism and frailty, being more common in women, restrict their mobility.

The mobility of the elderly in various age groups is shown in Table 51. Of those who lived alone, over 80 per cent. were able to leave the house daily or several times a week up to the age of 80 years, after which the proportions dropped rapidly. Of those who did not live alone, the ability to leave the home fell steadily with advancing years, with a sharp fall after the age of 75.

Table 51.

The Mobility of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age.

Ability to Leave the Home	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Daily or several times per week	28 (100%)	63 (86.3%)	82 (89.1%)	79 (83.2%)	26 (59.1%)	5 (33.3%)
Occasionally	-	1 (1.4%)	1 (1.1%)	4 (4.2%)	8 (18.2%)	1 (6.7%)
Not at all	-	9 (12.3%)	9 (9.8%)	12 (12.6%)	10 (22.7%)	9 (60%)
Total	28 (100%)	73 (100%)	92 (100%)	95 (100%)	44 (100%)	15 (100%)
Not Living Alone:						
Daily or several times per week	78 (88.6%)	122 (83.0%)	167 (79.5%)	85 (58.6%)	40 (47.6%)	12 (40%)
Occasionally	3 (3.4%)	12 (8.2%)	16 (7.6%)	12 (8.3%)	7 (8.3%)	5 (16.7%)
Not at all	7 (8%)	13 (8.8%)	27 (12.9%)	48 (33.1%)	37 (44%)	13 (43.3%)
Total	88 (100%)	147 (100%)	210 (100%)	145 (100%)	84 (99.9%)	30 (100%)

A greater degree of mobility was found to exist amongst those who lived alone than amongst those who did not. This was true of both sexes and every age group except the very oldest. This better mobility exists in spite of the fact that, as has been shown previously, complaints of poor or difficult locomotion were more frequent amongst those who lived alone.

This suggests that the better mobility of the elderly who live alone is born of necessity. A fair degree of mobility is required in order to maintain an independent existence. This mobility may have to be maintained in spite of locomotor and other difficulties which might, if not living alone, be factors making for restricted mobility.

An element of selection may, however, enter into this assessment. It is likely that when reasonable mobility is lost, the ability to live alone is considerably lessened. Only those who have adequate help can then continue to live alone. The others may have to give up their way of living. It may be, therefore, that only those who have reasonable mobility or adequate help can continue to live alone.

Nevertheless the fact that mobility was greater amongst those who lived alone in spite of the fact that more complained of difficulty of locomotion suggests that those who do live alone force themselves to overcome their difficulties because they have to in order to retain their independent way of life. Many examples of this were encountered in the course of the enquiry. Elderly people living alone were seen to display great fortitude in carrying out their daily tasks in the face of physical disability, pain and frailty.

The following are a few examples:

An elderly woman who was almost bent double with severe arthritis and had a slow, shuffling gait nevertheless managed to do all her own shopping and housekeeping.

An elderly woman walked only with the aid of two sticks but did most of her own shopping and cleaning.

Although almost blind, an old woman did all her own shopping and visited a friend almost daily.

An elderly woman has been deaf and dumb since birth but still did all her own shopping and housekeeping and regularly visited her deaf and dumb friends.

An old man with a varicose ulcer walked with the aid of a stick. He did most of his own shopping and attended an old age club.

The incidence of the elderly who were house-bound has been reported in several investigations. Sheldon found that eleven per cent. of his group were house-bound, and Hobson and Pemberton stated that 3.1 per cent. of their males and 14.2 per cent. of their females were so situated. Mair et al (1956) estimated that 15 per cent. of their sample were house-bound and 17 per cent. were so found in the Hammersmith survey, "Over Seventy" (1954). Chalke and Benjamin (1953) in a selected group noted that nine per cent. of the males and 18 per cent. of the females were confined to the house.

In the present enquiry, 14.1 per cent. of those who lived alone and 20.6 per cent. of those who did not live alone were confined to the house (Table 50). As with other enquiries, it was found that a greater proportion of females were house-bound than males. Thus, of those who lived alone, 14.7 per cent. of the women were confined to the house compared with 11.5 per cent. of the men; and of those who did not live alone, 24.3 per cent. of the women were confined to the house compared with 14.1 per cent. of the men (Table 50).

That as many as 14 per cent. of the elderly who lived alone could remain house-bound is surprising. It again illustrates the extent to which the elderly who live alone receive help when in need. While some of those

house-bound were confined to the house on a temporary basis as a result of illness, others had been confined to the house for periods of over a year. One had been house-bound for three years and another for twelve years.

The principal reasons keeping the elderly who lived alone house-bound are shown in Table 52. Such a table, however, only gives part of the picture, as elderly people living alone can only remain house-bound in the presence of adequate help from their family and/or neighbours. People were found with disabilities which seemed just as severe but who were not confined to the house.

Table 52.

The Chief Causes of 49 Elderly People Living Alone being House-bound.*

Cause	Number of Persons
General weakness and frailty	11
Conditions of bone and joints	9
Cardio-vascular conditions	8
Breathlessness	3
Bronchitis	5
Vertigo	5
Following an accident or operation	5
Failing sight or blindness	3
Mental state	4
Persistent vomiting	1
Generalised oedema	1
Frequency of micturition	1
Cramps of the legs	1
Varicose ulcer	1
Indefinite reasons	2
Total	60

* In several cases more than one main cause was operative.

In the same way it is not easy to arrive at the true cause which keeps an elderly person house-bound. It may be a result of multiple causes and the obvious cause is not always the real one. Thus, an elderly person with arthritis may be house-bound because of attacks of giddiness and a fear of traffic.

As is shown in Table 52, the main disabilities which caused the elderly who lived alone to be house-bound were general weakness and frailty, cardio-vascular disease, diseases of the bone and joints (mainly rheumatoid and osteo-arthritis), bronchitis, vertigo and post-traumatic states. In two instances no apparent cause could be ascertained. One woman said she "didn't like going out," and another said she "didn't feel well enough to go out."

It must not be assumed that all those who lived alone who left the home daily or several times a week were fit and well. Some only maintained their mobility by efforts of sheer will-power and determination. Their mobility, in the face of disability, was often a matter for surprise and admiration.

Summary.

The mobility and state of locomotion of the elderly who lived alone have been described.

In spite of the fact that complaints of difficulty with locomotion were more common amongst the elderly who lived alone, their mobility was better than that of the elderly who did not live alone. It was clear that this better state of mobility was often born of necessity and maintained in spite of physical disability.

The group of the elderly living alone who were house-bound was discussed.

CHAPTER 16.

MEDICAL ATTENTION.

The extent to which the elderly who live alone receive medical attention provides a useful insight to the general health of the group as a whole. Visiting the family doctor, however, is influenced by several factors. It varies with the season, being more frequent in winter and in cold, wet weather. In the present enquiry, the interviews took place in all seasons and thus a fair approach to accuracy was obtained in this respect.

A good doctor-patient relationship tends to increase attendance, and conversely a poor relationship tends to limit attendance. Certain doctors, also, make a routine visit to their elderly patients or visit when in the vicinity, whether called or not.

A distant surgery may also modify attendance. The Govan ward, however, is well supplied with medical practitioners whose surgeries are easily accessible. Almost all of the elderly persons interviewed were on a medical practitioner's list. A very few were not and they were advised to obtain a medical practitioner without delay.

In the present enquiry the elderly persons interviewed were asked if they were receiving medical attention and, if so, how often the medical practitioner was being consulted. No attempt was made to determine the period since the last time of consultation in the group who were not receiving medical attention.

The incidence and frequency of medical attention for the group interviewed are shown in Table 53. Of those who lived alone, 34.6 per cent. stated that they were not receiving any medical attention, as did 43.6 per cent. of those who did not live alone. A further 18.4 per cent. of those who lived alone and 15.9 per cent. of those who did not live alone consulted their doctor occasionally.

Table 53.

The Frequency of Medical Attention of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

Frequency of Medical Attention	Male	Female	Total
Living Alone:			
Not at all	27 (44.3%)	93 (32.5%)	120 (34.6%)
Occasionally	7 (11.5%)	57 (19.9%)	64 (18.4%)
Regular Medical Attention			
At least once/month	27 (44.3%)	136 (47.6%)	163 (47.0%)
At least once/fortnight	13 (21.3%)	69 (24.1%)	82 (23.6%)
At least once/week	6 (9.8%)	38 (13.3%)	44 (12.7%)
Several times a week	1 (1.6%)	4 (1.4%)	5 (1.4%)
Total in Each Group	61	286	347
Not Living Alone:			
Not at all	128 (50.2%)	179 (39.9%)	307 (43.6%)
Occasionally	26 (10.2%)	86 (19.2%)	112 (15.9%)
Regular Medical Attention			
At least once/month	101 (39.6%)	184 (41.0%)	285 (40.5%)
At least once/fortnight	54 (21.2%)	91 (20.3%)	145 (20.6%)
At least once/week	25 (9.8%)	44 (9.8%)	69 (9.8%)
Several times a week	5 (2.0%)	11 (2.4%)	16 (2.3%)
Total in Each Group	255	449	704

The remainder received regular medical attention. Of those who lived alone, 47 per cent. consulted their medical practitioner at least monthly, 23.6 per cent. at least fortnightly, 12.7 per cent. at least once a week, and 1.4 per cent. received medical attention more than once a week.

Of the elderly who did not live alone, 40.5 per cent. received medical attention at least once a month, 20.6 per cent. at least once a fortnight, 9.8 per cent. at least once a week, and 2.3 per cent. more than once a week.

This shows, therefore, that a slightly greater proportion of the elderly who lived alone were in receipt of regular medical attention than the elderly who did not live alone. This may indicate a slightly poorer general state of health or that for other reasons the elderly who lived alone simply consulted their family doctor more often.

A slightly greater proportion of those receiving medical attention more often than once a week existed amongst the elderly who did not live alone. This may be due to the fact that when solitary elderly people need regular and frequent medical attention a tendency exists to transfer them to hospital or other accommodation.

Slightly more women than men living alone were in receipt of regular medical attention but the difference in proportion was small. Thus, 47.6 per cent. of the women consulted their medical practitioner at least once per month compared with 44.3 per cent. of the men; 24.1 per cent. consulted their medical practitioners once per fortnight compared with 21.3 per cent. of the men; and 13.3 per cent. consulted their medical practitioner once per week compared with 9.8 per cent. of the men (Table 53).

There was little difference in the proportion receiving regular medical attention in the two sexes not living alone (Table 53).

Irrespective of whether living alone or not, more women than men consulted their medical practitioner occasionally. Thus, 19.9 per cent. of the women who lived alone consulted their doctor occasionally, compared with 11.5 per cent. of the men; and 19.2 per cent. of the women who did not live alone consulted their doctor now and then compared with 10.2 per cent. of the men.

The incidence and frequency of medical attention in the various age groups are shown in Table 54. It is seen from this table that there was no increase in the proportions receiving regular medical attention as the age increased.

Table 54.

The Frequency of Medical Attention of the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age.

Frequency of Medical Attention	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Not at all	7 (25%)	25 (34.2%)	38 (41.3%)	32 (33.7%)	12 (27.3%)	6 (40%)
Occasionally	7 (25%)	11 (15.1%)	18 (19.6%)	20 (21.1%)	6 (13.6%)	2 (13.3%)
At leaat once/month	14 (50%)	37 (50.7%)	36 (39.1%)	43 (45.3%)	26 (59.1%)	7 (46.7%)
At least once/fortnight	9 (32.1%)	22 (30.1%)	13 (14.1%)	23 (24.2%)	12 (27.3%)	3 (20%)
At least once/week	5 (17.9%)	13 (17.8%)	5 (5.4%)	12 (12.6%)	8 (18.2%)	1 (6.7%)
Several times a week	-	2 (2.7%)	-	2 (2.1%)	1 (2.3%)	-
Total in Each Age Group	28	73	92	95	44	15
Not Living Alone:						
Not at all	41 (46.6%)	69 (46.9%)	93 (44.3%)	55 (37.9%)	36 (42.9%)	13 (43.3%)
Occasionally	11 (12.5%)	24 (16.3%)	32 (15.2%)	21 (14.5%)	17 (20.2%)	7 (23.3%)
At least once/month	36 (40.9%)	54 (36.7%)	85 (40.5%)	69 (47.6%)	31 (36.9%)	10 (33.3%)
At least once/fortnight	17 (19.3%)	25 (17.0%)	40 (19.0%)	37 (25.5%)	20 (23.8%)	6 (20.0%)
At least once/week	4 (4.5%)	9 (6.1%)	18 (8.6%)	23 (15.9%)	13 (15.5%)	2 (6.7%)
Several times a week	-	1 (0.7%)	2 (1.0%)	10 (6.9%)	2 (2.4%)	1 (3.3%)
Total in Each Age Group	88	147	210	145	84	30

The outstanding feature of this enquiry is that half of the males and half of the females who lived alone were not in receipt of regular medical attention, and that this proportion did not fall as the age increased. Further, the frequency of medical attention was only slightly greater than that of the elderly who did not live alone.

Such a situation suggests that the over-all level of general health of the elderly who lived alone was reasonable. There was little difference in the amount of medical attention received by the two sexes living alone, although on the whole women received more medical attention than men.

The Location of the Consultation.

The location of the consultation with the medical practitioner is shown in Table 55.

Table 55.

The Location at Which the Medical Practitioner was Consulted.

Location	Male	Female	Total
Living Alone:			
At Surgery	24 (70.6%)	118 (61.1%)	142 (62.6%)
At Home	10 (29.4%)	75 (38.9%)	85 (37.4%)
Total	34 (100%)	193 (100%)	227 (100%)
Not Living Alone:			
At Surgery	79 (62.2%)	131 (48.5%)	210 (52.9%)
At Home	48 (37.8%)	139 (51.5%)	187 (47.1%)
Total	127 (100%)	270 (100%)	397 (100%)

Of the 227 elderly persons living alone who were receiving regular or occasional medical attention, 142 (62.6%) visited the medical practitioner's surgery. The remaining 85 (37.4%) were visited in their home.

Of the 397 elderly persons receiving medical attention who did not live alone, 210 (52.9%) visited the medical practitioner's surgery and 187 (47.1%) were visited in the home.

Irrespective of whether living alone or not, more women than men were visited in the home by the medical practitioner. Thus, 38.9 per cent. of the women who lived alone were visited at home compared with 29.4 per cent. of the men; and of those who did not live alone, 51.5 per cent. of the women were visited at home compared with 37.8 per cent. of the men (Table 55).

It has been shown in another section that women have poorer mobility than men, and this may be a reflection of that situation.

The age incidence of those on whom the medical practitioner called is shown in Table 56. Irrespective of whether living alone or not, as the age increased so did the proportion visited in their own home, as would be expected.

It has been shown that a greater proportion of those who lived alone managed to call at the medical practitioner's surgery than those who did not live alone. This is true for all age groups (Table 55). This may be a reflection of the better state of mobility of the elderly who lived alone and it may account for the slightly greater proportion receiving regular medical attention in that more were able to make the journey to the doctor's surgery.

Hospital Attention.

Those interviewed were asked if they had been in hospital in the last six months. The result of this enquiry is shown in Table 57.

Table 56.

The Location at Which the Medical Practitioner was Consulted, by Age.

Location	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
At Surgery	17 (81%)	33 (68.7%)	39 (72.2%)	37 (58.7%)	12 (37.5%)	4 (44.4%)
At Home	4 (19%)	15 (31.3%)	15 (27.8%)	26 (41.3%)	20 (62.5%)	5 (55.6%)
Total	21 (100%)	48 (100%)	54 (100%)	63 (100%)	32 (100%)	9 (100%)
Not Living Alone:						
At Surgery	36 (76.6%)	53 (67.9%)	71 (60.7%)	37 (41.1%)	9 (18.7%)	4 (23.5%)
At Home	11 (23.4%)	25 (32.1%)	46 (39.3%)	53 (58.9%)	39 (81.3%)	13 (76.5%)
Total	47 (100%)	78 (100%)	117 (100%)	90 (100%)	48 (100%)	17 (100%)

Table 57.

Attendance at Hospital Within the Previous Six Months.

At Hospital	Male	Female	Total
Living Alone:			
Not in Hospital	50 (82.0%)	241 (84.3%)	291 (83.9%)
As an In-Patient	10 (16.4%)	32 (11.2%)	42 (12.1%)
As an Out-Patient	1 (1.6%)	13 (4.5%)	14 (4.0%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Not in Hospital	208 (81.6%)	361 (80.6%)	569 (80.9%)
As an In-Patient	34 (13.3%)	60 (13.4%)	94 (13.4%)
As an Out-Patient	13 (5.1%)	27 (6.0%)	40 (5.7%)
Total	255 (100%)	448 (100%)	703 (100%)
Not Stated		1	1

Four per cent. of those who lived alone and 5.7 per cent. of those who did not live alone had been out-patients in this period; and 12.1 per cent. of those who lived alone and 13.4 per cent. of those who did not live alone had been in-patients.

There was, therefore, little difference in the incidence of hospital treatment in the two groups.

Slightly more of the males who lived alone had had in-patient treatment and slightly more of the females had had out-patient treatment. Thus, 16.4 per cent. of the men had had in-patient treatment compared with 11.2 per cent. of the women; and 4.5 per cent. of the women had had out-patient treatment compared with 1.6 per cent. of the men (Table 57).

There was little difference in the incidence of hospital treatment in the two sexes not living alone.

The age incidence of those who had received hospital treatment is shown in Table 58. Irrespective of whether living alone or not, the proportion of those who had received hospital attention in the last six months decreased steadily as the age increased.

Table 58.

Attendance at Hospital Within the Previous Six Months, by Age.

At Hospital	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Not in Hospital	20 (71.4%)	60 (82.2%)	80 (87.0%)	82 (86.3%)	35 (79.5%)	14 (93.3%)
As an In-Patient	5 (17.9%)	13 (17.8%)	7 (7.6%)	11 (11.6%)	5 (11.4%)	1 (6.7%)
As an Out-Patient	3 (10.7%)	-	5 (5.4%)	2 (2.1%)	4 (9.1%)	-
Total	28 (100%)	73 (100%)	92 (100%)	95 (100%)	44 (100%)	15 (100%)
Not Living Alone:						
Not in Hospital	61 (69.3%)	112 (76.2%)	172 (82.3%)	122 (84.2%)	74 (88.1%)	28 (93.3%)
As an In-Patient	17 (19.3%)	27 (18.4%)	25 (12.0%)	15 (10.3%)	9 (10.7%)	1 (3.3%)
As an Out-Patient	10 (11.4%)	8 (5.4%)	12 (5.7%)	8 (5.5%)	1 (1.2%)	1 (3.3%)
Total	88 (100%)	147 (100%)	209 (100%)	145 (100%)	84 (100%)	30 (99.9%)
Not Stated			1			

It must be noted that in the assessment of hospital attention what is really being considered is the ability to return home. This depends on many factors, such as the nature of the illness and the home conditions. Other things being equal, the ability to return home from hospital is probably less in those who live alone and this may account for the slightly smaller proportion of those living alone who had received hospital attention in the period in question. In the same way, the ability to return home is probably less in the older age groups which may account for the age trend described.

The conditions from which the elderly who lived alone entered hospital is shown in Table 59.

Table 59.

The Conditions for which the Elderly Who Lived Alone were Referred to Hospital.

Condition	In-Patient	Out-Patient
Cardio-Vascular Disease	7	-
Accident	6	4
Eye Condition	3	5
Pneumonia	3	-
Abdominal Operation	5	-
Diabetes Mellitus	2	1
Prostatectomy	1	-
Mastectomy	2	-
Arthritis or Muscular Rheumatism	-	2
Abdominal Pain	2	-
Bronchitis	2	-
Anaemia	2	-
Coal Gas Poisoning	1	-
Varicose Ulcer	1	-
Cerebral Incident	1	-
Social Reasons	2	-
Ear Conditions	1	1
Unstated	1	1
Total	42	14

The commonest conditions for which treatment was given were cardio-vascular conditions, accidents, conditions of the eye, conditions requiring operative intervention, pneumonia and diabetes mellitus.

The incidence of out-patient treatment seemed to be rather small considering the many ailments of which the elderly complained. It would appear that insufficient use was being made of the out-patient services of the local general hospital by the elderly.

The over-all impression received during the enquiry was that the service provided to the elderly by the local medical practitioners was excellent. Many instances of the high quality of care and attention given by medical practitioners to their elderly patients were met with during the course of the enquiry.

Summary.

The incidence of medical attention received by the elderly who lived alone has been described.

Over half were not in receipt of regular medical attention.

The incidence of medical attention was much the same in the group of elderly who did not live alone.

Almost two-thirds of those in receipt of medical attention visited the doctor's surgery, but as the age increased the proportion visited at home increased.

The incidence among the series of those who had received hospital treatment in the last six months is described. It is suggested that insufficient use was made of the out-patient services of the local general hospital.

CHAPTER 17.

ON THE INCIDENCE OF CERTAIN DISABILITIES - I.

VERTIGO.
DIGESTIVE UPSETS.

Vertigo.

Many elderly people suffer from attacks of giddiness or dizzy spells, and this has been the subject of several enquiries.

While these attacks are frequently described as "vertigo," it must be noted that they include a variety of symptoms. Vertigo is a sensation of the external world revolving around the patient or a sensation experienced by the patient of revolving in space. Giddiness and dizziness, when described by the elderly, may mean anything from a sensation of light-headedness or a feeling of unsteadiness to true vertigo or a fainting attack. As Droller (1955) points out, the term "dizziness" may be used by the elderly to convey any unpleasant sensation above the diaphragm. This symptom-complex, however, in the elderly is usually discussed under the heading of vertigo and for the sake of convenience it is so discussed here.

The incidence of vertigo has varied considerably in the reports of the various investigators who examined the elderly. Sheldon (p. 88), who devoted a very full and interesting section to the subject, stated that 38.7 per cent. of the males and 57.2 per cent. of the females in his sample suffered from the condition. Hobson and Pemberton stated that 13.1 per cent. of the men and 30.1 per cent. of the women in their group had frequent or continuous vertigo. One-third of the men and two-fifths of the women in the group described by Simonds and Stewart suffered from giddiness.

The incidence of vertigo has been found to be very much lower in other investigations, which may be due to lack of specific enquiry. Cowan (1955) stated that 6.7 per cent. of a group of ambulant old people living alone suffered from giddiness, as did 5.3 per cent. of the first 450 elderly persons to attend his Rutherglen clinic (Anderson, 1955). Five per cent. of a group of hospital patients described by Nisbett (1953) complained of dizziness or unsteadiness. Two (0.8%) of the 238 patients examined by

Maddison et al (1955) were listed as having vertigo and one (0.3%) of the group described by Mair et al (1956) complained of dizziness.

In the present enquiry those interviewed were asked if they suffered from "dizzy turns." No attempt was made to assess the severity of the attacks nor to form an opinion of the probable causes of the attacks.

Table 60.

The Incidence of Vertigo in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Complaint of Vertigo	14 (23.3%)	107 (37.7%)	121 (35.2%)
No Complaint	46 (76.7%)	177 (62.3%)	223 (64.8%)
Total	60 (100%)	284 (100%)	344 (100%)
Not Stated	1	2	3
Not Living Alone:			
Complaint of Vertigo	63 (25%)	168 (37.8%)	231 (33.1%)
No Complaint	189 (75%)	277 (62.2%)	466 (66.9%)
Total	252 (100%)	445 (100%)	697 (100%)
Not Stated	3	4	7

The incidence of vertigo in the elderly persons interviewed is shown in Table 60. Of those who lived alone, 35.2 per cent. stated that they suffered from "dizzy turns," as did 33.1 per cent. of those who did not live alone; the incidence being much the same in the two groups.

Irrespective of whether living alone or not, females were more subject to "dizzy turns" than males. Thus, of those living alone, 37.7 per cent. of the women suffered from "dizzy turns" compared with 23.3 per cent. of the men. Of those who did not live alone, 37.8 per cent. of the women suffered from "dizzy turns" compared with 25 per cent. of the men (Table 60).

The incidence of vertigo found in the two sexes was lower than

that found by Sheldon and Simonds and Stewart and was slightly higher than that found by Hobson and Pemberton. These authors also considered that females are more subject to vertigo than males.

The incidence of vertigo in various age groups is shown in Table 61. Of those who lived alone, the incidence rose markedly after the age of 75, fell in the age quinquennium 80-84 and rose again after the age of 85. Of those who did not live alone, the incidence of vertigo rose steadily with each succeeding age group. With the females a peak occurred in the age quinquennium 75-79 years. Among males the incidence rose sharply after the age of 85.

Vertigo, therefore, tends to be more common among very old people. Such a finding has also been noted by Sheldon and by Hobson and Pemberton.

The causation of vertigo in the elderly has been the subject of some speculation. Sheldon considered that up to the age of 75 the most important factors were related to the earlier physical history of the patient; for example, vascular degeneration and long standing disease of the middle ear. He further suggested that the whole labyrinth mechanism is as prone to senile degeneration as the cochlea.

Hobson and Pemberton found an association between vertigo and arterio-sclerosis and also with impaired hearing. Droller et al (1952), confirming the earlier impression of Platt (1950), found no association between vertigo and an elevated blood pressure.

Orma (1955), in a review of 112 patients over the age of 64 complaining of dizziness, considered the main cause to be cerebral arteriosclerosis rather than disfunctions of the ear.

Table 61.

The Incidence of Vertigo in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age.

Complaint of Vertigo	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	-	3 (17.6%)	9 (40.9%)	2 (33.3%)	-
Female	10 (35.7%)	20 (34.5%)	23 (31.1%)	34 (47.2%)	12 (31.6%)	8 (57.1%)
Total in Each Age Group	10 (35.7%)	20 (27.8%)	26 (28.6%)	43 (45.7%)	14 (31.8%)	8 (53.3%)
Not Living Alone:						
Male	-	18 (30.5%)	16 (17.6%)	14 (25%)	9 (26.5%)	6 (46.2%)
Female	20 (23%)	22 (25%)	51 (43.2%)	44 (50%)	23 (47.9%)	8 (47.1%)
Total in Each Age Group	20 (23%)	40 (28.8%)	67 (32.1%)	58 (40.6%)	32 (39.5%)	14 (46.7%)

Table 62.

The Incidence of Vertigo amongst the Elderly with Impaired Hearing, Living Alone and Not Living Alone.

	Hearing Satisfactory	Hearing Poor or Very Deaf
Living Alone:		
Complaint of Vertigo	102 (36.3%)	19 (30.2%)
No Complaint	179 (63.7%)	44 (69.8%)
Total	281 (100%)	63 (100%)
Not Living Alone:		
Complaint of Vertigo	168 (31.5%)	63 (38.6%)
No Complaint	366 (68.5%)	100 (61.4%)
Total	534 (100%)	163 (100%)

An attempt was made in the present enquiry to explore the relationship between vertigo and impaired hearing. Table 62 shows that of those who lived alone 30.2 per cent. of those who had poor hearing or who were very deaf suffered from "dizzy turns," while of those whose hearing was satisfactory 36.3 per cent. had "dizzy turns." Of those who did not live alone, 38.6 per cent. of those whose hearing was poor or who were very deaf suffered from dizziness, while 31.5 per cent. of those whose hearing was satisfactory complained.

There was found, therefore, no association between vertigo and impaired hearing. This is not in agreement with the views held by Hobson and Pemberton but agrees with the conclusions of Orma.

The relationship between vertigo and an elevated blood pressure is discussed in a later section. No association could be found between the two conditions.

The liability to vertigo is part of the process of growing old. The causes of the condition are various and are almost certainly associated

with arterio-sclerosis (Sheldon, Hobson and Pemberton, Orma). The extent to which arterio-sclerosis affects the vestibular apparatus is still not clear and the association of vertigo with the cochlear apparatus is not definite. Further research on this subject is required.

Vertigo is an important feature of the health of the elderly who live alone. The sudden attacks of dizziness, often without apparent cause although often associated with sudden movement, may result in a fall, with resulting injury. The lack of help in the home is only partly compensated by the presence of familiar furniture which can be quickly reached when the attack starts.

Attacks of dizziness generate a feeling of insecurity and lack of confidence. This may lead to a restriction of activities outside the home. Excursions to the street where traffic is fast and noisy may become an ordeal.

Nevertheless it would not appear that being subject to attacks of dizziness is a cause of giving up living alone, as little difference could be found between the incidence in the two groups of elderly people examined.

Summary.

The incidence of vertigo in the elderly who lived alone has been described.

Altogether 35.2 per cent. of the group suffered from this condition, women being more affected than men.

The incidence of vertigo was much the same in the group of elderly who did not live alone.

It could not be shown that vertigo, in the elderly, was associated with impaired hearing or with an elevated blood pressure.

Digestive Upsets.

Gastro-intestinal disturbances in the elderly may arise from many causes. They may be a result of organic changes of the gastro-intestinal tract itself or may arise from conditions outside the gastro-intestinal tract, such as cardiac failure, uraemia or pernicious anaemia. They may also arise from a diminished functional ability consequent upon the changes of old age, from psychological troubles such as worry or depression, or from feeding indiscretions involving dietary neglect or unsuitable diet (Oliver, 1954; Exton-Smith, 1955).

It proved rather difficult to find the incidence of digestive upsets among the people interviewed. As Exton-Smith (1955) points out: "It (indigestion) may be used to describe any discomfort or pain which is expressed in the lower part of the chest or abdomen."

It was found difficult to frame a suitable question to elicit the desired information. The question most frequently used was: "Do you suffer from stomach upsets?" This covered a wide field and included answers on vomiting, pain associated with meals, abdominal discomfort, nausea and heartburn. No attempt was made to trace the probable causes of the digestive upsets.

Sheldon (p. 57) stated that 18.8 per cent. of those in his sample made complaints of digestive symptoms of one kind or another. He did not, however, subject this group to further analysis. Simonds and Stewart stated that 6.6 per cent. of the males and 5.7 per cent. of the females in their group had gastric upsets, and Walker (1947) stated that 12 (5.6%) of his group had digestive complaints. Two (0.5%) of the group described by Mair et al complained of stomach trouble.

Table 63.

The Incidence of Digestive Upsets in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
No Complaint	51 (85%)	223 (78.8%)	274 (79.9%)
Complaint of Digestive Upsets	9 (15%)	60 (21.2%)	69 (20.1%)
Total	60 (100%)	283 (100%)	343 (100%)
Not Stated	1	3	4
Not Living Alone:			
No Complaint	220 (87%)	367 (82.5%)	587 (84.1%)
Complaint of Digestive Upsets	33 (13%)	78 (17.5%)	111 (15.9%)
Total	253 (100%)	445 (100%)	698 (100%)
Not Stated	2	4	6

The incidence of digestive upsets in those interviewed in this enquiry is shown in Table 63. Of those who lived alone, 20.1 per cent. complained of digestive upsets, as did 15.9 per cent. of those who did not live alone. The incidence of digestive upsets was slightly higher amongst those who lived alone but the difference in proportion is not statistically significant (standard error of difference, 5).

Whether living alone or not, females suffer more than males from digestive upsets. Thus, of those who lived alone, 21.2 per cent. of the women had indigestion compared with 15 per cent. of the men. Of those who did not live alone, 17.5 per cent. of the women suffered compared with 13 per cent. of the men (Table 63).

This is rather contrary to the impression received in general practice by Grant (1955) that elderly men who live alone become dyspeptic because they will not learn to cook. The incidence of digestive upsets in men living alone in this enquiry was lower than that of women whether living alone or not.

Table 64.

The Incidence of Digestive Upsets in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age and Sex.

Having Digestive Upsets	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	3 (21.4%)	2 (11.8%)	3 (13.6%)	1 (16.7%)	-
Female	11 (39.3%)	13 (22.8%)	13 (17.6%)	15 (20.8%)	5 (13.2%)	3 (21.4%)
Proportion in Each Age Group	11 (39.3%)	16 (21.9%)	15 (16.3%)	18 (18.9%)	6 (13.6%)	3 (20%)
Not Living Alone:						
Male	-	8 (13.6%)	10 (11%)	9 (16.4%)	3 (8.3%)	3 (23.1%)
Female	12 (13.6%)	13 (14.8%)	18 (15.3%)	24 (27.3%)	6 (12.8%)	5 (29.4%)
Proportion in Each Age Group	12 (13.6%)	21 (14.3%)	28 (13.4%)	33 (23.1%)	9 (11%)	8 (26.7%)

The incidence of digestive upsets in various age groups is shown in Table 64. No trend with increasing age could be shown, either for those who lived alone or for those who did not.

Table 65.

The Incidence of Digestive Upsets in the Elderly Who were Edentulous, Living Alone and Not Living Alone.*

	Edentulous	Having Teeth or Using Dentures
Living Alone:		
Complaint of Digestive Upsets	14 (21.9%)	39 (22.2%)
No Complaint	50 (78.1%)	137 (77.8%)
Total	64 (100%)	176 (100%)
Not Living Alone:		
Complaint of Digestive Upsets	34 (19.5%)	57 (15.2%)
No Complaint	140 (80.5%)	317 (84.8%)
Total	174 (100%)	374 (100%)

* Subjects where the information was not stated are excluded.

Lack of teeth was considered. The relative incidences of digestive upsets in those who were edentulous and in those who had teeth or used dentures are shown in Table 65, which demonstrates that of those who lived alone 21.9 per cent. of those who were edentulous complained of digestive upsets compared with 22.2 per cent. of those who had their own teeth or who used dentures. Of those who did not live alone, 19.5 per cent. of those who were edentulous complained of digestive upsets compared with 15.2 per cent. of those who had their own teeth or who used dentures.

There was no significant difference in the incidence of digestive upsets in the two groups. It is concluded, therefore, that the absence of teeth or dentures is not a factor of importance in the causation of indigestion in the elderly. This may be due to the fact that those who

are edentulous modify their diet, cut up their food well and chew more. Nevertheless, many without teeth stated that they did not need to modify their diet and that their gums were as good as teeth.

Table 66.

The Incidence of Digestive Upsets in the Elderly Who Complained of Loneliness, Living Alone and Not Living Alone.*

	Rarely Lonely	Lonely at Times	Very Lonely
Living Alone:			
Complaint of Digestive Upsets	41 (20.4%)	21 (21%)	7 (17.1%)
No Complaint	160 (79.6%)	79 (79%)	34 (82.9%)
Total	201 (100%)	100 (100%)	43 (100%)
Not Living Alone:			
Complaint of Digestive Upsets	104 (19.5%)	1 (11.1%)	6 (22.7%)
No Complaint	529 (80.5%)	8 (88.9%)	38 (77.3%)
Total	633 (100%).	9 (100%)	44 (100%)

* Subjects where the information was not stated are excluded.

The psychological aspects of digestive upsets in the elderly are difficult to determine, but in Table 66 digestive upsets amongst those who were lonely are compared with upsets among those who were not.

The table shows that of those who lived alone, digestive upsets were complained of by 20.4 per cent. of those who stated that they were rarely lonely, by 21 per cent. of those who stated that they were lonely at times, and by 17.1 per cent. of those who stated that they were very lonely. Of those who did not live alone, digestive upsets were complained of by 19.5 per cent. of those who stated that they were rarely lonely, by 11.1 per cent. of those who stated that they were lonely at times, and by 22.7 per cent. of those who stated that they were very lonely.

No association could be found, therefore, between complaints of digestive upsets and the state of loneliness. It would seem that the psychological causes of digestive upsets, as indicated by loneliness, are not so important as other mechanisms.

No opinion of the probable causes of the upsets was formed. In the absence of physical examination and special investigations such speculations would be misleading. Nevertheless, ten (14.5%) of those who lived alone and 16 (14.4%) of those who did not live alone stated that they were having, or had had, treatment for peptic ulceration.

The fact that four-fifths of the elderly who lived alone had no complaints of digestive upsets is notable. The dietary habits of those who live alone, especially the males, are less regular and more open to abuse than the dietary habits of those who do not live alone. Nevertheless the incidence of digestive upsets was only slightly greater. One is left with the impression that the stomach in the elderly is a very durable organ, able to function well despite the various strains put upon it.

Summary.

The incidence of digestive upsets in the elderly who lived alone has been described.

Complaints of digestive upsets were made by 20.1 per cent. of the group. Females were more affected than males.

The incidence of digestive upsets amongst those who lived alone did not differ significantly from that of the elderly who did not live alone.

No association could be demonstrated between digestive upsets and an edentulous condition; nor could an association be shown with loneliness.

CHAPTER 18.

ON THE INCIDENCE OF CERTAIN DISABILITIES - II.

CHRONIC BRONCHITIS.
PAINFUL FEET.
VARICOSE VEINS.

Chronic Bronchitis.

One of the commonest ailments of the elderly, especially the elderly who live in an industrial community, is chronic bronchitis. It may vary from a mild cough with sputum, becoming worse in winter, to severe bronchospasm, breathlessness and congestive cardiac failure.

Except when advanced, however, the disease is not disabling to the elderly who as a rule learn to conduct their activities within their respiratory reserve. Nevertheless it is subject to acute exacerbations, especially in winter, and is aggravated by such factors as fog and cold and damp weather. These exacerbations may lead to pneumonia, cardiac failure and death.

The incidence of chronic bronchitis in the elderly has been investigated by several authors. Sheldon (p. 58) estimated that 46.6 per cent. of the males and 38.7 per cent. of the females in his group suffered from bronchitis. He reached his estimate by asking his subjects if they were liable to a cough.

Hobson and Pemberton considered that 43.7 per cent. of the males and 38.4 per cent. of the females in their group suffered from bronchitis. They based their estimate on the basis of a long standing cough with sputum.

Sargaison (1954), a hospital almoner, wrote that 32.3 per cent. of the males she interviewed suffered from chronic bronchitis.

Fry (1954), in an analysis of chronic bronchitis in general practice, found that in the age group 60-69 years 14.2 per cent. of the males and nine per cent. of the females in his practice suffered from the condition; while over the age of 70, 12.5 per cent. of the males and 12.7 per cent. of the females suffered from chronic bronchitis.

A lower incidence of chronic bronchitis in the elderly has been reported by other investigators. Simonds and Stewart (1954), in a mixed

town and country survey, reported that 6.8 per cent. of the males and 6.7 per cent. of the females in their sample were affected. Walker (1947) considered that 5.2 per cent. of his group had chronic bronchitis. Mair et al (1956) reported that six per cent. of their group complained of their chests.

The people I interviewed were asked if they had a cough with sputum, and if so, how long they had had it. If the subject had a long standing cough with sputum he was considered to have chronic bronchitis. But such a method, in the absence of physical examination, is hardly calculated to give reliable answers. Further, it may be that only the more marked degrees of bronchitis are detected.

Table 67.

The Incidence of Chronic Bronchitis in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
No Complaint	43 (71.7%)	231 (81.7%)	274 (79.9%)
Suffering from Chronic Bronchitis	17 (28.3%)	52 (18.3%)	69 (20.1%)
Total	60 (100%)	283 (100%)	343 (100%)
Not Stated	1	3	4
Not Living Alone:			
No Complaint	184 (72.7%)	383 (86.1%)	567 (81.2%)
Suffering from Chronic Bronchitis	69 (27.3%)	62 (13.9%)	131 (18.8%)
Total	253 (100%)	445 (100%)	698 (100%)
Not Stated	2	4	6

Table 67 shows the incidence of chronic bronchitis and that, of those who lived alone, 20.1 per cent. suffered from the disease, as did 18.8 per cent. of those who did not live alone. There was, therefore, little difference in the incidence of chronic bronchitis in the two groups of the elderly.

Irrespective of whether living alone or not, more males were affected with chronic bronchitis than females. Thus, of those who lived alone, 28.3 per cent. of the men suffered compared with 18.3 per cent. of the women. Of those who did not live alone, 27.3 per cent. of the men were affected compared with 13.9 per cent. of the women (Table 67).

That men were more subject to chronic bronchitis than women was found by Sheldon, and Hobson and Pemberton. A similar situation was reported from general practice by Fry (1954) and from a clinic for chronic bronchitics by Oswald et al (1953).

The total incidence of chronic bronchitis in the present enquiry is rather less than that found by Sheldon, and Hobson and Pemberton. This may be due to variation in the assessment of what was chronic bronchitis and what was not.

The incidence of chronic bronchitis in various age groups is shown in Table 68, and no obvious trend with age can be demonstrated.

The effect of chronic bronchitis on the elderly who live alone is no different from the effect on the elderly as a whole. In most cases it is not a disabling condition, although according to Sheldon it is one of the chief causes of breathlessness in the elderly. Acute exacerbations, however, can lead to serious illness. In those untrained in coughing, cough syncope from excessive forceful coughing may lead to accidental injury (Lloyd, 1955).

In advanced cases, chronic bronchitis with emphysema may be extremely disabling and may lead to restricted movement or confinement to bed. When this happens to an elderly person living alone, it becomes difficult to maintain an independent existence. Those affected have either to give up living alone or have to depend upon family or neighbours for help.

Table 68.

The Incidence of Chronic Bronchitis in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Sex.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Suffering from Chronic Bronchitis	7 (25%)	22 (30.6%)	14 (15.4%)	19 (20.2%)	6 (14%)	1 (6.7%)
Total in Age Group	28	72	91	94	43	15
Not Living Alone:						
Suffering from Chronic Bronchitis	14 (15.9%)	33 (22.6%)	38 (18.2%)	29 (20.3%)	12 (14.5%)	5 (16.7%)
Total in Age Group	88	146	208	143	83	30

Altogether five (7.2%) of the elderly who lived alone who suffered from chronic bronchitis were confined to the house on that account. Difficulty was experienced, however, in separating this group from the group who had cardiac failure as the two conditions were often co-existent.

The outlook for the elderly chronic bronchitic has improved greatly in recent years as acute exacerbations can frequently be successfully treated with antibiotic therapy, provided, as Howell (1950) points out, the treatment can be given early in the exacerbation.

Further investigation is required, however, into the prevention of this condition.

Summary.

The incidence of chronic bronchitis in the elderly who lived alone has been described.

Chronic bronchitis was considered to be present in 20.1 per cent. of the group. Males were more affected than females.

The incidence of chronic bronchitis did not differ significantly from that among the elderly who did not live alone.

Painful Feet.

One of the most troublesome afflictions of the elderly is painful feet. Arising in many cases from relatively minor conditions, painful feet are not only very uncomfortable but may cause disablement and restriction of movement. Because many of the conditions which cause painful feet respond to skilled treatment yet rarely receive this treatment, the position is made even more unfortunate.

The following case history illustrates the ill-effects of painful feet in the elderly:-

S.D., aged 73, a widow living alone. At the time of the interview she was limping badly and was wearing carpet slippers, one of which was slit at the side. The cause of her trouble was an inflamed bunion. She was able to go out only occasionally and then only for shopping. When out she had to wear slippers. Several months previously she had been confined to bed for five weeks with the same complaint, being looked after by neighbours. She thought that she might have to go to bed again. She had never been to a chiropodist and, at the time of the interview, had not consulted her medical practitioner.

Several investigators have reported on painful feet and the disablement caused.

Sheldon (p. 69) stated that 26.1 per cent. of the males and 44.6 per cent. of the females in his sample complained of painful feet. According to Sheldon, the commonest causes were corns and callosities, bunions and other deformities.

Hobson and Pemberton reported on the examination of the feet of their sample. They considered that only 21.3 per cent. of the men and 16.8 per cent. of the women had normal feet. The commonest abnormalities encountered were ingrowing toe-nails, flat feet, hallux valgus, bunions and corns, arthritis and onychogryphosis.

Cowan (1955) made the interesting observation that although 23 (19.3%) of his group complained of painful feet, only eight (6.7%) had satisfactory feet on clinical examination. The most frequent defects were corns, onychogryphosis, hallux valgus, uncut toe-nails and callosities.

Simonds and Stewart (1954) reported that 34.8 per cent. of the males and 51 per cent. of the females in their group had painful feet. Of the group of men interviewed by Sargaison (1954), 8.6 per cent. complained of painful feet.

Comments on the untoward effects of conditions of the feet in the elderly have been made by Thomson (1949), Warren (1950 b), Amulree (1955), and Chalke and Benjamin (1953). Observations from the point of view of a general practitioner have been made by Grant (1955) and Pinsent (1955); and from the point of view of a chiropodist by Charlesworth (1951) and Suvanna (1955).

Those interviewed were asked if they had trouble with their feet and a positive answer was taken as an indication of pain or discomfort in the feet. The feet of those interviewed were not examined clinically and thus the causes of discomfort were not found. In many cases, however, reasons and causes were volunteered.

Table 69.

The Incidence of Painful Feet in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
No Complaint	52 (86.7%)	233 (82%)	285 (82.2%)
Complaint of Pain or Discomfort of Feet	8 (13.3%)	51 (18%)	59 (17.2%)
Total	60 (100%)	284 (100%)	344 (100%)
Not Stated	1	2	3
Not Living Alone:			
No Complaint	210 (83%)	359 (80.5%)	569 (81.4%)
Complaint of Pain or Discomfort of Feet	43 (17%)	87 (19.5%)	130 (18.6%)
Total	253 (100%)	446 (100%)	699 (100%)
Not Stated	2	3	5

The incidence of painful feet in the elderly persons interviewed is given in Table 69 which shows that of those who lived alone 17.2 per cent. complained of pain or discomfort of the feet as did 18.6 per cent. of those who did not live alone. Therefore the incidence of painful feet did not differ in the two groups of the elderly.

Irrespective of whether living alone or not, more women than men suffered from pain or discomfort of the feet. Of those who lived alone, 18 per cent. of the women complained of pain or discomfort of the feet compared with 13.3 per cent. of the men. Of those who did not live alone, 19.5 per cent. of the women complained of pain or discomfort of the feet compared with 17 per cent. of the men (Table 69).

That women are more troubled with their feet than men has been reported by many authors, including Sheldon, Hobson and Pemberton, and Simonds and Stewart.

Table 70.

The Incidence of Painful Feet in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Complaint of Pain or Discomfort of Feet	7 (25%)	8 (11.1%)	21 (23.1%)	14 (14.9%)	7 (15.9%)	2 (13.3%)
Total in Age Group	28	72	91	94	44	15
Not Living Alone:						
Complaint of Pain or Discomfort of Feet	15 (17%)	28 (19%)	42 (20.1%)	26 (18.2%)	15 (18.1%)	4 (13.8%)
Total in Age Group	88	147	209	143	83	29

Table 70 gives the incidence of those who complained of their feet in the various age groups and demonstrates that no trend with increasing age existed. Foot defects of the elderly seem to be a legacy of their earlier years.

In the absence of clinical examination, no attempt was made to elicit the causes of pain and discomfort in the feet. The commonest conditions volunteered were corns, conditions of the nails, bunions (particularly in women), and arthritis.

There is no doubt that many of those who complained of painful feet would have benefited from the skilled attention of a chiropodist. Very few, however, were in receipt of such attention. The reason for this stemmed not from a lack of knowledge of the value of a chiropodist, but from the fact that such a service is not provided free under the National Health Service. The nearest free chiropody clinic was some distance from the Govan ward.

The value of chiropody to the elderly has been referred to by many authors. Sheldon considered that about half of those he interviewed with painful feet could have had life made more bearable by a visit to the chiropodist. Hobson and Pemberton, as a result of clinical examination, estimated that 67 per cent. of the males and 71 per cent. of the females in their group would have benefited from chiropody. Chalke and Benjamin (1953) considered that chiropody would be an important element in the preservation of normal life for about one-quarter of their group.

There is a definite need to provide a free chiropody service for the elderly. This is required not only to alleviate their foot ailments but, as Thomson (1955), a practising chiropodist, stated, to prevent the ill-effects of their own attempted self-treatment which in cases of diabetes and arterio-sclerosis may be particularly dangerous.

Amulree (1955) and Charlesworth (1951) have advocated that a free chiropody service should be run in old people's clubs. It would be better, however, in the interests of hygiene and privacy, for such a service to be based on hospitals or clinics. A staff of chiropodists should also be available for domiciliary visiting. Warren (1950 b) considered that a chiropodist should be on the staff of every geriatric unit.

Irrespective of where the service is based, there is clearly a case for the development and expansion of a chiropody service for the elderly.

Summary.

The incidence of painful feet in the elderly who lived alone has been described.

A complaint of pain or discomfort of the feet was made by 17.2 per cent. of those who lived alone. Females were affected more than males.

The incidence of painful feet did not differ significantly from that of the elderly who did not live alone.

A plea is made for a free chiropody service for the elderly.

Varicose Veins.

Each of those interviewed was asked if they had varicose veins, and whenever possible their presence was confirmed by direct observation. No attempt was made to grade their severity.

Sheldon (p. 62) in a modified sample estimated that 17.3 per cent. of his group suffered from varicose veins. In the group described by Simonds and Stewart (1954), 2.8 per cent. of the males and 5.4 per cent. of the females had varicosities; and of those examined by Maddison et al (1955), two (0.8%) of the males and six (2.5%) of the females had varicose veins.

Table 71.

The Incidence of Varicose Veins in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
No Complaint	51 (85%)	221 (78.1%)	272 (79.3%)
With Varicose Veins	9 (15%)	62 (21.9%)	71 (20.7%)
Total	60 (100%)	283 (100%)	343 (100%)
Not Stated	1	3	4
Not Living Alone:			
No Complaint	227 (89.8%)	356 (79.8%)	583 (83.4%)
With Varicose Veins	26 (10.2%)	90 (20.2%)	116 (16.6%)
Total	253 (100%)	446 (100%)	699 (100%)
Not Stated	2	3	5

The incidence of varicose veins in those interviewed is given in Table 71 which shows that of those who lived alone 20.7 per cent. had varicose veins, as had 16.6 per cent. of those who did not live alone.

A slightly greater proportion of those who lived alone had varicose veins but the difference in proportion was not great and was not significant.

Irrespective of whether living alone or not, women were more subject to varicose veins than men. Thus, of those who lived alone, 21.9 per cent.

Table 72.

The Incidence of Varicose Veins in the Elderly Who Lived Alone, and the Elderly Who Did Not Live Alone, by Age.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone: With Varicose Veins	6 (21.4%)	18 (25%)	15 (16.7%)	24 (25.3%)	5 (11.6%)	3 (20%)
Total in Age Group	28	72	90	95	43	15
Not Living Alone: With Varicose Veins	22 (25.3%)	21 (14.5%)	36 (17.2%)	25 (17.2%)	10 (12%)	2 (6.7%)
Total in Age Group	87	145	209	145	83	30

of the women had varicose veins compared with 15 per cent. of the men. Of those who did not live alone, 20.2 per cent. of the women had varicose veins compared with 10.2 per cent. of the men (Table 71). That women are more subject than men to varicose veins is well known and has been amply recorded.

The incidence of varicose veins in the various age groups is shown in Table 72, which reveals no definite trend with increasing age. It would appear that varicose veins, like painful feet, are a legacy of the elderly person's earlier years.

Table 73.

The Incidence of Varicose Ulceration in the Elderly Who have Varicose Veins, Living Alone and Not Living Alone.

	Male	Female	Total
Living Alone:			
Ulcer Present	3 (33.3%)	7 (11.3%)	10 (14.1%)
Without Ulceration	6 (66.7%)	55 (88.7%)	61 (85.9%)
Total	9 (100%)	62 (100%)	71 (100%)
Not Living Alone:			
Ulcer Present	9 (34.6%)	16 (17.7%)	25 (21.5%)
Without Ulceration	17 (65.4%)	74 (82.3%)	91 (78.5%)
Total	26 (100%)	90 (100%)	116 (100%)

Table 73 lists the varicose ulcers and shows that of the 71 subjects who lived alone who had varicose veins, ten (14.1%) had a varicose ulcer (2.9 per cent. of the elderly who lived alone); and of the 116 subjects who did not live alone who had varicose veins, 25 (21.5%) had a varicose ulcer (3.6 per cent. of the elderly who did not live alone). Sheldon stated that 5.4 per cent. of the females he questioned had a varicose ulcer. A slightly smaller proportion of those who lived alone suffered from varicose ulceration, but the difference was not marked.

Whether the people were living alone or not, the incidence of varicose ulceration amongst those who had varicose veins was higher in males. Thus, of those who lived alone who had varicose veins, 33.3 per cent. of the men had a varicose ulcer compared with 11.3 per cent. of the women. Of those who did not live alone, 34.6 per cent. of the men had a varicose ulcer compared with 17.7 per cent. of the women (Table 73). Such a finding is interesting but the numbers in the sample are too small to support any definite conclusions.

Varicose ulceration in the elderly may be a source of considerable disability and may impose restrictions on their mobility. In the case of one person who lived alone it was the principal reason for being house-bound. A further feature of varicose ulceration in the elderly is that the standard treatment, with its emphasis on rest and immobility, may, in the elderly, have undesirable side effects. As Exton-Smith (1955) points out, the treatment of varicose ulceration in the elderly should always aim to keep them ambulant, an aim that is sometimes overlooked.

Summary.

The incidence of varicose veins and varicose ulceration in the elderly who lived alone has been described.

Varicose veins were present in 20.7 per cent. and varicose ulceration in 2.9 per cent. of the group.

Women were more subject to varicose veins than men, but in those who had varicose veins, varicose ulceration was more common in men.

The incidence of varicose veins and varicose ulceration did not differ significantly from that of the elderly who did not live alone.

CHAPTER 19.

ON THE INCIDENCE OF CERTAIN DISABILITIES - III.

MISCELLANEOUS CONDITIONS.
RHEUMATISM.
NERVOUSNESS.
HIGH BLOOD PRESSURE.

After asking questions in relation to the conditions previously described, two further questions were asked. These were of the nature: "Have you any other complaints?" and "What illnesses do you suffer from?" A note was then made of the various illnesses and complaints stated. In addition, a note was made of any conditions that could be observed.

These illnesses and complaints are shown in Table 74, the conditions previously described being excluded. The majority of the complaints were self-reported and are thus subject to error. As far as was possible, the illnesses and complaints were checked against the background of the subject's medical history. For example, pernicious anaemia was only recorded if the diagnosis had been made in hospital, as it was found that some elderly persons were receiving liver injections as a "tonic."

The list of illnesses and complaints shown in Table 74 is, naturally, of limited value. To ascertain the true incidence of the various conditions specific questions would have to be asked and, as has been done by Hobson and Pemberton (1955) and Maddison et al (1955), a thorough medical examination carried out. Nevertheless, this table is presented for the sake of interest and completeness.

It is seen from Table 74 that the commonest conditions encountered were, of those who lived alone, non-articular rheumatism (46.1%), appearance of anaemia (17.3%), articular rheumatism (16.4%), "high blood pressure" (14.1%), congestive cardiac failure (9.8%), constipation (8.4%), "nervousness" (7.8%), general frailty (6.6%), and headaches (4.4%).

The commonest conditions encountered amongst the elderly who did not live alone were non-articular rheumatism (28%), articular rheumatism (21.9%), "high blood pressure" (11.9%), appearance of anaemia (10.5%), congestive cardiac failure (9.1%), constipation (6.5%), headaches (6.1%), and general frailty (5.5%).

Table 74.

The Incidence of Certain Illnesses and Complaints in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Living Alone				Not Living Alone			
	Male	Female	Total	Total as % of Sample	Male	Female	Total	Total as % of Sample
Diseases of the Cardio-Vascular System:								
Congestive Cardiac Failure (All Stages)	8	26	34	9.8%	27	37	64	9.1%
Complaint of "High Blood Pressure"	8	41	49	14.1%	18	66	84	11.9%
Angina of Effort	2	2	4	1.2%	6	6	12	1.7%
Recent* Coronary Thrombosis	2	1	3	0.9%	3	1	4	0.6%
Intermittent Claudication	1	1	2	0.6%	2	-	2	0.3%
Phlebitis	-	-	-	-	2	2	4	0.6%
Haemorrhoids	1	1	2	0.6%	2	2	4	0.6%
Recent* Haemorrhage	-	1	1	0.3%	3	7	10	1.4%
Diseases of the Nervous System:								
Parkinsonism	1	4	5	1.4%	5	4	9	1.3%
Sub-Acute Combined Degeneration	-	1	1	0.3%	-	1	1	0.1%
Paralysis or Paresis following a Cerebral Incident -								
Recent*	1	3	4	1.2%	4	6	10	1.4%
Old	2	8	10	2.9%	7	8	15	2.1%
"Nervousness"	1	26	27	7.8%	-	19	19	2.7%
Epilepsy	-	-	-	-	1	-	1	0.1%
Facial Paralysis	1	-	1	0.3%	-	1	1	0.1%
Miscellaneous	-	4	4	1.2%	4	-	4	0.6%
Diseases of the Respiratory System:								
Asthma	3	9	12	3.5%	5	17	22	3.1%
Tuberculosis	1	1	2	0.6%	6	-	6	0.9%
Pneumonia	-	-	-	-	-	2	2	0.3%
Sinusitis	1	2	3	0.9%	1	2	3	0.4%
Diseases of the Blood:								
Pernicious Anaemia	2	11	13	3.7%	3	14	17	2.4%
Appearance of Anaemia	14	45	59	17.3%	22	52	74	10.5%

Table 74 (Contd.)

	Living Alone				Not Living Alone			
	Male	Female	Total	Total as % of Sample	Male	Female	Total	Total as % of Sample
Diseases of the Digestive System:								
Peptic Ulcer	3	7	10	2.9%	11	5	16	2.3%
Gall Bladder Disease	-	16	16	4.6%	1	12	13	1.8%
Loss of Appetite	1	3	4	1.2%	-	3	3	0.4%
Persistent Diarrhoea	1	2	3	0.9%	1	2	3	0.4%
Colostomy	-	-	-	-	-	1	1	0.1%
Faecal Fistula (Abdominal)	-	1	1	0.3%	-	-	-	-
Hernia	4	2	6	1.7%	10	2	12	1.7%
Constipation	7	22	29	8.4%	15	31	46	6.5%
Diseases of the Genito-Urinary System:								
Complaint of Frequency	-	8	8	2.3%	-	8	8	1.1%
Symptoms of Enlarged Prostate	5	-	5	1.4%	6	-	6	0.9%
Gynaecological Condition	-	7	7	2.0%	-	12	12	1.7%
Disease of the Kidney	-	2	2	0.6%	-	1	1	0.1%
Diseases of the Skin and Special Senses:								
Diseases of the Skin	-	6	6	1.7%	6	5	11	1.6%
Cataract	3	16	19	5.5%	10	26	36	5.1%
Other Eye Conditions	1	2	3	0.9%	1	2	3	0.4%
Ear Conditions	-	1	1	0.3%	2	-	2	0.3%
Tinnitus	-	3	3	0.9%	-	2	2	0.3%
Diseases of Bone, Joints and Muscle:								
Articular Rheumatism	5	52	57	16.4%	39	115	154	21.9%
Non-Articular Rheumatism	13	147	160	46.1%	62	135	197	28%
Paget's Disease of Bone	-	3	3	0.9%	-	-	-	-
Recent* Fracture	1	6	7	2.0%	4	15	19	2.7%
Endocrine Conditions:								
Diabetes Mellitus	-	6	6	1.7%	1	16	17	2.4%
Goitre	-	1	1	0.3%	-	2	2	0.3%
Myxoedema	-	-	-	-	-	1	1	0.1%
Neoplasm:								
All Sites	-	2	2	0.6%	2	8	10	1.4%
Mastectomy	-	2	2	0.6%	-	2	2	0.3%

Table 74 (Contd.)

	Living Alone				Not Living Alone			
	Male	Female	Total	Total as % of Sample	Male	Female	Total	Total as % of Sample
Miscellaneous Conditions:								
Headaches	1	15	16	4.6%	11	32	43	6.1%
Insomnia	1	2	3	0.9%	-	8	8	1.1%
Septic Conditions	1	1	2	0.6%	1	1	2	0.3%
Nocturnal Cramps	-	-	-	-	-	3	3	0.4%
General Frailty	2	21	23	6.6%	6	33	39	5.5%
Possible Scurvy	1	-	1	0.3%	-	-	-	-
Other Conditions	-	1	1	0.3%	1	2	3	0.4%
Amputations:								
Leg	1	-	1	0.3%	-	1	1	0.1%
Arm	2	1	3	0.9%	3	-	3	0.4%
History of a Recent* Domestic Accident	4	27	31	8.9%	7	35	42	6.0%

* Within the previous twelve months.

With the exception of non-articular rheumatism, articular rheumatism, "nervousness" and the appearance of anaemia, there was little difference in the incidence of the various conditions of which complaints were made in the two groups of the elderly.

Certain conditions are discussed further.

Rheumatism.

Old people very often suffer from "rheumatism." By this is meant a complex of conditions of varied aetiology, both articular and non-articular, which are characterised by aches, pains and stiffness. They may vary in severity from the merely troublesome to the near crippling.

Rheumatism in the elderly is accepted with a surprising degree of complacency both by the sufferers themselves and by their families. It is

to many the inevitable accompaniment of growing old. Even the medical profession, as Tegner (1955) points out, has tacitly assented to the current opinion that rheumatic diseases in the elderly are uninteresting, inevitable and incurable.

That aches, pains and stiffness of the muscles and joints are one of the commonest complaints of the elderly has been found by several investigators. Curran et al (1946) stated that, of the many physical disabilities from which old people suffer, the most prevalent and incapacitating, although not necessarily the most dangerous, was the group generally called "rheumatism." Pain in various sites was the commonest complaint made by the first 450 elderly persons to pass through the Rutherglen consultative health centre (Anderson, 1955).

Sheldon (p. 63) stated that 55.4 per cent. of his group complained of rheumatic symptoms of one kind or another. Hobson and Pemberton stated that only 9.8 per cent. of the women and 18.8 per cent. of the men in their sample had no rheumatic or arthritic conditions. Simonds and Stewart (1954) found that 20.3 per cent. of their males and 28.4 per cent. of their females had "arthritis, fibrositis, etc."

Walker (1947) stated that 22.5 per cent. of his group had arthritis deformans or "rheumatics." Sargaison (1954) found that 16.2 per cent. of the elderly men she interviewed had "rheumatics," and Maddison et al (1955) recorded an incidence of articular arthritis of 8.4 per cent.

In the present enquiry only 39.8 per cent. of those who lived alone and 52.8 per cent. of those who did not live alone did not complain of articular or non-articular rheumatism.

Non-Articular Rheumatism.

The incidence of non-articular rheumatism in the elderly persons interviewed is given in Table 75. This condition was complained of under

such names as "fibrositis," "lumbago," "rheumatics" and "muscular rheumatism."

Table 75.

The Incidence of Articular and Non-Articular Rheumatism in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
No Complaint	43 (70.5%)	95 (33.2%)	138 (39.8%)
Articular Rheumatism	5 (8.2%)	52 (18.2%)	57 (16.4%)
Non-Articular Rheumatism	13 (21.3%)	147 (51.4%)	160 (46.1%)
Total in Each Group	61	286	347
Not Living Alone:			
No Complaint	158 (62%)	214 (47.7%)	372 (52.8%)
Articular Rheumatism	39 (15.3%)	115 (25.6%)	154 (21.9%)
Non-Articular Rheumatism	62 (24.3%)	135 (30.1%)	197 (28%)
Total in Each Group	255	449	704

The table shows that of those who lived alone 46.1 per cent. complained of non-articular rheumatism as did 28 per cent. of those who did not live alone.

Whether living alone or not, females were more subject to non-articular rheumatism than males. Thus, of those who lived alone, 51.4 per cent. of the women had these complaints compared with 21.3 per cent. of the men. Of those who did not live alone, 30.1 per cent. of the women complained of non-articular rheumatism compared with 24.3 per cent. of the men (Table 75).

A higher incidence of non-articular rheumatism in women was also found by Sheldon, who stated that 24 per cent. of the men and 30 per cent. of the women in his sample suffered from muscular rheumatism. Hobson and Pemberton stated that 31.6 per cent. of the females and 25.3 per cent. of the males in their sample had rheumatism.

It is seen from Table 75 that there was a higher incidence of non-articular rheumatism amongst those who lived alone compared with those who did not. This was due to the high incidence of the condition in women living alone. It is difficult to find an explanation for the high incidence of non-articular rheumatism in this group. It may be that women living alone, having to manage the home and do the housework with little or no help, become more aware of their aches and pains and thus complain more of them.

The incidence of non-articular rheumatism in the various age groups is shown in Table 76, and no definite link with increasing age can be demonstrated, either for those who lived alone or for those who did not.

Non-articular rheumatism is not a particularly disabling condition to the elderly but it is frequently a source of pain and discomfort.

Articular Rheumatism.

The incidence of articular rheumatism in the elderly persons interviewed is shown in Table 75. The incidence was assessed from the complaints of those interviewed but in many cases it was confirmed by direct observation.

Table 75 shows that of those who lived alone 16.4 per cent. suffered from articular rheumatism as did 21.9 per cent. of those who did not live alone. The proportion of those who had articular rheumatism who lived alone is smaller than that of those who did not live alone, and the difference is statistically significant (standard error of difference, 5).

Irrespective of whether living alone or not, a larger proportion of women suffered from articular rheumatism than men. Thus, of those who lived alone, 18.2 per cent. of the women had articular rheumatism compared with 8.2 per cent. of the men; and of those who did not live alone, 25.6 per cent. of the women had articular rheumatism compared with 15.3 per cent. of the men (Table 75).

Table 76.

The Incidence of Articular and Non-Articular Rheumatism in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

(a) Living Alone.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Male:						
Articular Rheumatism	-	1 (6.7%)	1 (5.9%)	2 (9.1%)	1 (16.7%)	-
Non-Articular Rheumatism	-	4 (26.7%)	5 (29.4%)	2 (9.1%)	2 (33.3%)	-
Total in Age Group	-	15	17	22	6	1
Female:						
Articular Rheumatism	7 (25%)	17 (29.3%)	12 (16%)	12 (16.4%)	3 (8%)	1 (7.1%)
Non-Articular Rheumatism	15 (53.6%)	25 (43.1%)	38 (50.7%)	36 (49.3%)	25 (65.8%)	8 (57.1%)
Total in Age Group	28	58	75	73	38	14

Table 76.

The Incidence of Articular and Non-Articular Rheumatism in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

(b) Not Living Alone.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Male:						
Articular Rheumatism	-	8 (13.6%)	11 (12.1%)	11 (19.6%)	6 (16.7%)	3 (23.1%)
Non-Articular Rheumatism	-	9 (15.3%)	23 (25.3%)	16 (28.6%)	9 (25%)	5 (41.7%)
Total in Each Age Group	-	59	91	56	36	13
Female:						
Articular Rheumatism	20 (21.6%)	24 (27.3%)	26 (21.8%)	26 (29.2%)	17 (35.4%)	2 (11.8%)
Non-Articular Rheumatism	19 (22.7%)	23 (26.1%)	37 (31.1%)	38 (42.7%)	16 (33.3%)	2 (11.8%)
Total in Each Age Group	88	88	119	89	48	17

The fact that females are more subject to articular rheumatism than males is well known (Cecil, 1955; Duthie and Davidson, 1955). A greater incidence of articular rheumatism in females was also found by Sheldon, Hobson and Pemberton, and Simonds and Stewart.

The incidence of articular rheumatism in the various age groups is shown in Table 76 which demonstrates that, of the elderly who did not live alone, the highest incidences were in the later age groups, being highest in males in the age group 85 years and over and in females in the quinquennium 80-84 years.

The age incidence in those who live alone is quite different. Considering only the females, as the number of males is rather small, the incidence of articular rheumatism falls steadily with each succeeding decade over the age of 60. This suggests that the progression of articular rheumatism with age interferes with the ability to live alone. As has been pointed out previously, the over-all incidence of articular rheumatism is significantly lower amongst those who live alone.

The commonest types of articular rheumatism encountered were rheumatoid arthritis and osteo-arthritis. While no attempt was made to assess the relative incidence of each, the severest cases of disability from articular rheumatism occurred in those who suffered from rheumatoid arthritis.

The impression was formed that a more positive outlook on the treatment of articular and non-articular rheumatism in the elderly is required, rather than the approach that they are the inevitable outcome of old age. In this connection a better use of the existing out-patient facilities would probably be an advantage.

Summary.

The incidence of articular and non-articular rheumatism in the elderly who lived alone has been described.

Complaints of articular rheumatism were made by 16.4 per cent. of the group and of non-articular rheumatism by 46.1 per cent.

Females were more subject to articular and non-articular rheumatism than males.

The incidence of non-articular rheumatism was greater amongst women living alone than amongst those who did not; the incidence of articular rheumatism was less. Reasons are put forward to explain these differences.

Nervousness.

A small group of elderly persons complained of feelings of nervousness. By this they meant feelings of unease, anxiety or apprehension which were associated with imagined possibilities rather than actual happenings.

Feelings of nervousness were complained of by 27 (7.8%) of those who lived alone and by 19 (4.2%) of those who did not live alone. It was almost solely a complaint of women. Thus, of the 27 elderly persons living alone with this complaint 26 were females; and all of those who did not live alone who complained of nervousness were females.

A feeling of nervousness in women living alone is understandable and it was surprising that the complaint was not made more often. It is certain that had a specific question been asked on the subject, the incidence would have been much higher. Many of those who lived alone, particularly women, made remarks about burglars and the attacking and robbing of elderly people in their own homes.

Some of the women who lived alone stated that they made it a rule never to answer the door after dark, or that they did so only in response to a pre-arranged signal knock. Several made a ritual of locking the windows and doors before retiring, and a few even went the length of rising during the night to check that the door was locked. One old lady slept with a police whistle hanging from a nail above her bed.

On the other hand, many elderly women living alone seemed to be quite without fear. They left doors unlocked during the day so that their friends could enter without delay.

Of those who did not live alone, nervousness was usually complained of only in relation to being left alone in the home when the other occupants were away. Some women who did not live alone stated that they rarely stayed alone in the evening as when the possibility arose they visited a relative or friend.

It is worth noting that none of those who complained of nervousness was the least apprehensive at our visit in spite of the fact that we were strangers. It would appear that the feelings of nervousness were derived from imagined possibilities rather than actual encounters with authenticated strangers, as could be expected, especially in Glasgow.

High Blood Pressure.

It is seen from Table 74 that 14.1 per cent. of those who lived alone and 11.9 per cent. of those who did not live alone stated that they had "high blood pressure."

Rather more females than males made this complaint. Thus, of those who lived alone, high blood pressure was complained of by 14.4 per cent. of the women and 13.1 per cent. of the men; and of those who did not live alone, high blood pressure was complained of by 14.7 per cent. of the women and 7.1 per cent. of the men.

These figures are of no value in attempting to ascertain the incidence of this condition in the groups under consideration. The standard of diagnosis and in many cases the source of the diagnosis were not available. In some cases it was a self-diagnosis made by the elderly subject to explain certain symptoms.

Nevertheless, these figures are of interest. Several of those

who made this complaint had modified their way of life on its account, either as a result of medical advice or as a result of simply being told that they had high blood pressure. Many had been instructed not to hurry, not to become excited, to take things quietly and to rest in bed in the afternoon. Pheno-barbitone was sometimes being taken.

It was found, when questions were being asked on diet, that some elderly persons, particularly females, had stopped or reduced their consumption of meat because of being told they had this condition. They had been told that meat was bad for high blood pressure.

Three females had become blood donors as a result of being told that it would help their blood pressure.

The wisdom of informing an elderly person that his or her blood pressure is elevated is doubtful. As Palmer and Muench (1953) point out, the risk of death from high blood pressure decreases steadily with increasing age. Further, Exton-Smith (1955) and Droller et al (1952) are of the opinion that high blood pressure in the elderly causes relatively little impairment of the cardio-vascular system. Droller et al could find no association between high blood pressure and the radiological size of the heart or the subject's well being.

As far as the elderly subject is concerned, it is probable that the psychological ill-effects of being told that the blood pressure is raised, enhanced by the "old wives' tales" concerning the condition, far outweigh the value of the advice that is given. As Kyser (1956) advises, the doctor who confidently explains that the blood pressure is not alarming is often rewarded by a significant drop on the second determination.

A more detailed investigation of the blood pressure in the elderly is discussed in a later section.

THE PATTERN OF LIFE OF THE ELDERLY WHO LIVE ALONE

A Comparative Study : Medical and Sociological

by

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CHAPTER 20.

ACCIDENTS IN THE HOME.

Accidents to the elderly in their own homes are not uncommon and are within the experience of most medical practitioners. The extent to which such accidents can cause injury, and even death, has been increasingly realised in recent years and has been the subject of several investigations.

According to the report "Accidents in the Home" (1953), over half of the fatal accidents which occurred in the ten year period studied happened to people over the age of 65. The commonest causes were falls, burns and scalds, and coal gas poisoning.

Fischer (1955), describing a series of 500 patients over the age of 65 who were admitted to an accident hospital, stated that over half occurred in the home. Falls were the commonest cause of injury.

In a study of almost three thousand domestic accidents from the same hospital, Castle (1950) found that ten per cent. occurred to people over the age of 65.

Seiler and Ramsey (1954), in a survey of home accidents in Edinburgh, stressed that the accident rate was high in the elderly, particularly the very old. They estimated that 14.1 per thousand of those over the age of 85 had had to attend a hospital as a result of a home accident in 1950.

Of a series of one hundred consecutive deaths from carbon monoxide poisoning described by Simpson (1954), 66 (66%) were of people over the age of 60.

Colebrook et al (1956), in an analysis of 701 cases of burning accidents in the home, stated that 13.6 per cent. occurred to people over the age of 65; and that of the 94 deaths in the series, 46 (48.9%) were of people over the age of 65. In a similar survey, Tempest (1956) stated that 14.4 per cent. of the domestic burns and scalds in his series were to the elderly, and that this group contained 72 per cent. of the fatalities.

In the present enquiry, no specific question was asked concerning accidents in the home. The cases recorded are drawn simply from the notes on the interview sheets. This being the case, the analysis has a limited value. While realising that it undoubtedly underestimates the incidence of domestic accidents, it is put forward in the hope that it might shed some further light on the problem.

The incidence of a recent accident in the home, as disclosed in the case history, is shown in Table 74. A recent domestic accident occurred to 8.9 per cent. of those who lived alone and to six per cent. of those who did not live alone. While there was a slightly higher incidence of domestic accidents amongst those who lived alone, the difference was neither large nor significant.

Irrespective of whether living alone or not, women were more subject to domestic accidents than men. Thus, of those who lived alone, 27 (9.4%) of the women had a history of a recent accident compared with 4 (6.6%) of the men; and of those who did not live alone, 35 (7.8%) of the women had a history of a recent accident compared with 7 (2.7%) of the men.

That women are more liable to domestic accidents than men has been reported by Fischer and by Castle. Hobson and Pemberton found that more women than men had sustained a fracture since the age of 50. The increased liability of females to sustain a domestic accident would seem reasonable when it is considered that it is to them that most of the housework falls. The increased accident history of men living alone compared with men not living alone probably reflects the relationship of accidents to housework.

The age incidence of those who gave a history of a recent domestic accident is given in Table 77 which shows that over the age of 65 the incidence of accidents in the home tends to increase with advancing years.

Table 77.

The Incidence of a Recent Domestic Accident in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age.

History of a Recent Domestic Accident	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone	2 (7.1%)	5 (6.8%)	6 (6.5%)	8 (8.4%)	7 (15.9%)	3 (20%)
Total in Each Age Group	28	73	92	95	44	15
Not Living Alone	10 (11.4%)	5 (3.4%)	10 (4.8%)	9 (6.2%)	5 (6%)	3 (10%)
Total in Each Age Group	88	147	210	145	84	30

At all ages the incidence of accidents in the home was greater amongst those who lived alone but the difference was marked after the age of 80.

Table 78.

The Type of Domestic Accident which Occurred to the Elderly Living Alone and Not Living Alone.

Type of Accident	Living Alone	Not Living Alone
Fall with Injury	21 (67.7%)	24 (57.1%)
Fall Resulting in a Fracture	4 (12.9%)	12 (28.6%)
Burns or Scalds	2 (6.5%)	2 (4.8%)
Coal Gas Poisoning	1 (3.2%)	-
Other	3 (9.7%)	4 (9.5%)
Total	31 (100%)	42 (100%)

The types of accident which occurred to those interviewed are shown in Table 78. The outstanding feature of this table is that, irrespective of whether among those living alone or not, over three-quarters of the accidents recorded were associated with falls.

Of the accidents which were associated with a fall, 16 per cent. in those who lived alone and 33.3 per cent. in those who did not live alone resulted in a fracture. The smaller proportion of falls associated with a fracture amongst those who lived alone is probably associated with the ability to remain living alone after a fracture has been sustained.

That the elderly are liable to falls has been well recorded (Droller, 1955; Howell, 1955; Nisbet, 1953; etc.). Sheldon (p. 96) found that one-third of his group were subject to falls and discussed their relationship to accidents. In his sample, females were more subject to falls than males and the maximum incidence was in the age group 80-84 years.

A domestic accident to an elderly person may have serious consequences. Apart from any injury which might be sustained, an accident may be the means of precipitating a general physical or mental breakdown.

It must be noted, however, that an accident, particularly as a result of a fall, may be the result, and not the cause, of illness or physical deterioration (Warren, 1953; Alvarez, 1955; Howell, 1955).

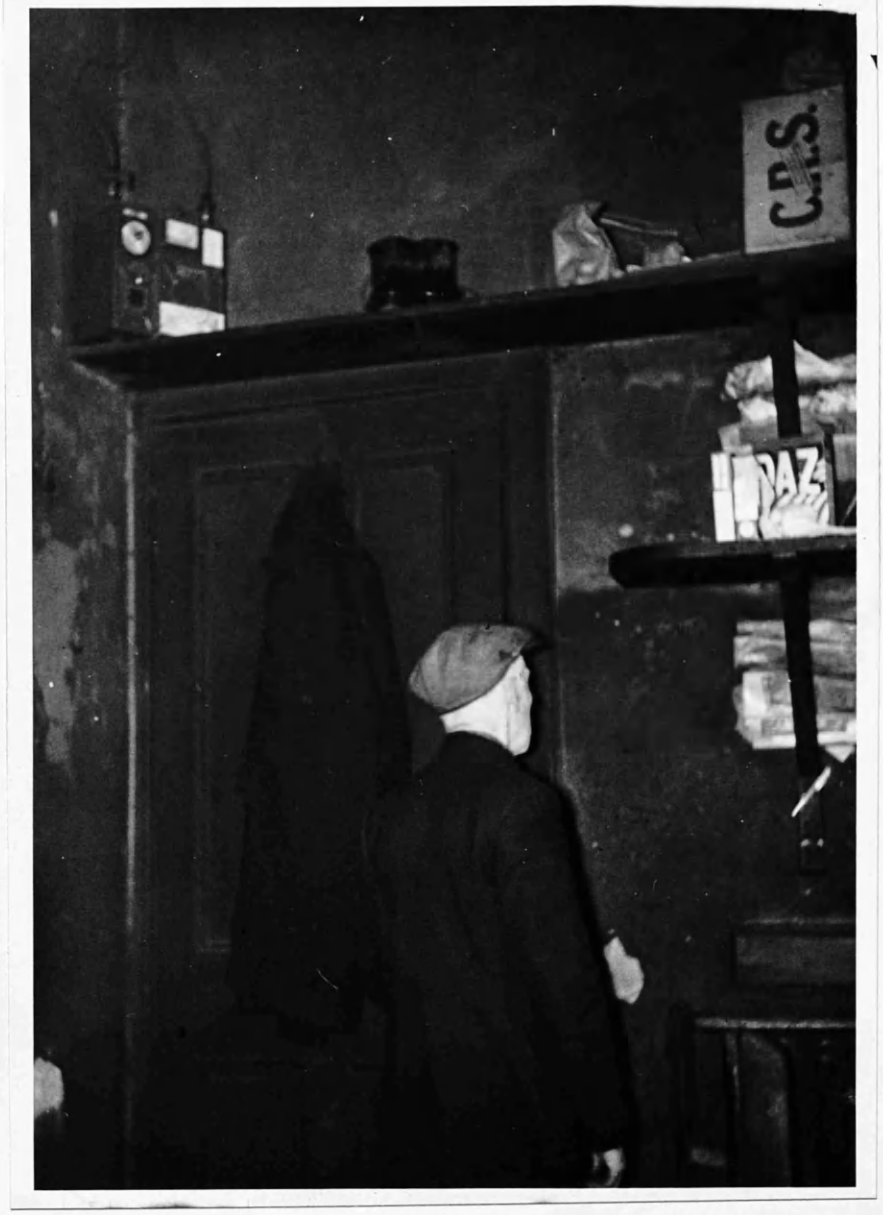
Many of the domestic accidents which occur to the elderly could be prevented. While little can be done to influence the physiological and pathological factors which make for accidents, much could be done to influence the environmental factors. For example, carpets and linoleum should be kept in good repair and floors should not be polished. Loose objects and trailing flexes should not be left on the floor. Lighting should be good and dark corners illuminated, particularly the route to the toilet.

Shelves and meters should be at eye level and climbing on chairs or stools should be avoided. Footwear should be kept in good repair. The elderly should never hurry - a maxim which should be taught more to the elderly person's family than the elderly themselves for it is often the family who cause the old person to hurry.

All fires, coal and electric, should have a fireguard. All gas taps should have spring-return taps so that they are not accidentally left or knocked half-on.

In the present enquiry it was found that most of the elderly were doing all or some of the household tasks. Many of these tasks were potentially dangerous. In many instances the elderly stood on chairs or other objects to perform some job and an example of this type of act is illustrated. This shows an elderly female who lived alone doing part of her weekly cleaning from high on a ladder.

In the accompanying illustration, the height of the gas meter into which money had to be inserted regularly is worthy of note. Meters in high positions and high shelves were frequently encountered during the course of the enquiry.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Perhaps the most dangerous of the household tasks encountered was that of washing the windows. It was a matter of some amazement to see elderly women sitting on high outside window ledges cleaning their windows; and the alternative arrangement, that of leaning over the top of the window from the inside, was equally dangerous.

That fatal accidents do occur to the elderly who live alone is well known. Of the present group, to the certain knowledge of the investigator, one has died of coal gas poisoning, one of a burning accident in which much of the house was destroyed, and one a few days after fracturing her femur in the home.

To control domestic accidents in the elderly, the elderly and their families must be educated. At the same time some authority must be kept continuously alive to the situation.

It is suggested that all domestic accidents should be made notifiable to the Medical Officer of Health, who should undertake the task of accident prevention. He should issue instructions and give publicity to the problem. Literature, posters and speakers should be made available to the elderly persons' organisations and clubs. Accident prevention should be brought into the conversation of all who regularly visit the elderly, and courses of instruction in accident prevention should be made available to social workers and health visitors interested in the care of the elderly.

The social and domestic problems which occur when the elderly become ill have been described by many authors, particularly Sheldon, and the general nature of the problem is now well appreciated.

The various hardships which may result and the stresses and strains which are put upon both family and community services alike have been well reported by those who undertook random sample surveys (e.g., Walker, 1947; Sheldon, 1948; McCoubrey and McQueen, 1952; Simonds and Stewart, 1954, etc.); by geriatricians forced by growing waiting lists to examine the elderly in their natural surroundings (e.g., Brooke, 1949; Exton-Smith and Crockett, 1949; Thomson, 1950; Amulree et al, 1951; Exton-Smith, 1952, etc.); and by medical officers of health and others examining the work of the home care services (e.g., Ferguson, 1948; Chalke and Benjamin, 1951, 1953; Geffen and Warren, 1954; Roberts and McWatt, 1956, etc.).

It has been reported in several of these investigations that the elderly who live alone are frequently less fortunate than their fellows when overtaken by illness. With less opportunity for family help they may easily drift into states which can only be resolved by urgent action. Consequently, when ill, they may make heavy demands on the existing hospital and home care services.

In the present enquiry the position of the elderly who live alone when overtaken by illness has been considered.

The Extent to Which Help can be Expected in Illness.

Each elderly person interviewed was asked the hypothetical question: "Who will look after you if you become ill?"

This question had to be modified slightly, as in the early stages of the enquiry when it was asked directly it provoked reactions of fear and apprehension amongst several of those who lived alone. To the question was added, therefore: "For example, if you had to go to bed with a bout of 'flu."

It was evident that a fear of illness, particularly sudden illness, was a very real feature in the life of the elderly who lived alone. Many recounted in detail what they would do if they became ill. A great many had some method whereby they could attract the attention of the neighbours - usually by knocking on a certain wall or floor. It was obvious that many had given some thought to the problem of sudden illness.

Table 79.

The Extent to Which the Elderly Can Expect Help in the Event of Illness, Living Alone and Not Living Alone.*

From Whom Help Expected	Male	Female	Total
Living Alone:			
Family	27 (50.9%)	158 (60.5%)	185 (58.9%)
Neighbours only	12 (22.6%)	62 (23.8%)	74 (23.5%)
"Do not know"	14 (26.4%)	41 (15.7%)	55 (17.5%)
Total	53 (99.9%)	261 (100%)	314 (99.9%)
Not Living Alone:			
Spouse	108 (47.6%)	69 (17.9%)	177 (29%)
Family	106 (46.7%)	301 (78.4%)	407 (66.6%)
Neighbours only	6 (2.6%)	10 (2.6%)	16 (2.6%)
"Do not know"	7 (3.1%)	4 (1.0%)	11 (1.8%)
Total	227 (100%)	384 (99.9%)	611 (100%)

* Excluded are 33 elderly persons living alone and 93 elderly persons not living alone, who were wholly or partially confined to bed.

The result of the enquiry is shown in Table 79 and Figures 14 and 15. From this table have been excluded those who were wholly or partially confined to bed, as in these cases it could be judged directly who was caring for the patient.

It is seen from Table 79 that of those who lived alone, 58.9 per cent. stated that they would be cared for by their family, 23.5 per cent. that they would be cared for by their neighbours, and 17.5 per cent. stated

FIGURE 14

The Extent to which Help Can be Expected in Illness, Living Alone.

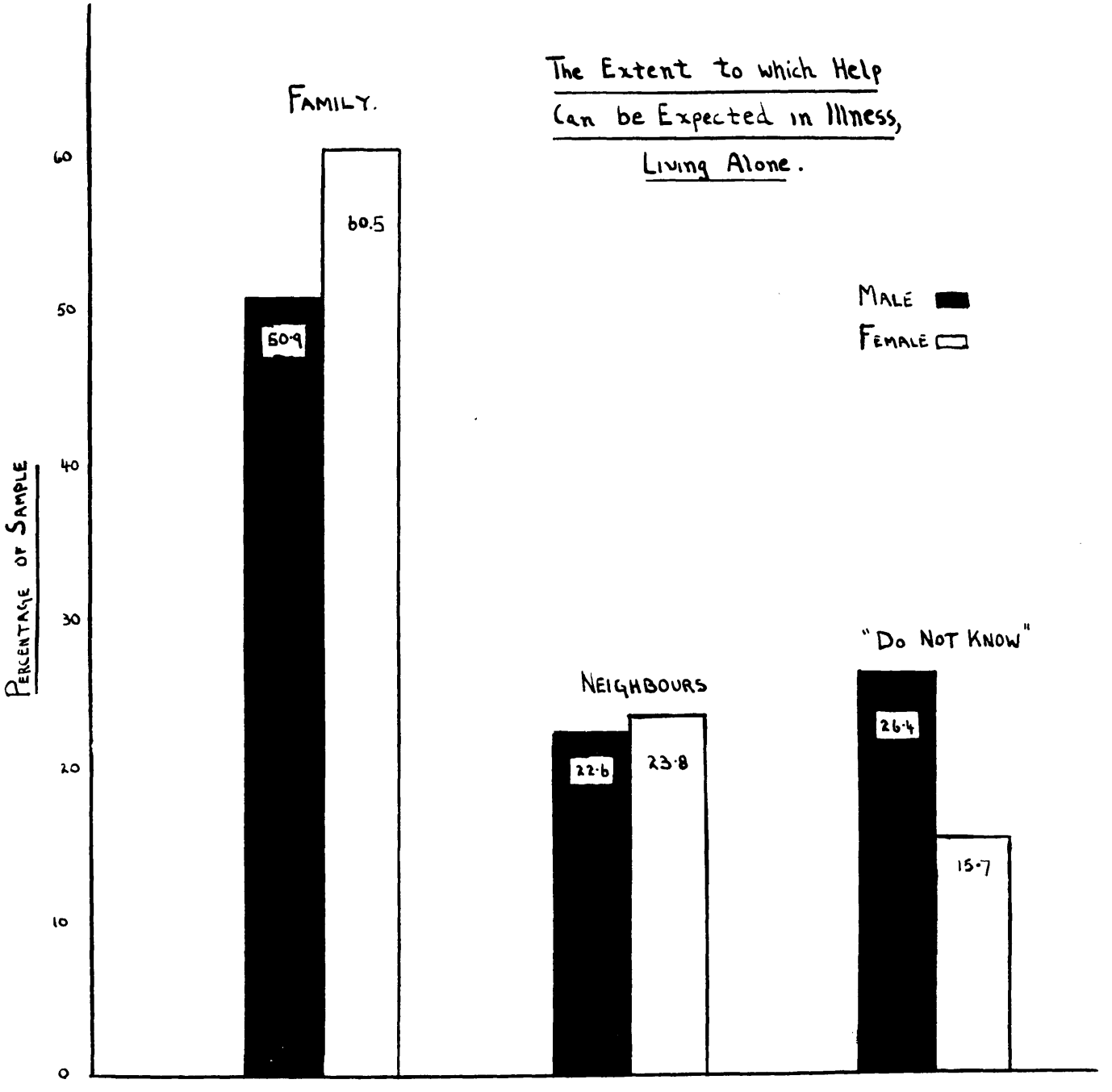
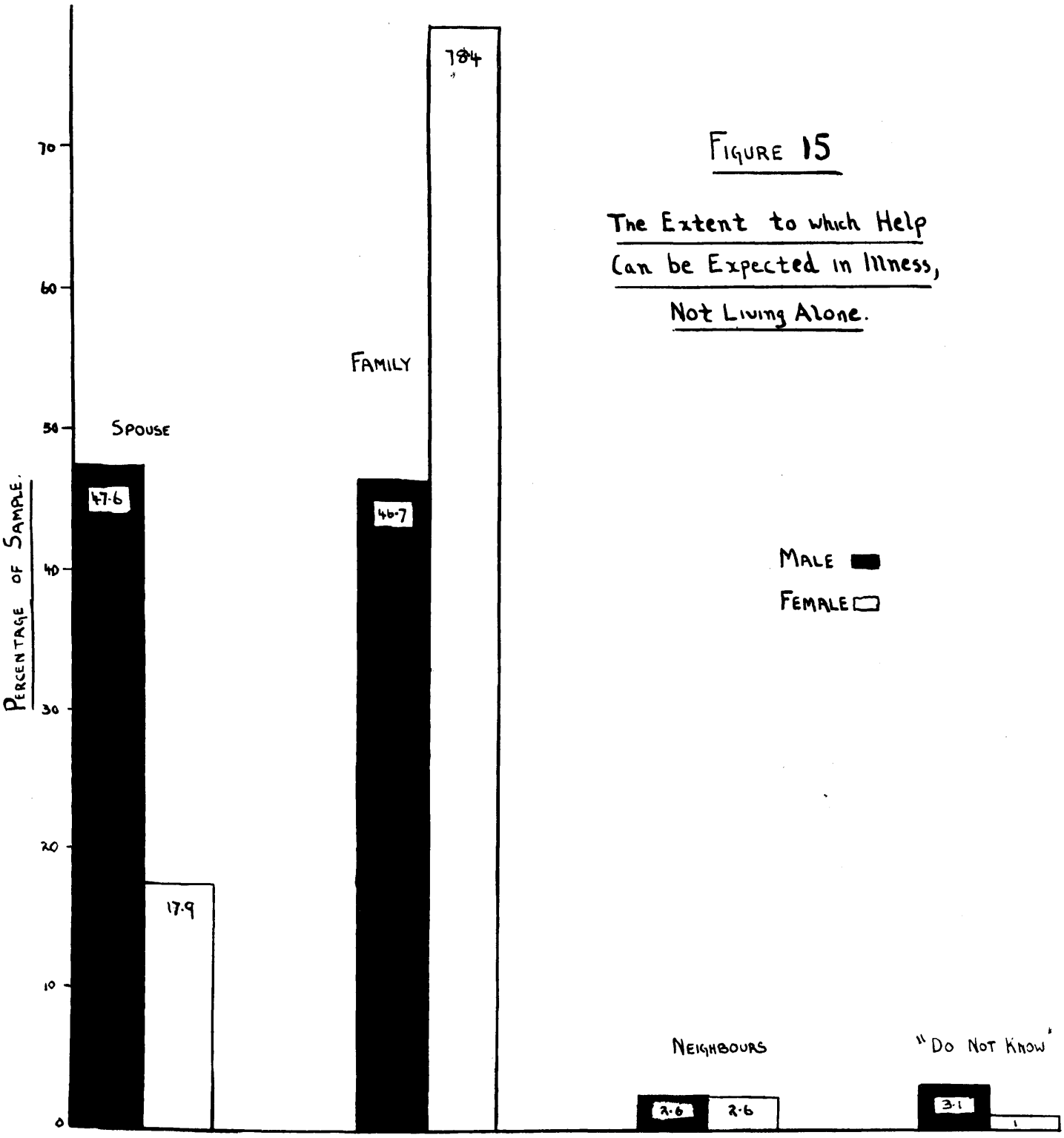


FIGURE 15

The Extent to which Help Can be Expected in Illness, Not Living Alone.



that they did not know who would look after them.

Of those who did not live alone, 29 per cent. stated that they would be cared for by husband or wife, as the case might be; 66.6 per cent. that their family would look after them; 2.6 per cent. that they would be cared for by their neighbours, and 1.8 per cent. stated that they did not know who would look after them.

As might be expected, the elderly who live alone are in a much worse position than those not living alone from the point of view of expected help in illness. Over 40 per cent. of those who lived alone had no one, or only their neighbours, to turn to in the event of illness, compared with 4.4 per cent. of those who did not live alone.

Females who lived alone were in a slightly better position than males. Thus, 60.5 per cent. of the women stated that they could turn to their family for help compared with 50.9 per cent. of the men; and 26.4 per cent. of the men stated that they did not know who would look after them in the event of illness compared with 15.7 per cent. of the women (Table 79).

There were distinct differences in the way the two sexes replied amongst those who did not live alone. Thus, 47.6 per cent. of the men stated that they would be looked after by their wives, but only 17.9 per cent. of the women stated that they would be looked after by their husbands. In the same way, 78.4 per cent. of the women stated that they would be looked after by their families compared with 46.7 per cent. of the men (Table 79).

The way in which the two sexes answered this enquiry is illustrated in Figures 14 and 15.

While only in answer to a hypothetical question, these findings closely resemble the situation actually found when the nursing arrangements

were examined of those who were completely or partially confined to bed. Thus, of those who lived alone who were either completely or partially confined to bed, 54.5 per cent. were cared for by their family (estimate: 58.9%), 30.3 per cent. were nursed by neighbours (estimate: 23.5%), and 15.2 per cent. looked after themselves, including one case who received some help from the family but who was mostly left alone (estimate: 17.5%).

Of those who did not live alone who were completely or partially confined to bed, 53.6 per cent. of the men were nursed mainly by their wives (estimate: 47.6%), and 42.9 per cent. were nursed mainly by their families (estimate: 46.7%). Of the women, 20 per cent. were nursed mainly by their husbands (estimate: 17.9%), and 70.8 per cent. were nursed mainly by their families (estimate: 78.4%).

It would appear, therefore, that from such a question a fairly reliable estimate can be formed of the help that would be given to the elderly in times of illness.

The results of this enquiry are of interest in that it is sometimes assumed that because an elderly person lives alone he automatically becomes dependent on hospitals and home care services when taken ill. This is not so. Half of the males and three-fifths of the females who lived alone stated that they would be cared for by their families. Many of the remainder stated that they would be cared for by neighbours, although in these cases some assistance from the home care services would probably be required.

The 17.5 per cent. of the elderly who lived alone who stated that they did not know who would look after them probably represent the hard core who would require hospital or home care services in time of illness. They are probably the true "social isolates" of the group visited.

In order to define the position further, the family structure was

examined of those who stated that they had no one, or only the neighbours, to depend upon for assistance in time of illness.

Of the 129 such subjects who lived alone, 57 (44.2%) were without a family other than distant relatives who visited rarely or who could not be depended upon for assistance. Twelve (9.3%) had only another elderly person or persons as relatives. The remaining 60 (46.5%) had families consisting of one or more sons or daughters.

Twenty-three of these families lived outside the city boundary, several being in England and several abroad. Eight lived in new housing areas within the city and 27 lived in the close vicinity. Two were not stated.

It is seen, therefore, that only 35 (27.1%) of the 129 subjects in the group had families who could be approached readily for assistance. It may be that in times of illness this help would be rendered, but even this is doubtful as many of those interviewed gave reasons why their families could not or would not help them. The following are a selection:

"He only visits me on New Year's Day;" "My son and daughter-in-law are both out working;" "I've only one girl and she's an invalid;" "I have seven of a family but only one visits me - every fortnight;" "I don't speak to them - they would not take me home from hospital;" "My son never looks near me - when I was ill I looked after myself;" "My boy is in Canada and my girl is not well;" "My daughter and I do not speak."

The group of elderly who did not live alone who stated that they had no one or only their neighbours to depend on consisted entirely of lodgers, those who had lodgers, and solitary elderly couples where one partner was in poor health.

It is concluded from this enquiry that four-fifths of the elderly who lived alone had someone to depend on for assistance in time of illness.

While, in some cases, the answer to the question might have been optimistic, the general pattern of expected help resembled closely that which was actually found when the nursing arrangements were considered of those who were actually ill.

Thirty-five (10.1%) elderly persons living alone, in spite of having a family living within the city boundary, stated that they could not depend upon them for help in time of illness.

The Help Received When Overtaken by Illness.

An assessment of the help received by the elderly who lived alone when overtaken by illness was made. This analysis is based on the help received by those who were completely or partially confined to bed.

For the purposes of this enquiry, a person was classified as being completely bed-ridden if he or she was quite unable to leave the bed; and as partially bed-ridden if he or she had to remain in bed for most of the day because of illness but was able to rise for part of the day and was able to visit the lavatory. This latter group varied in helplessness and the extent of the nursing required varied with individual cases.

It is realised that the group described who lived alone is a selected group in that those who became ill who had no one to assist them tended to gravitate to hospital, leaving behind those who were receiving some assistance.

The proportion of the elderly who are bedfast has been reported by several authors. Sheldon (p. 23) found that 2.5 per cent. of his group were bedfast as were two per cent. of those visited in the Hammersmith survey, "Over Seventy" (1954). Adams and Cheeseman (1951) stated that three per cent. of their sample were confined to bed, and a similar proportion was reported by McCoubrey and McQueen (1952). One per cent. of those described by Mair et al (1956) were bedfast. Hobson and Pemberton

(1955) stated that 1.8 per cent. of the females and 0.5 per cent. of the males in their group were bed-ridden. Of the group described by Simonds and Stewart (1954), 8.2 per cent. of the females and 1.7 per cent. of the males were permanently or periodically confined to bed.

The incidence of those confined to bed amongst groups receiving or requesting home care services has been found to be much higher. Thus, Chalke and Benjamin (1953) 17 per cent., Geffen and Warren (1954) 17 per cent., and Ferguson (1948) 36 per cent.

Table 80.

The Incidence of Those Completely or Partially Confined to Bed, Living Alone and Not Living Alone.

Confined to Bed	Male	Female	Total
Living Alone:			
Not at all	53 (86.9%)	261 (91.3%)	314 (90.5%)
Partially	6 (9.8%)	24 (8.4%)	30 (8.6%)
Completely	2 (3.3%)	1 (0.3%)	3 (0.9%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Not at all	227 (89.0%)	384 (85.5%)	611 (86.8%)
Partially	23 (9%)	41 (9.1%)	64 (9.1%)
Completely	5 (2%)	24 (5.4%)	29 (4.1%)
Total	255 (100%)	449 (100%)	704 (100%)

In the present enquiry, three (0.9%) of those who lived alone and 29 (4.1%) of those who did not live alone were found to be completely confined to bed. That there should be a smaller proportion of bedfast subjects living alone is hardly surprising, as illness severe enough to require complete confinement to bed amongst those who live alone receives, as a rule, priority when referred for admission to hospital. Thirty (8.6%) of those who lived alone and 64 (9.1%) of those who did not live alone were found to be partly confined to bed. It is surprising that there should be

so little difference in the incidence in the two groups, and it again illustrates the determination of the elderly who live alone to remain in their own home as long as it is humanly possible. Such independence, however, can only be maintained with outside help and this maintained independence shows that the elderly who live alone are really helped in time of need.

There was little difference in the incidence of those completely or partially confined to bed when examined by sex. Thus, of those living alone, 3.3 per cent. of the men and 0.3 per cent. of the women were completely confined to bed, and 9.8 per cent. of the men and 8.4 per cent. of the women partially confined to bed (Table 80).

Of those who did not live alone, 5.4 per cent. of the women and two per cent. of the men were completely confined to bed, and 9.1 per cent. of the women and nine per cent. of the men were partially confined to bed (Table 80).

The conditions causing the elderly to be completely or partially confined to bed are shown in Table 81.

Of those who lived alone, the three who were totally bed-ridden were there because of a cerebral incident (one), congestive cardiac failure (one), and one following an incapacitating accident.

The commonest causes of people being partially confined to bed were congestive cardiac failure (eight), general frailty and weakness (four) and rheumatoid arthritis (three).

The commonest conditions causing complete confinement to bed amongst those who did not live alone were senility (four), rheumatoid arthritis (four), cerebral incident (four), congestive cardiac failure (three), neoplasm (three) and general frailty (three).

Table 81.

The Conditions from Which the Elderly were Completely or Partially Confined to Bed, Living Alone and Not Living Alone.

(a) Completely Confined to Bed.

Condition	Number of Cases
Living Alone:	
Cerebral Incident	1
Following an Accident	1
Congestive Cardiac Failure and Chronic Bronchitis	1
Total	3
Not Living Alone:	
Senility	4
Rheumatoid Arthritis	4
Cerebral Incident	4
Congestive Cardiac Failure	3
Neoplasm	3
General Frailty	3
Old Fracture of Hip	2
Following an Accident	2
Thrombosis of Leg	1
Jaundice ? Carcinoma of Liver	1
Coronary Thrombosis	1
Pneumonia	1
Total	29

Table 81.

The Conditions from Which the Elderly were Completely or Partially Confined to Bed, Living Alone and Not Living Alone.

(b) Partially Confined to Bed.

Condition	Number of Cases
Living Alone:	
Congestive Cardiac Failure	8
General Frailty	4
Senility (including Early Senility)	4
Rheumatoid Arthritis	3
Chronic Bronchitis	2
Phthisis	2
Following an Accident	2
Post-Cerebral Incident	1
Persistent Vomiting	1
Post-Operative Condition (Fistula)	1
Gross Oedema, ? Kidney Condition	1
Neuritis	1
Total	30
Not Living Alone:	
General Frailty	13
Congestive Cardiac Failure	11
Senility	7
Rheumatoid Arthritis	5
Neoplasm	3
Phthisis	3
Cerebral Incident	3
Post-Cerebral Incident	4
"Feeling Unwell"	4
Varicose Ulcer	2
Old Fracture of Hip	2
Post-Operative Condition	1
Recent Haematemesis	1
Sciatica	1
Colostomy	1
Persistent Diarrhoea	1
Bronchiectasis	1
Cystitis and Prolapse	1
Total	64

Of those who were partially confined to bed, the commonest conditions were frailty (thirteen), congestive cardiac failure (eleven), senility (seven), rheumatoid arthritis (five), hemiplegia (four), and in four instances the complaint of feeling generally unwell.

Table 82.

The Nursing Arrangements of the Elderly Who Were Completely or Partially Confined to Bed, Living Alone and Not Living Alone.

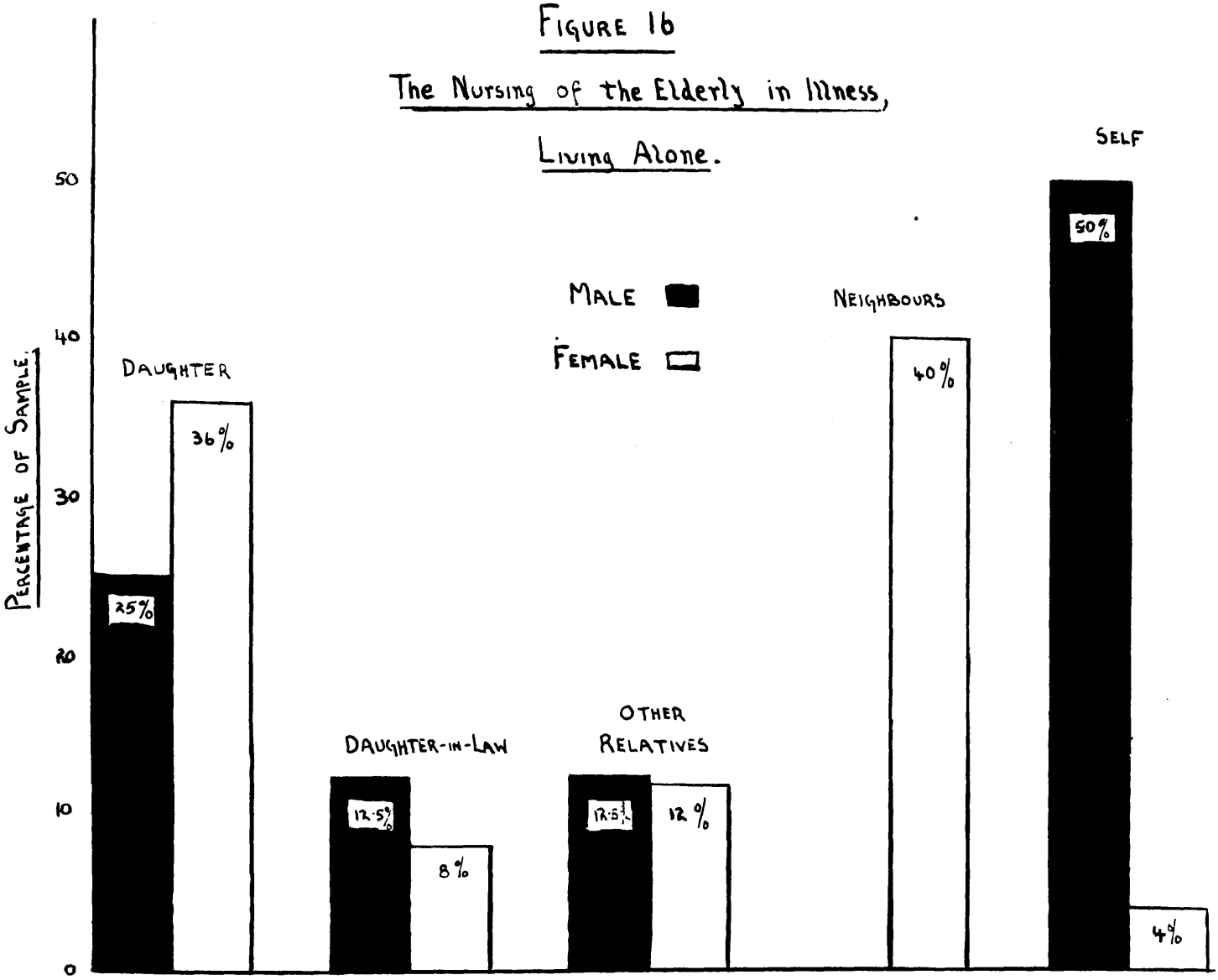
By Whom Nursed	Male	Female	Total
Living Alone:			
Daughter	2 (25%)	9 (36%)	11 (33.3%)
Daughter-in-Law	1 (12.5%)	2 (8%)	3 (9.1%)
Other Relatives	1 (12.5%)	3 (12%)	4 (12.1%)
Neighbours	-	10 (40%)	10 (30.3%)
Self	4 (50%)	1 (4%)	5 (15.2%)
Total	8 (100%)	25 (100%)	33 (100%)
Not Living Alone:			
Spouse	15 (53.6%)	13 (20%)	28 (30.1%)
Daughter	6 (21.4%)	32 (49.2%)	38 (40.9%)
Daughter-in-Law	2 (7.2%)	6 (9.2%)	8 (8.6%)
Other Relatives	4 (14.3%)	8 (12.3%)	12 (12.9%)
Neighbours (including Lodgers)	1 (3.6%)	6 (9.2%)	7 (7.5%)
Total	28 (100.1%)	65 (99.9%)	93 (100%)

The nursing arrangements of those completely or partially confined to bed are shown in Table 82 and Figure 16. Briefly, of the 33 cases so classified, eleven (33.3%) were nursed primarily by a daughter, three (9.1%) by a daughter-in-law, and four (12.1%) by other relatives. Ten (30.3%) were cared for primarily by neighbours and five (15.2%) received little help from either family or neighbours and had to look after themselves.

The number of males in the group is too small to allow a reasonable comparison by sex, but it is of interest that four (50%) of the males received little help from family or neighbours and had to manage for themselves.

FIGURE 16

The Nursing of the Elderly in Illness, Living Alone.



Three of the elderly who lived alone were completely confined to bed.

T.W., a widower, aged 80. Following a domestic accident in which he fractured his arm and received multiple bruises, this man went to bed. He made no attempt to rise, even to reach the toilet, and when examined he was completely bed-ridden. He was nursed by his daughters and daughters-in-law who visited him by rota during the day. At night one of the family always slept in the house. At our request he was admitted to a geriatric unit for rehabilitation.

T.N., a widower, aged 68. This man was confined to bed with congestive cardiac failure and severe dyspnoea of effort. On the same stair lived his son and daughter-in-law, both of whom were out at work. He was left alone for most of the day and all of the night. A kitchen pail was used as a urinal and bedpan, being emptied in the evening. He received no food, apart from what was left for him in the morning, until a meal was brought to him when his family returned from work in the evening. Great difficulty was experienced in trying to help this man. A home help was refused as he had a family living nearby, and priority admission to hospital could not be arranged. He was placed on the waiting list.

J.L., a widow, aged 77. This woman was confined to bed following a cerebral incident. She was well looked after by a home help in the morning and by a middle-aged neighbour for the rest of the day. She was left alone at night. Her only daughter lived in Dundee and visited once a week.

Thus, of the three cases who were completely bedfast, two were nursed principally by their families and one by neighbours. One, looked after by the family, was neglected. Two were left alone at night. None was on the waiting list for admission to hospital. One had the services of a home help but none was visited by the home nursing service.

Thirty (8.6%) of those who lived alone were partially confined to bed. Ten (33%) of these cases were nursed primarily by a daughter, two (6.7%) by a daughter-in-law, and four (13.3%) by other relatives. Nine (30%) were nursed primarily by neighbours and five (16.7%) had little or no help from family or neighbours and looked after themselves.

The pattern of help received by this group resembles closely that described by the remainder when asked by whom they would be looked after in time of illness.

The stresses and strains which occur in a family having to nurse and care for an elderly sick person in their midst have been amply described by Sheldon (p. 179). In the same way, stresses and strains were often evident in the families of the elderly who lived alone when illness occurred.

Several of the female relatives were obviously having difficulty in running their own home as well as that of their sick relative. Some had to travel a long way; three travelled from beyond the city boundary every day - one from Renfrew, one from Clydebank and one from Hamilton. The effect of this travel was to increase their physical burdens. Because of the time taken, several had their leisure activities curtailed or abolished. One married daughter spent alternate nights in her own home and in that of her parent. She said she worried about her parent on the nights she left her alone.

Nevertheless this group requested little help from outside sources. Only two of the elderly who were being looked after by their families were on the hospital waiting list, only one had a home help, and only two were visited by the home nurse.

Nine (30%) of the elderly who were partially confined to bed were looked after primarily by their neighbours. The extent to which neighbours helped, however, was greater than this figure suggests, as in several cases

the neighbours assisted the family.

Three of the nine elderly persons in this group were being looked after by neighbours who were themselves elderly, and two by young married women with families. One elderly man, for example, was well looked after by his next door neighbour, a young married woman with two young children, one of whom was a destructive mongol.

One of this group was on the hospital waiting list, one was visited by a home nurse and four had a home help. Six were without family. Of the three who had a family, one lived outside the city and two lived nearby but only visited occasionally.

It is surprising to find how much will be done by neighbours who have neither ties of blood nor hope of monetary reward but who act out of a spirit of sheer good-will. Many authors have commented on this. In Glasgow, Curran et al (1946) found that one in ten of their group depended upon neighbours for assistance; and Ferguson (1948) found that 21 (7%) of his 300 cases depended upon neighbours for care and attention, and 17 of the 21 were completely bedfast.

In the present enquiry, all those who were looked after by neighbours were reasonably well cared for, and many could not have been better attended by a family. Such neighbourliness is a feature of Glasgow tenements of the poorer type and it may not flourish to the same extent in new housing areas.

Five (16.7%) of those who were partially confined to bed were nursed primarily by themselves. Two were on the waiting list for hospital, one was visited by the home nursing service and one had a home help. Four of this group had relatives within the city, although one was another elderly person who could offer little assistance. The remaining three had a son or daughter living within the city but who visited rarely, the most frequent

being once a month.

It was within this group that the most obvious cases of neglect occurred. The following are examples:

T.H., a male, aged 65, separated from his wife. This man was confined to bed for most of the day with congestive cardiac failure and auricular fibrillation. He managed to reach the outside lavatory and to make meals of a sort. A neighbour's child did his shopping. The house was very dirty and because of its condition a home help would not enter. He refused to go to hospital. He stated that a son would be out of prison shortly and he would look after him; his other son rarely visited him. Some elderly cronies visited him in the evenings but did little other than make tea for him.

M.B., a spinster, aged 65. This case is described fully in the section dealing with incontinence.

J.O'R., a married man, aged 65. Following his wife's admission to hospital, this man went downhill rapidly and started to show signs of mental deterioration. An elderly sister-in-law visited regularly but was of little help. The house was very dirty and there was little food in it. He was unclean and had been drinking to excess.

The majority of the elderly who lived alone who were either completely or partially confined to bed were looked after by their families or neighbours more or less satisfactorily. Nevertheless, four (12.1%) had no one to assist them and one was without help after the home help had left. One man being looked after by his family was neglected.

Thirty-one (93.9%) of the thirty-three elderly people in this group were left alone at night.

Altogether only three (9.1%) of the group were visited by the home nursing service, five (14.1%) were on the waiting list for admission to

hospital and seven (21.2%) had a home help.

The Nursing Arrangements of the Elderly Who Did Not Live Alone.

While not strictly comparable, the nursing arrangements of the elderly who did not live alone are described briefly for the sake of interest.

Of those who did not live alone, 29 (4.1%) were completely confined to bed and 64 (9.1%) were partially confined to bed. Twenty-eight (11%) of the males were either completely or partially confined to bed, as were 65 (13.2%) of the females (Table 80).

The nursing arrangements of the elderly in this group are shown in Table 82 and Figure 17.

Of the males, 15 (53.6%) were nursed primarily by their wives, six (21.4%) by their daughters, two (7.2%) by their daughters-in-law, and four (14.3%) by other relatives. One (3.6%) was nursed primarily by neighbours.

Of the females, 13 (20%) were nursed primarily by their husbands, 32 (49.2%) by their daughters, six (9.2%) by their daughters-in-law and eight (12.3%) by other relatives. Six (9.2%) were nursed primarily by neighbours or lodgers.

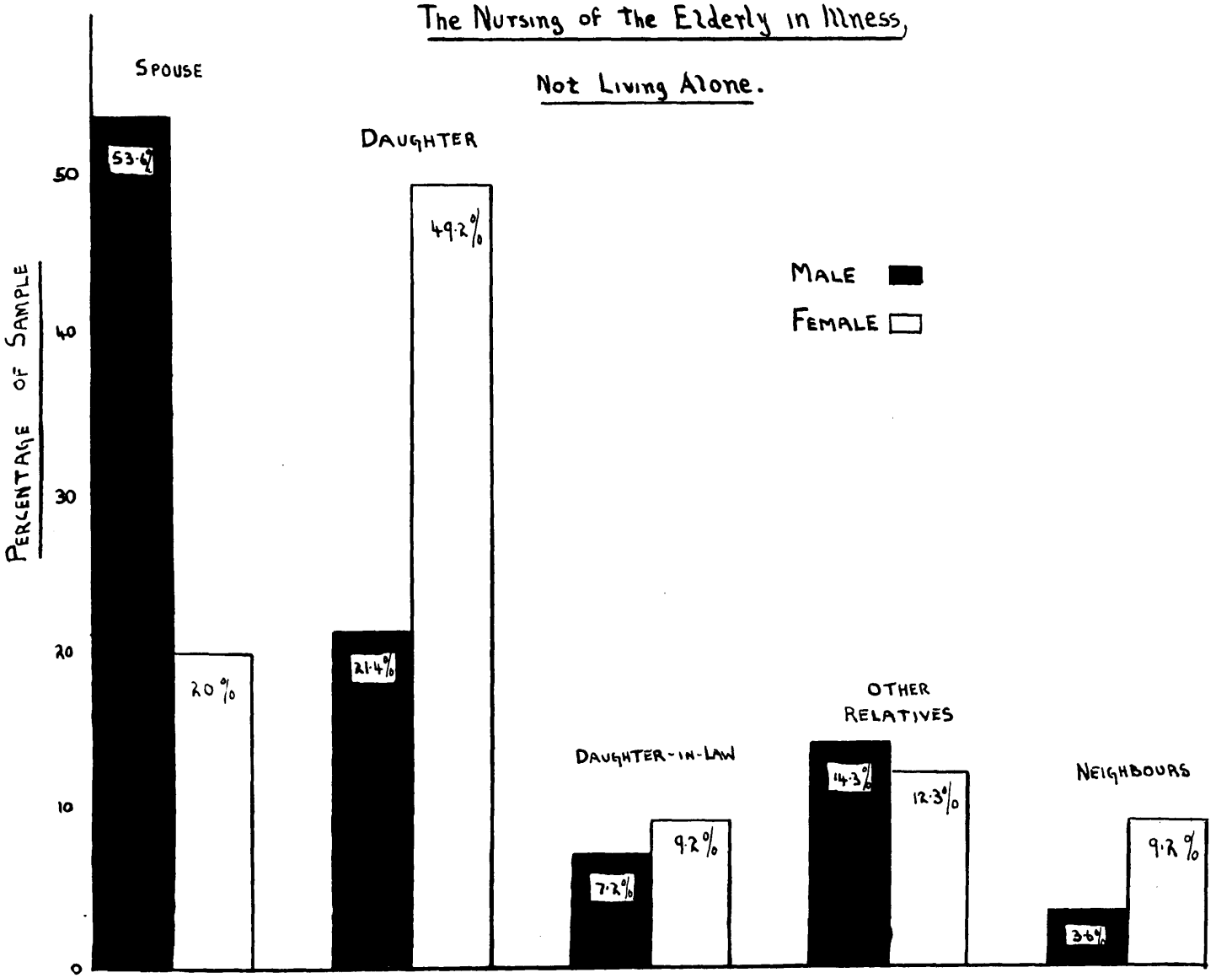
A larger proportion of men were nursed by their wives than wives by their husbands, and a greater proportion of women were nursed by their families. Such a pattern was also found by Sheldon in Wolverhampton.

Of those who were completely confined to bed, 12 (41.4%) were visited by the home nursing service, seven (24.1%) were on the waiting list for admission to hospital and two (6.9%) had the services of a home help.

Sixteen (25%) of those who were partially confined to bed were visited by the home nursing service, five (7.8%) were on the waiting list for admission to hospital and eight (12.5%), which included one couple, had the services of a home help.

FIGURE 17

The Nursing of the Elderly in Illness, Not Living Alone.



The extent to which the two groups of the elderly had home care facilities is discussed in a later section.

As with the elderly who lived alone, the over-all standard of care was high and relatively few cases of neglect were encountered. Six (6.5%) of those wholly or partially confined to bed were considered to be neglected.

Situations similar to those found by Sheldon were encountered in which a relative of an elderly sick person was suffering from severe strain. These cases have not been considered in detail but an indication of the proportion with restricted leisure time is given. This estimation is based on questions asked of those who were caring for the elderly who did not live alone who were completely or partially confined to bed.

Thirty of the relatives responsible for the care of the elderly sick person were themselves elderly. Of that number, 14 (46.7%) stated that they were unable to leave the house in the evening and 13 (43.3%) that they were unable to have a holiday because of their duties to the patient. This proportion may be an exaggeration of the position as many who stated that they were unable to leave the patient in the evening probably had no desire to leave the house in any case.

Fifty-six of the relatives responsible for the care of the elderly patients were of younger generations. Of that number, 17 (30.4%) stated that they were unable to leave the house in the evenings and 16 (28.6%) that they were unable to have a holiday because of their duties to the elderly patient.

The greatest restrictions to leisure time affected, as might be expected, those who had to care for elderly persons who were completely bed-ridden. One unmarried daughter stated that she had been unable to leave the house, except for shopping, for six months.

Three of the younger relatives stated that they had not been able

to have a holiday for the last seven years, two for five years and three for four years.

There is no doubt that in certain cases temporary hospital accommodation would help to relieve this strain. Such a practice was, however, never encountered in the present enquiry.

In other cases, an evening "sitter" would have been of help and not uncommonly was. In the majority of the cases where the relative was able to get out at night, the family or neighbours took it in turn to stay with the elderly patient. Such a service, however, should be made available for those who had no such private arrangements.

There is a need to develop a service of night attendants, both for the elderly who live alone and for the elderly who do not live alone. Such help is needed for solitary elderly patients who are awaiting admission to hospital. It is also needed to allow relatives to have an occasional night of uninterrupted sleep. Such a service has been advocated by Amulree (1956) and has been attempted as a pilot experiment by Elliott (1956) with apparent success.

CHAPTER 22.

THE ELDERLY WHO LIVE ALONE IN ILLNESS - II.

The Domiciliary Services Received by the Elderly Who Lived Alone.

An attempt was made to determine how much help the elderly who lived alone received from the home care services, including requests for admission to hospital.

It has often been stated that the elderly who live alone make heavy demands upon these services. Thomson (1950), in Birmingham, stated that 33 per cent. of those referred for hospital care lived alone, as did 46 per cent. of those referred in St. Pancras, London (Exton-Smith, 1952), and 21 per cent. in South London (Graham, 1954). Of a series of the elderly in a hospital for the chronic sick, described by Adams and Cheeseman (1951), at least 25 per cent., and often 40 per cent., of every age group had lived alone. Andrews and Wilson (1953) stated that a high proportion of their admissions were of people living alone.

From the point of view of help in the home, Wilson (1954) stated that over 50 per cent. of the group he studied lived alone. Of a group receiving the services of a home help and/or a home nurse, described by Chalke and Benjamin (1953), over 60 per cent. lived alone. Sixty-two per cent. of the people referred to a Public Health Department for assistance were found by Geffen and Warren (1954) to live alone.

Home Nursing.

Nine (2.6%) of the elderly who lived alone and 46 (6.5%) of those who did not live alone had the services of a home nurse. Of the 55 elderly persons who were in receipt of help from this service, nine (16.4%) lived alone. This proportion is similar to that found by Roberts and McWatt (1956) whose figure was approximately 14 per cent.

The services of a home nurse werereceived by four (12.1%) of the elderly who lived alone who were completely or partially confined to bed and by 28 (30.1%) of those who did not live alone who were similarly situated.

The principal reason for the visit of the home nurse to those who lived alone was to give injections (three cases), to attend to dressings (three cases), to give general nursing assistance, including bed-baths and attention to bed-sores (two cases) and to give gynaecological attention (one case).

The chief reason for the visit to the elderly who did not live alone was to give injections (19 cases), to give general nursing assistance, including bed-baths, etc. (19 cases), to attend to dressings (four cases), to give gynaecological attention (two cases) and miscellaneous duties (two cases).

The situation found in the present enquiry, therefore, was that a smaller proportion of the elderly who lived alone received the help of a home nurse than did the elderly who did not live alone. This was particularly true in times of illness.

Many people were seen, both living alone and not living alone, who would have benefited greatly from the help of a home nurse. For example, of those who were completely bedfast, only one (33.3%) of those who lived alone and 12 (41.4%) of those who did not live alone received this service.

Almost all of those who were completely or partially confined to bed would have benefited from a visit from the home nurse; not only by the actual nursing but by the instruction that could have been given to the relatives in routine nursing techniques. Only one-tenth of those who lived alone who were in this category received this help and only one-third of those who did not live alone.

A home nurse can only render assistance when directed to do so by the medical practitioner. It seems that some medical practitioners do not remember the home nursing service when weighing the home care needs of the elderly sick, for some would have obviously benefited from the service.

Further, it appears that when a home help was employed some medical practitioners considered that a home nurse was not needed. The concept of the home help as an auxiliary nurse should not be encouraged.

The help that can be expected of the home nurse is, of course, limited by the length of the individual nurse's list. Generally this can bear little addition. Nevertheless it was disquieting to see several people who were only moderately unwell receive this service while others in much more need got no help.

It may be that in the future the home nurse will have to devote more time to the instruction of relatives in nursing techniques in order that she may deal personally with patients most in need of help.

The Home Help.

The functions of the home help have been discussed in a previous section. Of the 30 home helps encountered in the present enquiry, 21 (70%) were devoted to the needs of the elderly who lived alone.

Of people who were completely or partially confined to bed, seven (21.2%) of those who lived alone and ten (10.8%) of those who did not live alone were assisted by a home help. A much higher proportion of the elderly who lived alone, therefore, received the services of a home help.

As with the home nursing service, several cases were encountered who would have benefited from the assistance of a home help; particularly those who, in illness, were left alone for a large part of each day. Many of these cases were recommended for the service but relatively few were accepted because of the proximity of the family.

Awaiting Admission to Hospital.

Eight (2.3%) of the elderly who lived alone and 17 (2.6%) of those who did not live alone were on the waiting list for admission to hospital. Excluded from this group are those who were awaiting admission for an

operation to their eyes and two males who were awaiting admission for herniotomy. Thus, of the 25 subjects awaiting admission to hospital, eight (32%) lived alone.

The proportion of those who were awaiting admission to hospital is similar to that found by Thomson, in Birmingham, and is slightly lower than that found by Exton-Smith in St. Pancras.

Five (15.2%) of the 33 elderly persons living alone who were completely or partially confined to bed were awaiting hospital admission, as were 12 (12.9%) of the 93 not living alone.

There was, therefore, very little difference in the proportions awaiting admission to hospital in the two groups of the elderly examined; and this was also true in time of illness. It is realised that this analysis may be biassed in that those who live alone who are referred for admission to hospital are often removed quickly, particularly those who have no one to assist them.

Nevertheless hospital facilities were requested for only a minority of those who were completely or partially confined to bed. It must again be remembered, however, that urgent cases may well have been removed to hospital and would not be included in this enquiry. Cases were seen which could have been classed as urgent: for example, the incontinent who still awaited admission to hospital. The fact that only a minority of the elderly who were partially or completely confined to bed were awaiting admission to hospital is a further measure of the strength of family affection.

The medical reasons for which admission to hospital was sought are shown in Table 83. The commonest reasons amongst those who lived alone were cardio-vascular conditions (three) and rheumatoid arthritis (two). Of those who did not live alone, the commonest conditions were senility (six) and general frailty (four).

Table 83.

The Conditions for Which Admission to Hospital was Requested of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

Condition	Number of Cases
Living Alone:	
Congestive Cardiac Failure	3
Rheumatoid Arthritis	2
Senility	1
Following an Accident	1
General Frailty	1
Total	8*
Not Living Alone:	
Senility	6
General Frailty	4
Congestive Cardiac Failure	1
Rheumatoid Arthritis	1
Following an Accident	1
Cerebral Incident	1
Post Operative Condition (Fistula)	1
Phthisis	1
Jaundice ? Carcinoma	1
Total	17+

* One case was incontinent of faeces.
\+ Six cases were incontinent of faeces.

In many of these the real reason for the request was to relieve the strain on the relatives. In almost all the initial request had come from the relatives. The request was understandable in several instances. For example, six of the elderly so awaiting admission were incontinent, six were senile and of these, three were both senile and incontinent.

It became evident that several of those who were on the waiting list for admission to hospital were so placed against their will. Of the eight patients living alone, three (37.5%) stated that they would not go to hospital, as did seven (41.2%) of the 17 patients not living alone. All of the families of the latter group still wished their admission to hospital.

A visit by a geriatrician to all cases to be admitted to hospital is to be recommended. It ensures that the patient is seen against his social background and that the urgent case is given priority. The influence of family pressure can also be assessed.

Nevertheless, once a patient has been classified as urgent, every effort should be made to secure a speedy admission to hospital. It is to be regretted that cases of incontinence and restless senility should be left at home for any length of time after being recommended for urgent admission.

The Incontinent Patient.

It is generally agreed that one of the most difficult of geriatric problems is the care and treatment of the incontinent patient. Much has been written on this from experience in the hospital ward, and of the distressing effect that such patients may have on fellow patients, visitors and the staff (Adams, 1949; Warren, 1947, 1953; Cosin, 1947; Thomson, 1949; Amulree et al, 1951; Nisbet, 1953, etc.).

Many forms of treatment have been instituted with greater or less success. Drugs seem to be of little value (Brocklehurst, 1951) and the greatest successes have been achieved through the principles of active rehabilitation (Warren, 1953; Cosin, 1947; Adams, 1949; Amulree et al, 1951; Nisbet, 1953). For the irremedial case, special types of apparatus and nursing aids have been evolved, such as the Brocklehurst bed (Brocklehurst, 1951), the Arnott gown (Arnott and Nisbet, 1953) and the Chapel (1951) apparatus for continuous urinary drainage.

In the home, without trained staff and special facilities, the incontinent patient poses a social and medical problem of the first magnitude. Together with senility, with which it is not infrequently associated, incontinence is a common cause of breakdown in the family desire to care for their elderly sick. It is a frequent reason for a family plea for admission

to hospital of their elderly relative (Grant, 1955; McEwan and Laverty, 1949).

Such a plea is often understandable, for little help is offered to those who have to care for an incontinent patient in the home. While hospital admission is the apparent solution, it is found in practice that such cases are often the most difficult to place in hospital, especially if associated with senility. Consequently, incontinent elderly patients are often left at home for considerable periods, a growing burden and an increasing strain on their families.

The incidence of incontinence in the elderly has been assessed by several investigators. Sheldon (p. 73) found that eleven per cent. of his sample had faecal or urinary incontinence and that 0.6 per cent. had faecal incontinence only. Of the group described by Hobson and Pemberton, 26 per cent. of the males and 12.9 per cent. of the females had regular or occasional urinary incontinence and 1.6 per cent. of the males and 2.4 per cent. of the females had regular or occasional faecal incontinence.

Six per cent. of the group described by Mair et al (1956) were incontinent but detailed information was not given. One per cent. of the males and three per cent. of the females considered by Chalke and Benjamin (1953) were incontinent, as were six per cent. of those in the group described by Geffen and Warren (1954). Of the group receiving nursing assistance, described by Ferguson (1948), 17.3 per cent. were incontinent.

The incidence of incontinence in the present enquiry was determined. By incontinence is meant the regular voiding of urine or faeces into the clothes or bed-clothes whether from conscious or unconscious motivations. The occasional case of incontinence was not considered. The incidence of incontinence is shown in Table 84.

Table 84.

The Incidence of Faecal and Urinary Incontinence in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

Incontinence	Male	Female	Total
Living Alone:			
Not Incontinent	61 (100%)	281 (98.3%)	342 (98.5%)
Urine Only	-	3 (1%)	3 (0.9%)
Faeces Only	-	1 (0.3%)	1 (0.3%)
Urine and Faeces	-	1 (0.3%)	1 (0.3%)
Total	61 (100%)	286 (99.9%)	347 (100%)
Not Living Alone:			
Not Incontinent	246 (96.5%)	430 (95.8%)	676 (96%)
Urine Only	5 (1.9%)	8 (1.8%)	13 (1.8%)
Faeces Only	-	1 (0.2%)	1 (0.1%)
Urine and Faeces	4 (1.6%)	10 (2.2%)	14 (2.0%)
Total	255 (100%)	449 (100%)	704 (99.9%)

Altogether five (1.4%) of those who lived alone and 28 (4%) of those who did not live alone were incontinent of urine or faeces. The lower incidence of this condition in those who live alone is not surprising as incontinence, particularly faecal incontinence, is a compelling reason for seeking admission to hospital.

When examined by sex, it was found that, of those who lived alone, five (1.7%) of the women and none of the men were incontinent of urine or faeces. Of those who did not live alone, 19 (4.2%) of the women and nine (3.5%) of the men were incontinent of urine or faeces (Table 84). This confirms the finding of Sheldon and of Hobson and Pemberton that women are more likely to become incontinent of urine or faeces than men.

The main causes of urinary incontinence in males were prostatic conditions, and in females prolapse with some degree of cystitis and frequency.

Two (0.7%) of the women who lived alone were incontinent of faeces, as were four (1.6%) of the men and eleven (2.4%) of the women who did not live alone.

The age incidence of those who did not live alone who had incontinence of faeces is shown in Table 85. While the numbers are too small to support any definite conclusions, the incidence increased steadily with advancing years.

Of the two females living alone who were incontinent of faeces, one was almost completely confined to bed and the other was active. The former had gone to bed following a fall in which she was severely bruised. She had remained there for several days, rising only to arrange with the milk boy to do some shopping, and to make tea and eat some food. When visited, she had become incontinent of faeces and urine, but had on one occasion changed her nightdress and had steeped the soiled one. She stated that she was unable to visit the outside lavatory. She was on the waiting list for admission to hospital and was being visited by the district nurse. She had always kept aloof from her neighbours. At our request she was admitted immediately to hospital.

The other woman had had faecal incontinence for many years, following what was probably a severe perineal tear in childbirth. She constantly wore a sanitary towel but in spite of this frequently soiled her underclothes.

Of those who did not live alone who were incontinent of faeces, eight (53.3%) were completely confined to bed, six (40%) were partially confined to bed and one (6.7%) was not confined to bed at all.

The primary causes for faecal incontinence in this group were senility (eight), carcinoma of the bowel (one), terminal illness (one),

Table 85.

The Age Incidence of 15 Elderly Persons Not Living Alone Who were Incontinent of Faeces, by Sex.

	60-64	65-69	70-74	75-79	80-84	85+
Male	-	1 (1.1%)	1 (1.1%)	-	2 (5.6%)	-
Female	-	1 (1.1%)	2 (1.7%)	2 (2.2%)	3 (6.2%)	3 (17.6%)
Total in Age Group:						
Male	-	59	91	56	36	13
Female	88	88	119	89	48	17

following a severe scalding (one), extreme frailty (one), following a prostatectomy (one) and anti-social behaviour (one).

The washing of the soiled linen and clothes was all done at home. In no case was help given by local authority or other laundry services. No assistance was given with the replacement of sheets. Of the two subjects who lived alone, one carried out her own washing and the other had tried to do so.

For the 15 people who did not live alone, the washing was done by a daughter (eight), the spouse (three), a daughter-in-law (two), a niece (one) and a lodger who was no relation (one).

One of the elderly who lived alone who was incontinent of faeces was visited by the home nurse, as were 10 (66.7%) of those who did not live alone. Six (40%) of those who did not live alone and one of those who lived alone were awaiting admission to hospital.

The commonest nursing device encountered was the large "nappy" which, while sometimes limiting the soiling of bedclothes, was not always successful and probably made for bed-sores.

Commentary.

There is a great need to give help to those families who are nursing incontinent patients in the home. It is not enough that such cases should be placed on a waiting list for admission to hospital and then left without further help.

The first great need is for a laundry service for soiled clothes. This would be of inestimable value to the housewives who have to cope with the washing. Such a service has been attempted by all too few authorities but the pioneer efforts of Greenwood (1950), Brooke (1950) and Booth (1953) have met with considerable success.

Such a service could be run by the local Public Health Department or, as has been done by Greenwood and Brooke, the facilities of a geriatric unit's laundry services made available to the incontinent at home. An issue of linen would also be an advantage.

It seemed that very little nursing advice was given to those who had to look after bedfast patients from the point of view of the prevention of incontinence. It has been stressed by many authors that incontinence can be helped and prevented by attempting to make bedfast patients ambulant, even if it be only to sit on a chair for a short time. This advice should be given to all who have to care for bedfast elderly patients.

Advice on how to lift patients would be of value. Exton-Smith (1952), for example, considered that difficulty in lifting a patient could lead to a neglect of the call to defaecation with a resultant "false" or overflow incontinence. Amulree (1956) has pointed out that the high bed with the soft mattress is unsuitable for old people as it is hard to get out of, and may again lead to a neglect of the call to defaecation.

Faecal incontinence has been found to occur with a loaded rectum, the so-called "overflow" incontinence (Cosin, 1947; Warren, 1950 a, 1953, etc.). Instruction in routine "bed-panning," a procedure found advantageous by Nisbet, could be given to help prevent this. In males, a urinal within easy reach might prevent urinary incontinence. Some geriatricians have found that a weekly enema is of value (Adams, 1949; Amulree et al (1951), and this could be administered by the home nursing service.

Warren (1953) has drawn attention to the best positions for the patient to adopt in bed: lying passively on the back tends to promote incontinence, whereas it may be prevented if the patient can be made to sit on a chair during the day and lie on his side at night. Attention should be paid to the fluid intake. An inadequate fluid intake may lead to

constipation and an overflow incontinence (Warren, 1953), whereas when incontinence is established a diminished fluid intake may prove to be of value in the treatment of the condition (Nisbet, 1953; Grant, 1955).

When an elderly patient becomes bedfast, the possibility of incontinence should be borne in mind by the medical and nursing attendants and advice on the above lines given to the relatives.

There are several devices on the market which might be used or adapted for the incontinent patient in the home. The urinal holder described by Ingham (1951) would be of value for bedfast men with urinary precipitancy, although in practice a hot water bag was sometimes encountered performing the same task. The system of continuous drainage described by Chapel (1951) might be useful for selected cases. For the senile incontinent the Arnott gown would be of value. Such devices should be available through the home nursing services.

The incontinent elderly patient imposes a great strain upon the bonds of family affection. It is a tribute to that affection that so many of the incontinent cases were well cared for and made clean and comfortable. The patience and fortitude of those who washed and cleaned these patients and who washed their soiled linen had to be seen to be fully appreciated. There is a great need to lighten their task.

General Summary and Conclusions to Chapters 21 and 22.

It was apparent from this enquiry that the younger generations took a considerable interest in the welfare of their own elderly folk. The help they rendered in illness was, on the whole, extensive and freely given. It was clear in many cases that in spite of the fact that the elderly person lived alone he, or more often she, was part of a family unit, a member for whom nursing assistance in illness was naturally given. Nevertheless, the small number of bedfast elderly people living alone

indicates that when overtaken by serious illness this group tend to be transferred to hospital or to the home of their family.

While cases of neglect were encountered, these cases were uncommon and were far outnumbered by the elderly who were receiving extensive help from their families. It is unfortunate that the cases of neglect seem to be noticed or remembered most, thereby creating the impression that in old age parents and others are neglected by their families.

It is easy to agree with Sheldon (1949) that there is almost an instinct which makes younger people feel they have to care for older people: this instinct was found in neighbours as well as relatives.

The help given by neighbours in time of illness was often considerable and is worthy of comment. Neighbourly assistance, in both major and minor forms, was frequently encountered, most commonly in crowded tenement property. Being part of a community of old and young alike where help and friendship are at hand is a great solace to many of the elderly who live alone. It is not surprising that many refuse to leave it for better physical conditions.

Over four-fifths of the elderly who lived alone felt that they had someone to turn to for help in time of illness. As far as could be judged from what actually happened in time of illness, this faith seemed to be justified. Almost one-fifth, however, felt that they had no one to turn to for help. An examination of the family structure of this group revealed that in all too many cases this was apparently true. Only one-quarter of the group had families to whom they could readily turn, and in most cases the relationships were strained.

The impression is sometimes gained that when an elderly person becomes ill the family quickly clamours for hospital admission. Such a situation was not apparent in the present enquiry where, irrespective of

whether living alone or not, only a minority of those who were ill had been placed on the waiting list for admission to hospital.

In the same way, relatively little help was asked of the home care services, and certainly much less than could have been utilised to advantage. This was particularly true of the home nursing service. Nor could it be shown that the elderly who lived alone tended to monopolise these services. While a larger proportion of those who lived alone received the services of a home help, a smaller proportion was visited by the home nurse, and the proportion awaiting admission to hospital was only slightly larger than that of those not living alone.

Several of the relatives who were caring for the elderly were showing signs of strain. Many had their leisure pursuits seriously curtailed or abolished. This was evident of the relatives of the elderly both living alone and not living alone. It is notable that many of the elderly who did not live alone were cared for by people who were themselves elderly.

Most of the elderly who lived alone when ill were left alone at night. This was because those who were caring for them had their own homes to manage and their own family responsibilities to fulfil. In cases of serious illness and in cases needing much attention, the help of a night "sitter" would have been of advantage.

If facilities allowed, a greater use of the home nursing service would be an advantage. There is also a need to secure the rapid admission of the senile or incontinent patient once he has been placed on the waiting list for hospital treatment. Further help is required for those who have to care for incontinent patients, particularly the provision of a laundry service.

CHAPTER 23.

SOME NUTRITIONAL ASPECTS OF THE ELDERLY WHO LIVE ALONE.

It is not easy for the elderly who live alone to maintain an adequate standard of diet. Their incomes are low and often allow an expenditure on food only just sufficient for their bodily needs. The cost of protein foods is high, and consequently carbohydrates constitute a large part of their diet. Preparing meals solely for themselves leads to a lack of interest in cooking and a tendency to make do with easily prepared dishes. There is a lack of variety in their diet, which is often ill-balanced and which, in some cases, may deteriorate to the level of tea, bread, margarine and jam. Frailty and disability, when present, aggravate the problem. When shopping becomes difficult and cooking troublesome, malnutrition and vitamin deficiency states may occur.

An assessment was made of the state of nutrition of the elderly who lived alone. Such an assessment is not easy and is subject to error due to the difficulty of distinguishing states of sub-nutrition from the natural appearance of the elderly person. On the whole, it was a clinical appraisal, based on weight, appearance of anaemia and signs of lassitude.

Those interviewed were classified into three groups: normal, undernourished and obese. The result of this assessment is shown in Table 86.

Table 86.

The State of Nutrition of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

State of Nutrition	Male	Female	Total
Living Alone:			
Normal	46 (75.4%)	213 (74.5%)	259 (74.6%)
Undernourished	12 (19.7%)	40 (14.0%)	52 (15.0%)
Obese	3 (4.9%)	33 (11.5%)	36 (10.4%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Normal	222 (87.1%)	331 (73.7%)	553 (78.6%)
Undernourished	21 (8.2%)	39 (8.6%)	60 (8.5%)
Obese	12 (4.7%)	79 (17.6%)	91 (12.9%)
Total	255 (100%)	449 (99.9%)	704 (100%)

Of those who lived alone, 15 per cent. were considered to be undernourished, 74.6 per cent. were considered to be normal and 10.4 per cent. were considered to be obese. Of those who did not live alone, 8.5 per cent. were considered to be undernourished, 78.6 per cent. were considered to be normal and 12.9 per cent. were considered to be obese. That is, a greater proportion of those who lived alone were undernourished than were those who did not live alone. The difference in proportion was statistically significant (standard error of difference, 4.4). Such a situation reflects the difficulties of the elderly who live alone in obtaining and cooking food.

The incidence of obesity did not differ much in the two groups. Thus, 10.4 per cent. of those who lived alone were classified as obese and 12.9 per cent. of those who did not live alone. There was, however, a lower incidence of obesity in females living alone compared with females not living alone.

Undernourishment was greater in males living alone than females. Thus, 19.7 per cent. of the men were considered to be undernourished compared

with 14 per cent. of the women. There was little difference in the incidence of undernourishment in the two sexes not living alone, for 8.2 per cent. of the men and 8.6 per cent. of the women were so classified (Table 86).

The greatest incidence of undernourishment, therefore, occurred in men living alone.

As might be expected, there were more obese females than males. Thus, 11.5 per cent. of the women who lived alone were obese compared with 4.9 per cent. of the men; and of those who did not live alone, 17.6 per cent. of the women were obese compared with 4.7 per cent. of the men (Table 86).

Undernourishment seemed to increase with age particularly once the age of 75 had been passed. This is shown in Table 87 where it is seen that the proportions of those considered to be undernourished increased steadily with age after the age of 70 had been passed. This is a reflection of increasing frailty, physical disability and general deterioration of health.

That states of undernourishment may occur in the elderly is well known. Hobson and Pemberton, on clinical grounds, considered that 17.3 per cent. of the males and 22.3 per cent. of the females in their sample were in a poor state of nutrition. While not strictly comparable, these proportions differ from those found of the elderly who lived alone. Hobson and Pemberton found a greater proportion of females with poor nutrition and also that more females were affected than males.

Much smaller proportions were found by Sheldon (p. 19). Only three per cent. of his sample were considered to be undernourished. Cowan (1955), reporting on a group of solitary elderly persons attending his clinic, stated that three (2.8%) suffered from malnutrition.

Table 87.

The Incidence of Undernourishment in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	2 (13.3%)	4 (2.4%)	3 (13.6%)	3 (50%)	-
Female	2 (7.1%)	8 (13.8%)	7 (9.3%)	11 (15.1%)	8 (21.1%)	4 (28.6%)
Total in Age Group -						
Male	-	15	17	22	6	1
Female	28	58	75	73	38	14
Not Living Alone:						
Male	-	4 (6.8%)	4 (4.4%)	6 (10.8%)	4 (11.1%)	3 (23.1%)
Female	5 (5.7%)	2 (2.3%)	11 (9.2%)	10 (11.2%)	8 (16.7%)	3 (17.6%)
Total in Age Group -						
Male	-	59	91	56	36	13
Female	88	88	119	89	48	17

Further evidence of undernourishment in the elderly has been given by Fuld and Robinson (1953) who wrote that 2.8 per cent. of the patients admitted to a general hospital dealing mainly with the elderly suffered primarily from malnutrition. Many more were seen who had nutritional deficiencies.

Factors which might have influenced the state of nutrition of the elderly who lived alone comprise among others loneliness, mental state, the position of the house and the ability to do the shopping. The incidence of these factors in the group considered to be undernourished was examined and compared with that of the group considered to be normal.

Table 88.

The Influence of Various Factors on the State of Nutrition of the Elderly Who Lived Alone.

	State of Nutrition	
	Undernourished	Normal
Position of the House.		
Ground Floor	14 (26.9%)	52 (19.9%)
One Floor	17 (32.7%)	98 (37.5%)
Two Floors	14 (26.9%)	67 (25.7%)
Three Floors	6 (11.5%)	43 (16.5%)
Four Floors	1 (1.9%)	1 (0.4%)
Total	52 (99.9%)	261 (100.1%)
Mental Attitude (Excluding Senility)		
Normal	22 (45.8%)	167 (64.7%)
Lonely at Times	14 (29.2%)	70 (27.1%)
Very Lonely	12 (25%)	21 (8.1%)
Total	48 (100%)	258 (99.9%)
Mental State.		
Normal	34 (65.4%)	247 (94.6%)
Impaired	14 (26.9%)	11 (4.2%)
Senile	4 (7.7%)	3 (1.1%)
Total	52 (100%)	261 (99.9%)
Ability to do Shopping.		
Able to do Shopping	32 (61.5%)	187 (71.6%)
Unable to do Shopping	13 (25%)	43 (16.5%)
Able with Help	7 (13.5%)	31 (11.9%)
Total	52 (100%)	261 (100%)

It was thought that undernourishment might have been more common amongst those who lived on the upper floors of tenements. This, however, did not appear to be so. The distribution of those considered to be undernourished on the various floors did not differ markedly from the distribution of those considered to be normal.

That loneliness and undernourishment are associated has been long suspected. In the present enquiry, 25 per cent. of those who were undernourished were classified as being very lonely compared with 8.1 per cent. of those whose nourishment was considered to be normal. The difference in proportion is statistically significant (standard error of difference, 12.9). A slightly greater proportion of those who were undernourished stated that they were lonely at times than did those in a normal state of nourishment.

A higher incidence of mental deterioration existed in those who were undernourished: 26.9 per cent. of those who were undernourished were classified as impaired from the point of view of mental health, compared with 4.2 per cent. of those normally nourished. This difference in proportion is statistically significant (standard error of difference, 12.5). Senility was more common in those considered to be undernourished, and 7.7 per cent. of those who were undernourished were classified as senile compared with 1.1 per cent. of those of good nutrition.

A smaller proportion of those who were undernourished said that they were able to do their own shopping: 61.5 per cent. of these did most of their shopping themselves compared with 71.6 per cent. of those of normal nutrition. The difference in proportion, however, is not statistically significant (standard error of difference, 14.6). Twenty-five per cent. of those who were undernourished said that they were unable to do their own shopping compared with 16.5 per cent. of those normal.

It is concluded, therefore, that undernourishment in those who live

alone is associated with loneliness, mental deterioration and, possibly, inability to do the shopping. It does not appear to be associated with the position of the house.

Scurvy.

Reports of scurvy in recent years have been confined almost entirely to the elderly who live alone, particularly elderly men.

Of 53 cases of scurvy described in Edinburgh by McMillan and Inglis (1944), 51 lived alone and 48 were males, forty-three of them being old age pensioners. In a series of 100 cases occurring in Glasgow, Thomson (1954) reported that of 56 whose domestic circumstances had been considered, 52 lived alone. The great majority of these folk were over the age of 60 and only six were women.

Hughes and MacLennan (1954) reported a case of advanced scurvy in an elderly man living alone and referred to another, also a solitary man. Dewhurst (1954) reported scurvy in a male living alone. Davis (1944) wrote that he had examined 16 cases of scurvy within two years, all in old age pensioners, but did not state their social circumstances.

Hobson and Pemberton reported six cases of established or probable scurvy in their survey. All lived alone and three were males.

In the present enquiry scurvy was suspected in only one case, a man living alone.

P.L., a bachelor, aged 79. He lived alone in a dirty house. He did his own cooking but was barely able to carry on. As far as could be judged, his diet lacked variety and was inadequate. He said he ate meat occasionally but rarely ate green vegetables or fruit. He had petechial haemorrhages over his lower legs, particularly the area just above his ankles. There was no bleeding from his gums but he was edentulous. He was referred to his medical practitioner for attention and arrangements were made for him to have his meals at the local old age club.

Anaemia.

The incidence of anaemia in the group from whom blood samples were taken is discussed in a later section. The incidence of those who appeared to be anaemic is shown in Table 74.

Weight.

The range of weights and the proportions considered underweight or overweight in a group who were weighed are discussed in a later section.

Diet.

It was impossible to make a detailed enquiry into the diets of the elderly who lived alone. Nevertheless an attempt was made to ascertain the extent to which meat, vegetables and fruit were eaten.

Several investigations into the diets of the elderly have been made in recent years. A comprehensive survey of the diets of elderly people living alone and elderly married couples was conducted in Sheffield by Bransby and Osborne (1953). These investigators recorded the consumption of various types of food over a period of one week. They reached several conclusions with regard to the variation in amount and type of food eaten by males compared to females, and by those who lived alone compared to married couples. Those who lived alone ate less food requiring preparation than did married couples, and the amount of various foods consumed varied with whether living alone or not.

Jordan et al (1954) in the United States of America investigated the diets of 100 elderly persons living alone. These investigators concluded that there was an insufficient intake of vitamin A and vitamin C, and that yellow and green vegetables, citrous fruits and dairy products were excluded from the diet more often than was desirable.

Pyke et al (1947) in London studied the nutritional value of the diets eaten by elderly people at home, in an almshouse and in two insti-

tutions for the elderly. They concluded that the amount of protein eaten by elderly women was low and that there was an insufficient intake of vitamins A and C.

Fuld and Robinson (1953), reviewing a series of cases of malnutrition in the elderly, commented on and gave an example of the typical diet of such a patient before admission to hospital.

Following are the findings in the present enquiry.

Meat.

Answers to the question of how often meat was eaten were classified into three groups: daily or almost daily, occasionally and rarely or not at all. Meat included sausages and tinned meats but excluded fish and bacon. The result of this enquiry is shown in Table 89 and Figure 18.

Table 89.

The Frequency with which Meat was Eaten by the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Daily/Almost Daily	24 (39.3%)	66 (23.1%)	90 (25.9%)
Occasionally	30 (49.2%)	181 (63.3%)	211 (60.8%)
Not at All/Rarely	7 (11.5%)	39 (13.6%)	46 (13.3%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Daily/Almost Daily	170 (66.7%)	234 (52.1%)	404 (57.4%)
Occasionally	74 (29%)	154 (34.3%)	228 (32.4%)
Not at All/Rarely	11 (4.3%)	61 (13.6%)	72 (10.2%)
Total	255 (100%)	449 (100%)	704 (100%)

This table shows that of those who lived alone 25.9 per cent. ate meat daily or almost every day, 60.8 per cent. ate meat occasionally and 13.3 per cent. did not eat meat at all or ate it but rarely. Of those who did not live alone, 57.4 per cent. ate meat daily or almost every day, 32.4

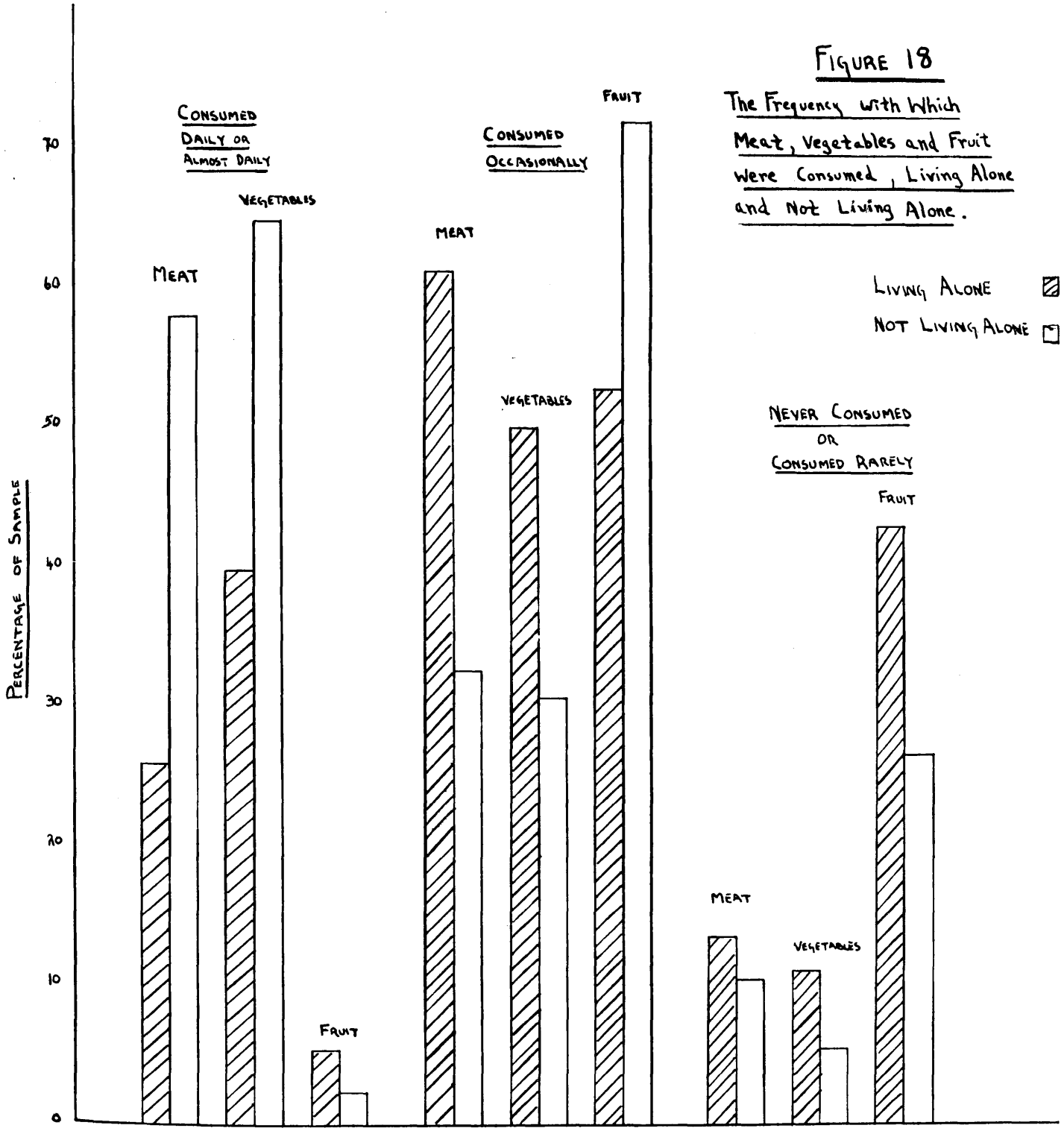


FIGURE 18
The Frequency with Which Meat, Vegetables and Fruit were Consumed, Living Alone and Not Living Alone.
LIVING ALONE
NOT LIVING ALONE
PERCENTAGE OF SAMPLE
0
10
20
30
40
50
60
70
CONSUMED DAILY OR ALMOST DAILY
MEAT
VEGETABLES
FRUIT
CONSUMED OCCASIONALLY
MEAT
VEGETABLES
FRUIT
NEVER CONSUMED OR CONSUMED RARELY
MEAT
VEGETABLES
FRUIT

per cent. ate meat occasionally and 10.2 per cent. did not eat meat at all or ate it but rarely (Figure 18).

The frequency, then, with which meat was eaten was much less in the group of elderly who lived alone than in the group who did not live alone. The majority of the elderly who lived alone only ate meat occasionally.

Most of those who lived alone ate meat at the week-end or maybe twice per week. Fish was a common substitute and was eaten more often than butcher-meat, especially by females. Other common protein foods eaten in place of meat were eggs and cheese.

The main reason given for the low consumption of meat was its cost. Others were the bother of cooking it and the difficulty of making it last for several days. The reasons given by those who did not eat meat at all included its cost, a preference for fish, a dislike of the taste of meat, dietary requirements - including a small group who did not eat meat because they considered it bad for their blood pressure - and some who had food fads. Apathy in preparing food was a factor in some of these cases.

More men ate meat daily than women. Of those who lived alone, 39.3 per cent. of the men ate meat daily or almost every day compared with 23.1 per cent. of the women. Of those who did not live alone, 66.7 per cent. of the men ate meat daily or almost every day compared with 52.1 per cent. of the women (Table 89 and Figure 19). Also, more women did not eat meat at all or ate it but rarely than men. Thus, 13.6 per cent. of the women who lived alone did not eat meat compared with 11.5 per cent. of the men. Of those who did not live alone, 13.6 per cent. of the women did not eat meat compared with 4.3 per cent. of the men (Table 89). Bransby and Osborne also found that meat was more eaten by males than females.

A liking for meat is a well known characteristic of men, particularly those who have a history of employment in heavy industry. It may be that

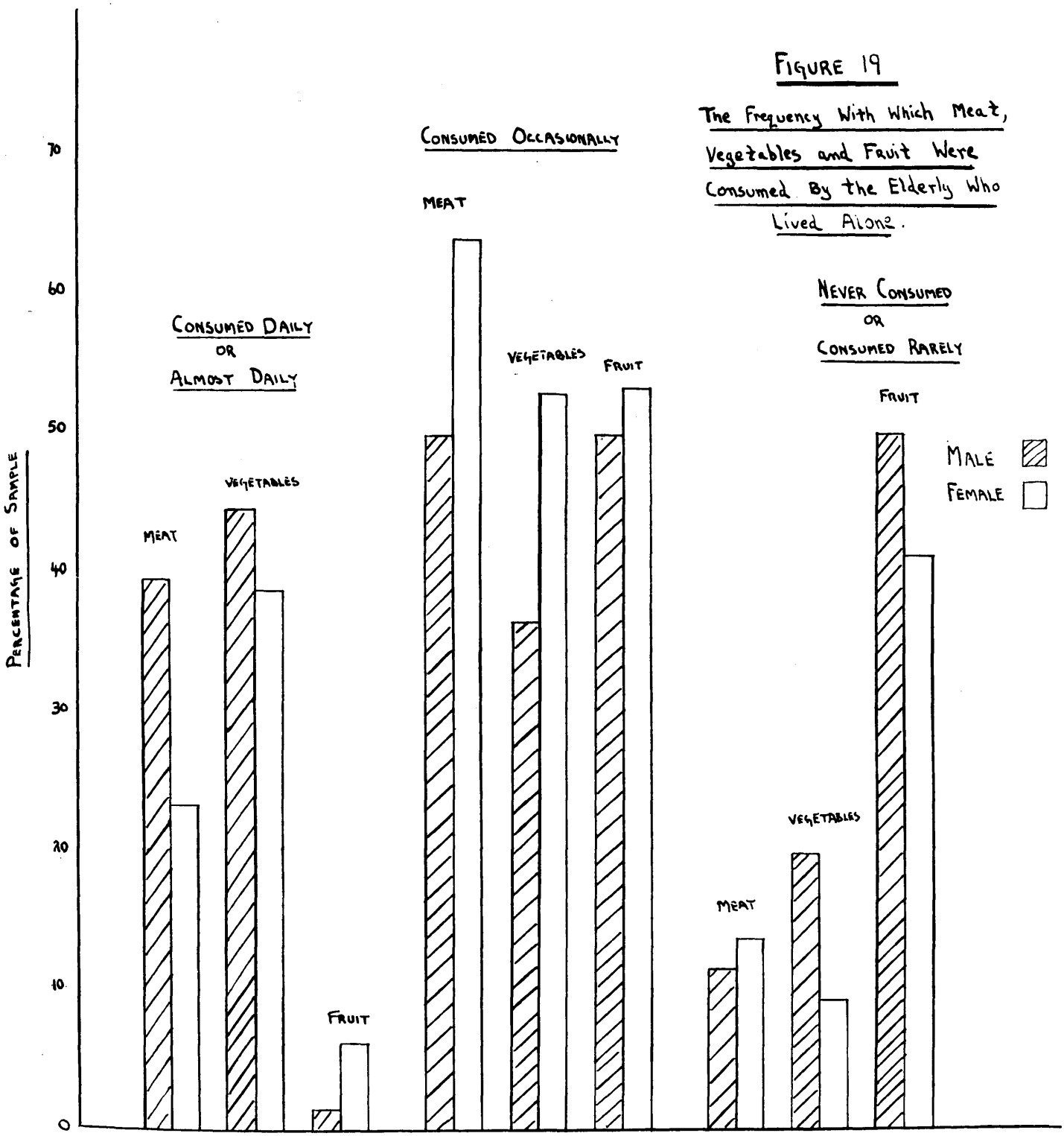


FIGURE 19
The Frequency With Which Meat, Vegetables and Fruit Were Consumed By the Elderly Who Lived Alone.
PERCENTAGE OF SAMPLE
0
10
20
30
40
50
60
70
CONSUMED DAILY OR ALMOST DAILY
MEAT
VEGETABLES
FRUIT
CONSUMED OCCASIONALLY
MEAT
VEGETABLES
FRUIT
NEVER CONSUMED OR CONSUMED RARELY
MEAT
VEGETABLES
FRUIT
MALE
FEMALE

males more than females make an effort to stretch their budget to include more meat and are willing to do without other foods. On the other hand, more men than women received help with the cooking and may thus have been given meat more often.

The frequency with which meat was eaten in the various age groups is shown in Table 90. No definite trend with age could be shown for the males, whether living alone or not. With females, the proportions who did not eat meat or ate it but rarely increased with age. No trend, however, could be demonstrated for those who ate meat daily or almost every day.

It is not true to say that old people do not enjoy meat. Even at advanced ages a substantial proportion of the elderly still enjoyed meat and the proportions might have been higher if the cost of meat had been lower.

Vegetables.

Those interviewed were asked how often they ate vegetables and the answers were classified into three groups: daily or almost every day, occasionally and rarely or not at all. Potatoes were excluded. The result of this enquiry is shown in Table 91 and Figure 18.

Table 90.

The Frequency with Which Meat is Eaten by the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male						
Daily	-	6 (40%)	6 (35.3%)	9 (40.9%)	2 (33.3%)	1 (100%)
Occasionally	-	7 (46.7%)	9 (53.0%)	11 (50%)	3 (50%)	-
Not at All	-	2 (13.3%)	2 (11.8%)	2 (9.1%)	1 (16.7%)	-
Total	-	15 (100%)	17 (100.1%)	22 (100%)	6 (100%)	1 (100%)
Female						
Daily	6 (21.4%)	12 (20.7%)	14 (18.7%)	18 (24.7%)	11 (29.0%)	5 (35.7%)
Occasionally	19 (67.9%)	42 (72.4%)	51 (68.0%)	45 (61.6%)	19 (50%)	5 (35.7%)
Not at All	3 (10.7%)	4 (6.9%)	10 (13.3%)	10 (13.7%)	8 (21.1%)	4 (28.6%)
Total	28 (100%)	58 (100%)	75 (100%)	73 (100%)	38 (100.1%)	14 (100%)
Not Living Alone:						
Male						
Daily	-	40 (67.8%)	60 (65.9%)	40 (71.4%)	25 (69.4%)	5 (38.5%)
Occasionally	-	15 (25.4%)	28 (30.8%)	15 (26.8%)	8 (22.2%)	8 (61.5%)
Not at All	-	4 (6.8%)	3 (3.3%)	1 (1.8%)	3 (8.3%)	-
Total	-	59 (100%)	91 (100%)	56 (100%)	36 (99.9%)	13 (100%)
Female						
Daily	45 (51.1%)	55 (62.5%)	62 (52.1%)	41 (46.1%)	25 (52.1%)	6 (35.3%)
Occasionally	36 (40.9%)	24 (27.3%)	40 (33.6%)	33 (37.1%)	17 (35.4%)	4 (23.5%)
Not at All	7 (8.0%)	9 (10.2%)	17 (14.3%)	15 (16.9%)	6 (12.5%)	7 (41.2%)
Total	88 (100%)	88 (100%)	119 (100%)	89 (100.1%)	48 (100%)	17 (100%)

Table 91.

The Frequency with Which Vegetables were Eaten by the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Daily/Almost Daily	27 (44.3%)	110 (38.5%)	137 (39.5%)
Occasionally	22 (36.1%)	150 (52.4%)	172 (49.6%)
Not at All/Rarely	12 (19.7%)	26 (9.1%)	38 (11%)
Total	61 (100.1%)	286 (100%)	347 (100.1%)
Not Living Alone:			
Daily/Almost Daily	170 (66.7%)	282 (62.8%)	452 (64.2%)
Occasionally	79 (31%)	135 (30.1%)	214 (30.4%)
Not at All/Rarely	6 (2.4%)	32 (7.1%)	38 (5.4%)
Total	255 (100.1%)	449 (100%)	704 (100%)

It is seen from this table that of those who lived alone, 39.5 per cent. ate vegetables daily or almost every day, 49.6 per cent. ate vegetables occasionally and 11 per cent. did not eat vegetables at all or ate them but rarely. Of those who did not live alone, 64.2 per cent. ate vegetables daily or almost every day, 30.4 per cent. ate them occasionally and 5.4 per cent. ate them rarely or not at all (Figure 18).

It appears that vegetables were consumed more frequently than meat. Vegetables were eaten less frequently by those who lived alone than by those who did not.

When the consumption of vegetables was considered by sex it was found that slightly more men living alone ate vegetables daily than did women, for 44.3 per cent. of the men ate vegetables daily or almost every day compared with 38.5 per cent. of the women. On the other hand, 19.7 per cent. of the men did not eat vegetables at all or ate them but rarely compared with 9.1 per cent. of the women (Table 91 and Figure 19).

There was little difference in the frequency with which vegetables were eaten by the two sexes not living alone. Thus, 66.7 per cent. of the men ate vegetables daily or almost every day compared with 62.8 per cent. of the women; and 2.4 per cent. of the men did not eat vegetables at all or ate them but rarely compared with 7.1 per cent. of the women (Table 91).

The frequency with which vegetables were eaten by those in various age groups is shown in Table 92. No trend with age could be shown for those who lived alone. Of those who did not live alone, no trend with age could be shown in the case of the males but with females the proportions who did not eat vegetables or who ate them but rarely increased steadily with advancing years.

The standard of consumption of vegetables amongst those who lived alone left much to be desired. A common way of taking vegetables was in soup which, when prepared, could be made to last for several days. The relatively low consumption of vegetables was probably due to the trouble of preparing them and to a disinclination to buy vegetables for one person. It is not surprising that an insufficient intake of vitamins A and C has been described by other workers.

Fruit.

Answers to questions about fruit eating were classified into three groups: daily or almost daily, occasionally, and rarely or not at all. The result of this enquiry is shown in Table 93 and Figure 18.

Table 92.

The Frequency with Which Vegetables were Eaten by the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male						
Daily	-	7 (46.7%)	7 (41.2%)	8 (36.4%)	4 (66.7%)	1 (100%)
Occasionally	-	5 (33.3%)	5 (29.4%)	11 (50%)	1 (16.7%)	-
Not at All	-	3 (20.0%)	5 (29.4%)	3 (13.6%)	1 (16.7%)	-
Total	-	15 (100%)	17 (100%)	22 (100%)	6 (100.1%)	1 (100%)
Female						
Daily	14 (50%)	25 (43.1%)	24 (32%)	28 (38.4%)	13 (34.2%)	6 (42.9%)
Occasionally	12 (42.9%)	32 (55.2%)	44 (58.7%)	36 (49.3%)	22 (57.9%)	4 (28.6%)
Not at All	2 (7.1%)	1 (1.7%)	7 (9.3%)	9 (12.3%)	3 (7.9%)	4 (28.6%)
Total	28 (100%)	58 (100%)	75 (100%)	73 (100%)	38 (100%)	14 (100.1%)
Not Living Alone:						
Male						
Daily	-	41 (69.5%)	69 (75.8%)	32 (57.1%)	20 (55.6%)	8 (61.5%)
Occasionally	-	15 (25.4%)	21 (23.1%)	23 (41.1%)	15 (41.7%)	5 (38.5%)
Not at All	-	3 (5.1%)	1 (1.1%)	1 (1.8%)	1 (2.8%)	-
Total	-	59 (100%)	91 (100%)	56 (100%)	36 (100.1%)	13 (100%)
Female						
Daily	67 (76.1%)	58 (65.9%)	80 (67.2%)	46 (51.7%)	26 (54.2%)	5 (29.4%)
Occasionally	18 (20.5%)	27 (30.7%)	33 (27.7%)	36 (40.4%)	17 (35.4%)	4 (23.5%)
Not at All	3 (3.4%)	3 (3.4%)	6 (5.0%)	7 (7.9%)	5 (10.4%)	8 (47.1%)
Total	88 (100%)	88 (100%)	119 (99.9%)	89 (100%)	48 (100%)	17 (100%)

Table 93.

The Frequency with Which Fruit was Eaten by the Elderly Who Lived Alone and by the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Daily/Almost Daily	1 (1.6%)	18 (6.3%)	19 (5.5%)
Occasionally	30 (49.2%)	151 (52.8%)	181 (52.2%)
Not at All/Rarely	30 (49.2%)	117 (40.9%)	147 (42.4%)
Total	61 (100%)	286 (100%)	347 (100.1%)
Not Living Alone:			
Daily/Almost Daily	5 (2%)	12 (2.7%)	17 (2.4%)
Occasionally	175 (68.6%)	326 (72.6%)	501 (71.2%)
Not at All/Rarely	75 (29.4%)	111 (24.7%)	186 (26.4%)
Total	255 (100%)	449 (100%)	704 (100%)

Of those who lived alone, 5.5 per cent. stated that they ate fruit daily or almost every day, 52.2 per cent. that they ate fruit occasionally and 42.4 per cent. that they ate it rarely or not at all. Of those who did not live alone, 2.4 per cent. ate fruit daily or almost every day, 71.2 per cent. ate fruit occasionally and 26.4 per cent. ate it but rarely or not at all.

The majority of the elderly ate fruit only occasionally. This is not surprising as to many old people fruit is a luxury which is eaten only on special occasions. The cost of fruit is relatively high and is ill afforded on a limited budget. Its value as an item of diet is rarely appreciated by the elderly.

Again those who lived alone were in a less fortunate position than those who did not live alone. A much smaller proportion ate fruit occasionally and a greater proportion did not eat it at all or at most ate it on rare occasions.

The group who ate fruit every day included some elderly people who

were food faddists and others who believed that a regular consumption of apples or oranges kept them in good health.

There was little difference in the consumption of fruit in the two sexes. Thus, of those who lived alone, 6.3 per cent. of the women ate fruit daily or almost every day compared with 1.6 per cent. of the men; and 52.8 per cent. of the women ate fruit occasionally compared with 49.2 per cent. of the men (Table 93 and Figure 19). A similar situation was found amongst those who did not live alone. Thus, 2.7 per cent. of the women ate fruit daily or almost every day compared with two per cent. of the men; and 72.6 per cent. of the women ate fruit occasionally compared with 68.6 per cent. of the men.

The frequency with which fruit was consumed in the various age groups is shown in Table 94. No trend with age could be shown either for those who lived alone or for those who did not.

The consumption of fruit by the elderly who live alone is insufficient. It is not surprising that an inadequate intake of vitamin C has been reported by other investigators. The cost of fruit, particularly in winter, and the habit of regarding fruit as a "treat" are probably the chief reasons for the lack of fruit in the diet.

Fish and Chips.

Fish and chips are much favoured by the Glasgow poor, as in other large towns, and as they are commonly bought cooked and ready for eating it was thought that they might prove a popular source of food for the elderly who lived alone. This was not so. Only 3.7 per cent. of those who lived alone bought fish and chips occasionally, as did six per cent. of those who did not live alone.

The commonest reason given for not buying fish and chips was the modern cost which is relatively high. Others stated that they disliked

Table 94.

The Frequency with Which Fruit is Eaten by the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male						
Daily	-	1 (6.7%)	-	-	-	-
Occasionally	-	8 (53.3%)	7 (41.2%)	11 (50%)	3 (50%)	1 (100%)
Not at All	-	6 (40%)	10 (58.8%)	11 (50%)	3 (50%)	-
Total	-	15 (100%)	17 (100%)	22 (100%)	6 (100%)	1 (100%)
Female						
Daily	3 (10.7%)	6 (10.3%)	2 (2.7%)	6 (8.2%)	-	1 (7.1%)
Occasionally	16 (57.1%)	31 (53.4%)	37 (49.3%)	40 (54.8%)	19 (50%)	8 (57.1%)
Not at All	9 (32.1%)	21 (36.2%)	36 (48.0%)	27 (37.0%)	19 (50%)	5 (35.7%)
Total	28 (99.9%)	58 (99.9%)	75 (100%)	73 (100%)	38 (100%)	14 (99.9%)
Not Living Alone:						
Male						
Daily	-	1 (1.7%)	1 (1.1%)	3 (5.4%)	-	-
Occasionally	-	41 (69.5%)	68 (74.7%)	33 (58.9%)	27 (75%)	6 (46.2%)
Not at All	-	17 (28.8%)	22 (24.2%)	20 (35.7%)	9 (25%)	7 (53.8%)
Total	-	59 (100%)	91 (100%)	56 (100%)	36 (100%)	13 (100%)
Female						
Daily	1 (1.1%)	1 (1.1%)	4 (3.4%)	5 (5.6%)	1 (2.1%)	-
Occasionally	66 (75%)	69 (78.4%)	85 (71.4%)	61 (68.5%)	36 (75%)	9 (52.9%)
Not at All	21 (23.9%)	18 (20.5%)	30 (25.2%)	23 (25.8%)	11 (22.9%)	8 (47.1%)
Total	88 (100%)	88 (100%)	119 (100%)	89 (99.9%)	48 (100%)	17 (100%)

greasy food or that they preferred to cook their own fish. Many made adverse comments, probably ill-founded, on the standards of hygiene of the local purveyors of fish and chips.

Commentary.

The elderly who lived alone were found, in this enquiry, to be less fortunate than those who did not live alone from the point of view of nutrition. There was a greater incidence of undernourishment, and meat, vegetables and fruit were consumed less frequently.

That as many as 15 per cent. of the elderly who lived alone should be undernourished is a grave reflection on the ability of this group to maintain an adequate standard of nutrition. In many cases it was apparent that the amount of protein consumed was low. Only one-quarter of those who lived alone managed to eat meat daily or almost every day. It was common to find meat eaten only twice a week or solely at the week-end. It was also clear, from conversations with the elderly, that the amount bought at any one time was small, commonly a quarter-of-a-pound at a time. A usual alternative was fish. Cheese and eggs were also often eaten at main meals as meat substitutes.

Fruit and vegetables were not eaten often enough by the elderly who lived alone. Fruit was obviously a luxury, eaten only on special occasions, and many did not eat fruit at all. Vegetables were commonly taken in soup and only two-fifths of those who lived alone ate vegetables daily or almost every day.

It would seem from the large proportion who either did not eat fruit and vegetables or who ate them only on occasion that the vitamin C intake of many elderly people living alone was insufficient. While clinical scurvy was only suspected in one subject, it was probable that sub-clinical states existed.

In spite of the fact that undernourishment was slightly more common in men than women living alone, the impression was gained that men spent more money on food than women. Males, however, were poorer housekeepers and probably did not utilise their money to the best advantage. For example, six men ate regularly at local restaurants when a much cheaper meal service was available at a local old age club. Only two women ate regularly at local restaurants. Men were probably less expert than women in buying the less expensive but equally nourishing types of food.

Grossly inadequate diets, commonly quoted as being typical of the lonely solitary elderly person, were encountered in 23 (6.6%) instances. Twenty-one (7.3%) of these inadequately fed were women and two (3.3%) were men. A typical diet consisted of tea, bread or toast, butter or margarine, and jam, supplemented by cheese, eggs occasionally, porridge and soup. Vegetables, other than for soup, and meat were rarely bought. Milk rarely exceeded half-a-pint per day. As might be expected, all of this group were considered to be undernourished. No case of malnutrition was encountered, however, which was sufficiently severe to warrant admission to hospital.

There is a need to give to the elderly who live alone some assistance with food. While meals-on-wheels perform an important service for the house-bound, relatively few can be given this service. This is due to a limitation of supplies and facilities. For example, only three (0.9%) of those who lived alone were in receipt of meals-on-wheels at the time of the interview. An extension of this service would be of value.

Lunch clubs and meals organised by old age clubs perform a valuable service but attract only those who are willing to eat away from home, those who are able to travel to the club and those who are willing to pay for meals. Such clubs do not reach those who are unwilling to go to the clubs for reasons of frailty, disability, shyness, shabby clothes or an unwillingness to spend

money on a meal however modest the sum may be.

It is suggested that food supplements should be made available to the elderly who live alone, either free or very cheaply. Vitamin supplements alone, as has been suggested by Amulree (1955) and Rafsky and Newman (1947), would be of value. Milk should be made available at a reduced price, and the suggestion put forward by Amulree et al (1954) that concentrated protein supplements should be made available is to be commended.

The suggestion put forward by Fuld and Robinson (1953) that all cases of malnutrition admitted to hospital should be notified to the Medical Officer of Health is excellent. To this should be added, however, all cases of vitamin deficiency states. Such patients should be visited, supervised and assisted following their dismissal from hospital. In this way much malnutrition might be rectified.

It is inevitable that as the cost of living arises cases of under-nutrition and malnutrition will increase amongst the elderly who live alone. In the absence of an increase in the level of the retirement pension, food supplements would go far to check this increase and would also assist those who have difficulty in managing their incomes.

Summary.

Some aspects of the nutrition and diet of the elderly who lived alone have been discussed.

Fifteen per cent. were considered to be undernourished. Men were more affected than women.

Undernourishment was thought to be associated with loneliness, mental deterioration and, possibly, inability to do the shopping unaided.

There was a significantly greater incidence of undernourishment amongst those who lived alone when compared with those who did not live alone.

The elderly who lived alone ate meat, vegetables and fruit less

frequently than did the elderly who did not live alone.

It is suggested that food supplements should be made available to the elderly who live alone, and that all cases of malnutrition be reported to the Medical Officer of Health for assistance.

CHAPTER 24.

LEISURE ACTIVITIES AND SOCIAL RELATIONSHIPS - I.

It is well realised that good social relationships and active leisure pursuits are important factors in the mental and physical well-being of the elderly who live alone. Such interests go far to keep the elderly interested and enable them to feel that they are an active part of a social organism.

Contrarily, limited leisure activities and diminishing social contacts lead to loneliness and boredom. There is then a danger of drifting into a state of mental apathy which in turn leads to self-neglect and to a disregard for the good social habits of a lifetime.

It was appreciated in the present enquiry that some information on the social and leisure activities of the elderly who lived alone would be of value. Questions were asked, therefore, which were designed to give some insight into these aspects of their lives.

This part of the enquiry was, of necessity, somewhat limited, as a separate investigation would have been necessary to elicit fully the complex structure of the social life of the elderly who live alone. As the enquiry progressed, it was realised that many more questions could usefully have been included, but it was not considered possible to do so.

Family Relationships.

The family was taken as the sons and daughters (including step-children and adopted children), their husbands and wives, and the brothers and sisters of the elderly persons interviewed. In some instances a nephew, or more often a niece, was visiting frequently. In these cases, they were also considered to be the family .

Table 95.

An Indication of the Family Structure of the Elderly Who Lived Alone.

Family Structure	Male	Female	Total
Without a family	16 (26.2%)	48 (16.8%)	64 (18.4%)
Another elderly person or persons only	5 (8.2%)	21 (7.3%)	26 (7.5%)
Nephew or niece only	1 (1.6%)	28 (9.8%)	29 (8.4%)
Sons, daughters, or both	39 (63.9%)	189 (66.1%)	228 (65.7%)
Total	61 (99.9%)	286 (100%)	347 (100%)

The family structure of the elderly who lived alone is indicated briefly in Table 95. Of the 347 persons interviewed, 64 (18.4%) were without a family and 283 (81.6%) had a family as previously defined. In 26 (7.5%) instances the family consisted of another elderly person or persons, and in 29 (8.4%) instances it consisted solely of an interested nephew or niece. The remaining 228 (65.7%) had sons, daughters, or both.

When examined by sex, little difference was noted in the proportions who had sons or daughters. Thus, 66.1 per cent. of the females and 63.9 per cent. of the males had sons or daughters.

A greater proportion of the men were without a family and a greater proportion of the women had a nephew or a niece interested in them. Thus, 26.2 per cent. of the men were without a family compared with 16.8 per cent. of the women; and 9.8 per cent. of the women had an interested nephew or niece compared with 1.6 per cent. of the men (Table 95).

The value of ascertaining the proximity of the family was only realised when the enquiry was well under way, and information is not available on this aspect of the family structure. Notes were made, however, of those whose only family were distant from the city and of those who resided in the same close as a member of the family.

Of the 283 elderly persons with a family, the whole family lived

distant from the city in 21 (7.4%) cases (4.4 per cent. of the males and 8 per cent. of the females). Some of these families were in neighbouring towns, some in England and some were overseas.

While accurate figures are not available, a large proportion of the elderly persons interviewed had at least one member of their family living locally or in a neighbouring housing scheme. There is a strong local feeling of belonging to the old burgh of Govan and it was clear that many of the families of the elderly had settled within the Govan ward or nearby. An indication of the proximity of the family is given by the large number who were able to visit their elderly parent every day.

It was surprising to find that 41 (11.8%) of the 347 elderly persons who lived alone had a family living in the same close. Of the 238 women who had a family, 32 (13.4%) lived in the same close as one of their family. Nine (20%) of the 45 men who had a family lived in the same close as one of their family. In other words, the elderly person lived alone next door to his family, and given adequate housing conditions they might all have lived together.

The 41 relatives in question consisted of a daughter in 21 (51.2%) instances, a son in eleven (26.8%) instances, a niece in four (9.8%) instances and a brother or sister in five (12.2%) instances. All of the younger generations were married and two of the elderly relatives each lived alone - two sisters who did not speak to each other.

Slightly over half of the relatives were daughters and just over a quarter sons.

Sheldon (p. 151) found that 5.9 per cent. of his group had children who lived next door, or virtually next door. This compares with the 32 (9.2%) in the present enquiry who had sons or daughters in the same close. As with the present enquiry, Sheldon found that there were approximately twice

as many daughters as sons living next door.

It is fully realised that while classified as living alone within the definition adopted, most of these 41 subjects were part of a family unit which was spread over two houses. Such an arrangement has much to commend it. It gives the elderly person freedom and independence yet still enables him or her to have help at hand in times of stress and illness. Also, the younger generations have their freedom and live a separate life, yet are still able to watch and care for their elderly relative.

It is probable that this arrangement would have been practised more commonly but for the housing shortage.

Another example of the way in which the elderly who live alone may function as part of the family unit was noticed during the course of the enquiry. Several of the elderly persons interviewed stated that a younger member of the family, almost always a grand-child, slept with them at night.

This arrangement was mentioned by 23 (6.6%) of those interviewed, by 22 (7.7%) of the women and by one (1.6%) of the men. In most cases a younger member of the family, and not always the same member, slept almost every night. In other cases it was a semi-regular occurrence. Such an arrangement is a happy one. The elderly person has company during the night but has not too much responsibility for the child. The child is available to seek help if necessary and his absence relieves overcrowding in the child's own home.

It is clear from the help which the elderly who live alone receive in health and in illness that many are, in fact, part of a family unit - a unit which, though scattered over several homes, nevertheless provides rich and satisfying relationships.

This is further illustrated by the frequency with which the families visited their old relative.

Each elderly person was asked if they were visited by their family and if so, how often the visit was paid. In some cases it was found that the majority of the visits were, in fact, made by the elderly themselves. For the purposes of this enquiry, these visits were taken as visits paid by the family. In many cases the family took it in turn to visit the elderly person, each frequently having his own special day.

Table 96.

The Frequency of Family Visitation to 283 Elderly Persons Living Alone.

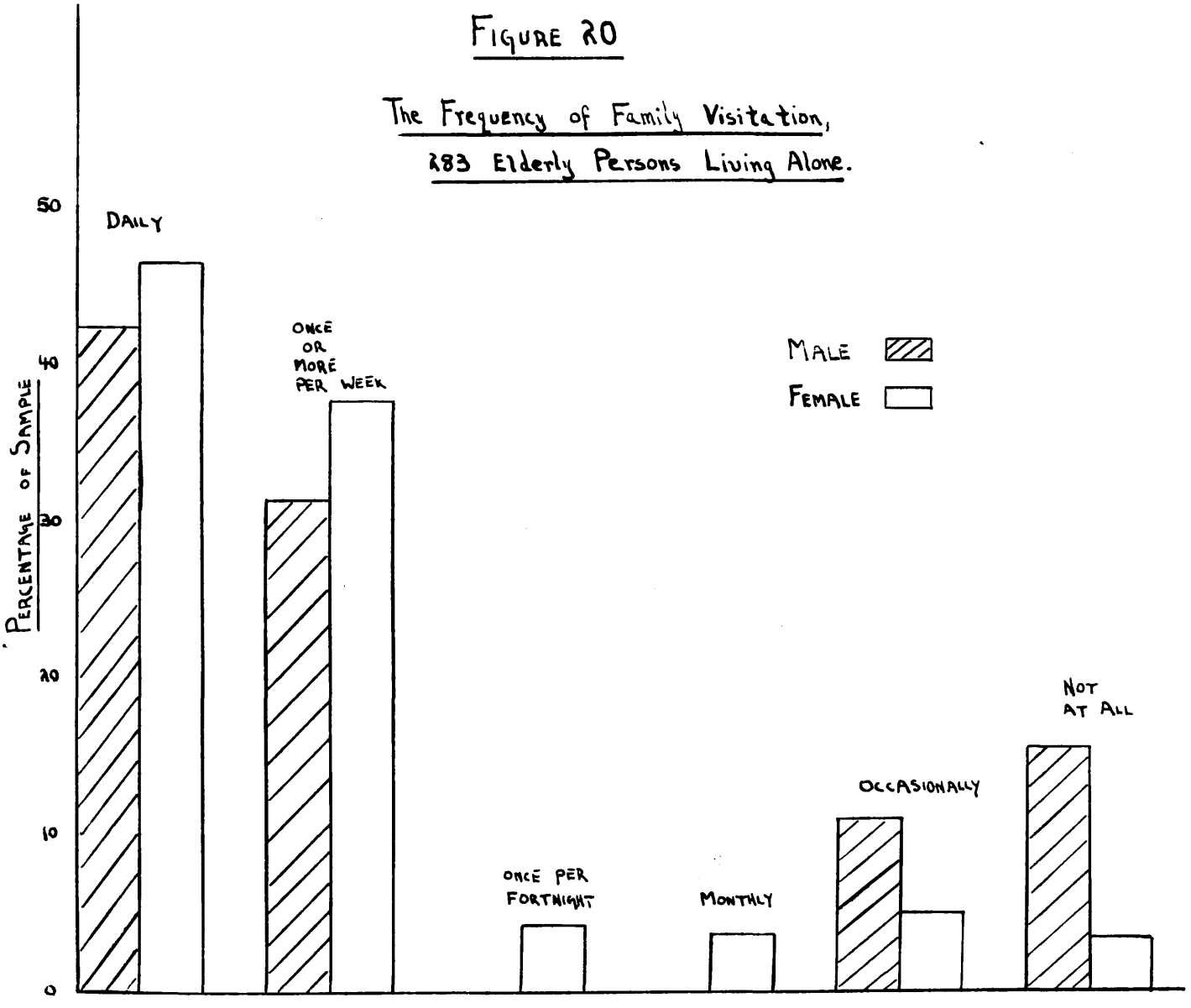
Family Visitation	Male	Female	Total
Family does not visit	7 (15.6%)	8 (3.4%)	15 (5.3%)
Occasionally	5 (11.1%)	12 (5%)	17 (6%)
Monthly	-	9 (3.8%)	9 (3.2%)
Fortnightly	-	10 (4.2%)	10 (3.5%)
Once or more per week	14 (31.1%)	89 (37.4%)	103 (36.4%)
Daily	19 (42.2%)	110 (46.2%)	129 (45.6%)
Total	45 (100%)	238 (100%)	283 (100%)

The frequency of family visitation is shown in Table 96 and Figure 20. Of the 283 elderly persons with a family, 129 (45.6%) were visited daily and a further 103 (36.4%) were visited once or more every week. Ten (3.5%) were visited once a fortnight, and nine (3.2%) once a month. Seventeen (6%) were only visited occasionally and 15 (5.3%) were not visited at all.

Women, on the whole, were visited more often than men. Thus, 46.2 per cent. of the women were visited daily compared with 42.2 per cent. of the men; and 37.4 per cent. of the women were visited at least once a week compared with 31.1 per cent. of the men. The family did not visit 15.6 per cent. of the men compared with 3.4 per cent. of the

FIGURE 20

The Frequency of Family Visitation,
283 Elderly Persons Living Alone.



women; and only visited occasionally in the case of 11.1 per cent. of the men compared with five per cent. of the women (Table 96).

It is seen, therefore, that over four-fifths of the women and almost three-quarters of the men who had families were, in fact, visited by them at least once a week, and almost half received a daily visit. This again demonstrates the interest that is taken in the elderly who live alone by their families.

It is probable that an even higher standard of visitation would have existed but for the fact that some families were unable to visit frequently because of distance or illness. Nevertheless there is no doubt that a small number of families showed little interest in the welfare of their elderly relative. These families were the exception and were far out-weighed by those who were actively interested in their elderly relative.

The influence of the age of the elderly person on the frequency of family visitation was examined. This is shown in Table 97. It appeared that the frequency of family visitation did not increase with age until the more advanced ages. Thus, daily visits increased markedly only after the age of 80 in men and after the age of 85 in women.

Table 97.

The Frequency of Family Visitation to the Elderly Who Lived Alone, by Age and Sex.

Family Visitation	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Daily Visits:						
Male	-	6 (54.5%)	4 (44.4%)	5 (27.8%)	4 (66.7%)	-
Female	9 (34.6%)	30 (58.8%)	25 (41%)	26 (45.6%)	11 (36.7%)	9 (69.2%)
Once or More per Week:						
Male	-	2 (18.2%)	2 (22.2%)	9 (50%)	1 (16.7%)	-
Female	9 (34.6%)	13 (25.5%)	29 (47.5%)	20 (35.1%)	14 (46.7%)	4 (30.8%)
Fortnightly and Monthly:						
Male	-	-	-	-	-	-
Female	2 (7.7%)	4 (7.8%)	5 (8.2%)	5 (8.8%)	3 (10%)	-
Total in Each Age Group						
Male	-	11	9	18	6	1
Female	26	51	61	57	30	13

Table 98.

The Frequency of Family Visitation by the Frequency with Which the Family Doctor was Attended, 283 Elderly Persons Living Alone.

Family Visitation	Attendance at Family Doctor					
	More than Once a Week	Weekly	Fort-nightly	Monthly	Occasion-ally	Not at All
Does not Visit	-	2 (6.2%)	3 (8.6%)	5 (7.5%)	4 (7.3%)	1 (1.1%)
Occasionally	-	3 (9.4%)	3 (8.6%)	4 (6%)	2 (3.6%)	5 (5.4%)
Monthly	-	-	1 (2.9%)	3 (4.5%)	2 (3.6%)	3 (3.3%)
Fortnightly	-	2 (6.2%)	-	4 (6%)	3 (5.5%)	1 (1.1%)
Once or More per Week	1 (50%)	10 (31.3%)	14 (40%)	23 (34.3%)	19 (34.5%)	36 (39.1%)
Daily	1 (50%)	15 (46.9%)	14 (40%)	28 (41.8%)	25 (45.6%)	46 (50%)
Total	2 (100%)	32 (100%)	35 (100.1%)	67 (100.1%)	55 (100.1%)	92 (100%)

Nor could it be shown that the frequency of family visits was related to the general state of health of the elderly person. Taking the frequency of visitation to the family doctor as an index of general health, it could not be shown that those who visited their doctors more frequently received in turn a greater proportion of frequent visits from their family. This is shown in Table 98 where it can be seen that no trend exists in the amount of daily or weekly visits by the family as frequency of attendance at the family doctor increases.

When the general health deteriorates materially, however, the frequency of family visitation tends to increase. This was seen in the group who were completely or partially confined to bed. Of the 33 subjects in this group, 25 had a family. Sixteen (64%) of the 25 were visited daily by their family and a further five (20%) were visited several times a week. The remainder were visited less often.

The impression was gained that frequent family visitation was a mental stimulus to the elderly and prevented the formation of bad social habits. To confirm this, the frequency of family visitation was examined in relation to loneliness and to the cleanliness of the house. This is shown in Tables 99 and 100.

Table 99.

The Frequency of Family Visitation by the State of Loneliness, 283 Elderly Persons Living Alone.

Family Visitation	State of Loneliness		
	Normal	Very Lonely	Lonely at Times
Does not Visit	5 (2.9%)	4 (13.3%)	6 (7.2%)
Occasionally	6 (3.5%)	4 (13.3%)	7 (8.4%)
Monthly	1 (0.6%)	3 (10%)	5 (6%)
Fortnightly	4 (2.4%)	-	6 (7.2%)
Once or More per Week	58 (34.1%)	7 (23.3%)	38 (45.8%)
Daily	96 (56.5%)	12 (40%)	21 (25.3%)
Total	170 (100%)	30 (99.9%)	83 (99.9%)

While the difference was not as striking as had been expected, nevertheless those who did not complain of loneliness had a higher standard of family visitation than those who did complain of loneliness. Thus, 90.6 per cent. of those who did not complain of loneliness were visited daily or weekly by their family compared with 71.1 per cent. of those who stated that they were lonely at times and 63.3 per cent. of those who stated that they were very lonely.

Table 100.

The Frequency of Family Visitation by the Cleanliness of the Home, 283 Elderly Persons Living Alone.

Family Visitation	Cleanliness of the Home		
	Clean	Fair	Dirty
Does not Visit	9 (3.9%)	4 (10%)	2 (15.4%)
Occasionally	8 (3.5%)	5 (12.5%)	4 (30.8%)
Monthly	8 (3.5%)	-	1 (7.7%)
Fortnightly	6 (2.6%)	4 (10%)	-
Once or More per Week	90 (39.1%)	11 (27.5%)	2 (15.4%)
Daily	109 (47.4%)	16 (40%)	4 (30.8%)
Total	230 (100%)	40 (100%)	13 (100.1%)

Of those whose house was clean, 86.5 per cent. were visited daily or weekly by their family compared with 67.5 per cent. of those whose house was classified as fair and 46.2 per cent. of those whose house was dirty. The contribution of the family to the actual cleaning, however, must be borne in mind.

The influence of family visitation in relation to mental state was discussed in a previous section.

Neighbourly Visits.

Although the question was not asked specifically, 184 (53%) of the elderly who lived alone mentioned that they were visited by their neighbours. This is almost certainly an under-statement of the actual position.

More women than men spoke of visits by neighbours. Thus, 167 (58.4%) of the women stated that they had visits from their neighbours compared with 17 (27.9%) of the men. Such a finding is not unexpected as the neighbourly visit and gossip are more likely between women.

The elderly who live alone derive much satisfaction from the presence and visits of their neighbours. This is particularly true of those who have no family of their own or who have little contact with their family. The presence of interested neighbours can be a source of great comfort to the elderly who live alone. They feel that they have someone to turn to in times of stress and sudden illness. The day-to-day contact which they supply can be an important feature of their social life.

Visits from Interested Workers.

Forty-seven (13.6%) of the elderly who lived alone received a visit from an official or voluntary worker. Twenty-one (6%) were visited by the voluntary visitors of the Society of Social Service and 26 (7.6%) by officials of the Health and Welfare Department. These officials consisted

of welfare officers, health visitors or sanitary inspectors. Four (1.2%) were visited by both organisations. Three (0.9%) received meals-on-wheels from the Women's Voluntary Service.

Most of those visited had been notified to the organisations concerned as being in difficulty or in need. Some were in difficulty with their finances and some with the cleanliness of their homes; others were notified because of their mental or physical condition.

The voluntary visiting service is to be commended. It performs an excellent task, particularly with lonely or isolated elderly persons. It is restricted, however, by the available number of voluntary workers and the fact that they have to await the notification of such cases to their organisation.

Commentary.

Many of those who had no family and many of those who were visited infrequently by their family would have benefited from regular visitation. Such visitation could be undertaken by the local authority or by the voluntary social and religious agencies.

In the opinion of the investigator, the most suitable person to undertake this visitation is the health visitor. With her medical and social training, she is ideal for the work of visiting the elderly who live alone. She has the advantage over the voluntary worker in that she is specially trained, can devote her time regularly to the task and, as a representative of the Health and Welfare Department, is able to command its many resources.

One health visitor should be allotted to each administrative area of the city for the purpose of visiting the elderly and attending to their problems. Such a service was established in the South-Western Division of the city at the conclusion of the present enquiry. The health visitor who

accompanied the investigator was allocated to the task. The value of the service has already been proved and it is recommended that the service be extended to the city as a whole.

It is also recommended that a register of the elderly who live alone should be formed. This would be of value for the purposes of routine visitation and the compilation of information. Such a register could be formed by advising medical practitioners, almoners, social agencies and old age clubs of the service. A notice could also be displayed in post offices where the elderly collect their pension.

The registration of old people for the purposes of visitation has been started in Aberdeen (Barclay, 1955) and in Shoreditch (Lancet, 1954, II : 392). A pilot scheme of registration has been started in the area in which the enquiry took place and is used in conjunction with the visits of the health visitor.

The value of regular visitation to the elderly who live alone would seem to be self-evident. As Lamont (1954) pointed out, an interested worker makes all the difference between a dear old gentleman and a dirty old man. It is to be hoped that many local authorities will see their way to the establishment of such a service instead of leaving it to the enlightened few.

CHAPTER 25.

LEISURE ACTIVITIES AND SOCIAL RELATIONSHIPS - II.

Outside Interests and Activities.

Those interviewed were asked if they had any outside interests or activities. The result of this enquiry is shown in Table 101 and Figure 21. Separate questions were asked about church attendance, membership of an old age club and visiting the cinema. These will be discussed in the following sections.

Table 101.

The Outside Activities of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

Outside Activities	Male	Female	Total
Living Alone:			
Nil	8 (13.1%)	59 (20.6%)	67 (19.3%)
Shopping only	5 (8.2%)	35 (12.2%)	40 (11.5%)
Shopping, visits, and walks mainly	21 (34.4%)	75 (26.2%)	96 (27.7%)
Varied	27 (44.3%)	117 (40.9%)	144 (41.5%)
Total	61 (100%)	286 (99.9%)	347 (100%)
Not Living Alone:			
Nil	53 (20.8%)	156 (34.7%)	209 (29.7%)
Shopping only	22 (8.6%)	41 (9.1%)	63 (8.9%)
Shopping, visits, and walks mainly	51 (20%)	115 (25.6%)	116 (23.6%)
Varied	129 (50.6%)	137 (30.5%)	266 (37.8%)
Total	255 (100%)	449 (99.9%)	704 (100%)

Table 101 shows that of those who lived alone, 19.3 per cent. stated that they had no outside interests, 11.5 per cent. said that their only outside interest was shopping, 27.7 per cent. that they had interests which, on the whole, were confined to shopping, walking and visiting, and 41.5 per cent. had varied outside interests and activities.

Of those who did not live alone, 29.7 per cent. replied that they had no outside interests, 8.9 per cent. said that their only outside interest was shopping, 23.6 per cent. that they had interests which, on the whole, were

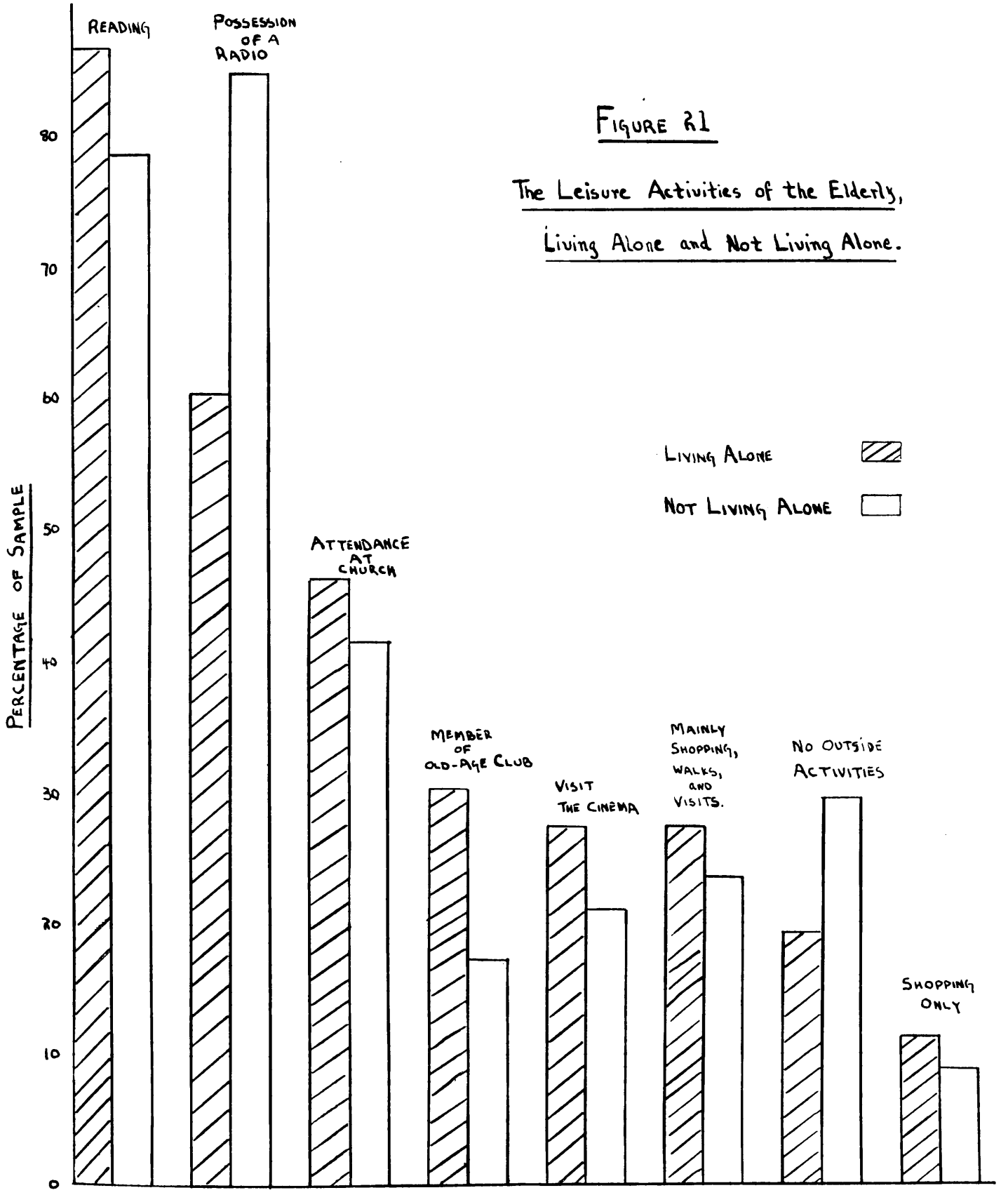


FIGURE 21

The Leisure Activities of the Elderly, Living Alone and Not Living Alone.

confined to shopping, walking and visiting, and 37.8 per cent. had varied outside interests and activities.

A larger proportion of the elderly who lived alone had varied outside activities and activities which consisted of walking, shopping and visiting than the elderly who did not live alone. Correspondingly, a smaller proportion had limited outside activities. While the differences in proportion were not large, such a trend is not unexpected. Having no company in the house, the elderly who live alone must either await a visitor or leave the house to seek company and social contacts.

More males than females had outside interests. Of those who lived alone 78.7 per cent. of the men had varied outside activities or went shopping, walking or visiting, compared with 67.1 per cent. of the women. Of those who did not live alone, 70.6 per cent. of the men had varied outside activities or went shopping, walking or visiting, compared with 56.1 per cent. of the women (Table 101 and Figure 22).

It seems that the elderly male has a greater interest in outside activities than the female. As is seen later, however, when organised activities such as church-going and membership of an old age club are examined, he seems less interested.

When related to age, as is shown in Table 102, it is found that among females living alone and among females and males not living alone the proportions who had outside activities of a varied nature, including shopping, walking and visiting, decreased steadily as the age increased. The exception was men who lived alone. It would appear that this group managed to participate in outside activities in spite of advancing years.

The group who had no outside activities consisted of those who were house-bound and a few who, in spite of doing their own shopping, did not consider it an outside activity.

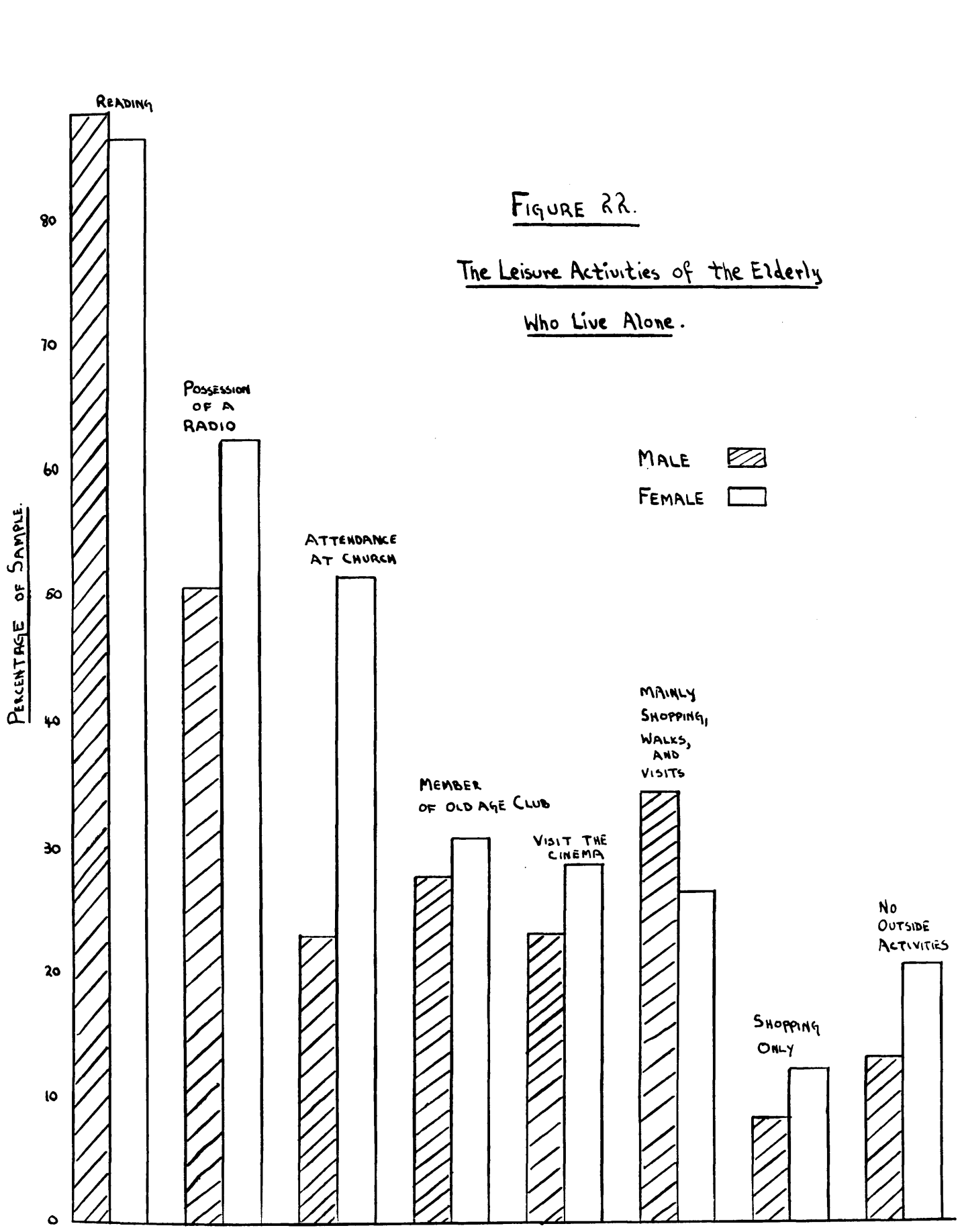


FIGURE 22.

The Leisure Activities of the Elderly Who Live Alone.

Table 102.

The Elderly Who Had Varied Outside Activities, by Age and Sex.

Shopping, Visits, Walks and Varied Activities	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	9 (60%)	13 (76.5%)	21 (95.5%)	4 (66.7%)	1 (100%)
Female	24 (85.7%)	47 (81%)	59 (78.7%)	46 (63%)	15 (39.5%)	1 (7.1%)
Not Living Alone:						
Male	-	47 (79.7%)	72 (79.1%)	38 (67.9%)	18 (50%)	5 (38.5%)
Female	71 (80.7%)	66 (75%)	71 (59.7%)	34 (38.2%)	8 (16.7%)	2 (11.8%)

Shopping alone was the sole outside activity of a tenth of the elderly who lived alone. Limited though this interest is, nevertheless shopping may provide a satisfying amount of social contact. This is particularly so in areas where small shops abound. In such shops the elderly person is usually known and engaged in conversation.

As has been shown in a previous section, over 80 per cent. of those who lived alone were able to undertake all or part of the shopping. The majority were thus able to enjoy at least this form of social contact. The replacement of the small shops with their personal atmosphere by large multiple stores would inevitably diminish this form of social intercourse.

The outside activities encountered covered a large range. A common activity of women was attending meetings of various sorts. These varied from church gatherings to political clubs. A common form of meeting was the mid-week meeting organised by the various religious bodies, particularly those of the minor orders. Many women spoke of the pleasure and satisfaction they received from such meetings. Other outside activities encountered were walks to the park in fine weather, attendance at concerts, whist drives, and somewhat surprisingly, attendance at old-time dances.

Perhaps the commonest social activity of women was visiting. These visits to their family and friends provide a rich source of diversion and entertainment. News, information and gossip are exchanged and past experiences remembered. The visit to the family is eagerly anticipated and, as was mentioned on several occasions, when television was installed this too is greatly enjoyed.

The commonest outside activities of men were attendance at football matches, of which several took place in or near the Govan ward, playing, or more commonly watching, bowling matches, visits to the public library and an occasional visit to the dog-racing track. An occasional male had an allot-

ment but was more likely merely to lend a hand occasionally in return for some of the produce.

A great many of the men had no definite outside activity. Walking, particularly with a friend, was a common way of passing the time, as was meeting their friends on street corners or at close mouths. In fine weather, a walk to the nearby park was often mentioned, where, as an added attraction, there was an old men's hut. Cards, draughts and dominoes were much in evidence when a visit was made to this hut, although the atmosphere, heavy with tobacco smoke, could hardly have been called healthy.

Little information was volunteered concerning visits to the public house but the impression was gained that such visits were less popular than might be imagined. It may be that greater participation in this form of social activity would have occurred had finances allowed.

On the whole, women seemed to make better use of their outside leisure time than men, of whom the pattern seemed to be aimless and unplanned activity. Nevertheless, with men and women alike, there seemed to be a lack of constructive leisure activity and recreational interest.

Religious Associations.

Those interviewed were asked if they belonged to a church, if they attended the church and if the minister or priest visited them.

Table 103.

The Church Membership of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Church Member	35 (57.4%)	239 (83.6%)	274 (79%)
Non-Member	26 (42.6%)	47 (16.4%)	73 (21%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Church Member	172 (67.5%)	354 (78.8%)	526 (74.7%)
Non-Member	83 (32.5%)	95 (21.2%)	178 (25.3%)
Total	255 (100%)	449 (100%)	704 (100%)

As is shown in Table 103, 79 per cent. of the elderly who lived alone were church members, as were 74.7 per cent. of those who did not live alone. There was, therefore, little difference in the proportions of church members in the two groups.

Whether living alone or not, more women were church members than men. Of those who lived alone, 83.6 per cent. of the women were members of a church compared with 57.4 per cent. of the men. Of those who did not live alone, 78.8 per cent. of the women were members of a church compared with 67.5 per cent. of the men (Table 103).

Church membership did not appear to be related to age. This is shown in Table 104, where no definite trend with age can be demonstrated.

Being a member of a church, however, did not necessarily mean that the church was attended. This is shown in Table 105, where the proportions of those who actually attended a church are shown.

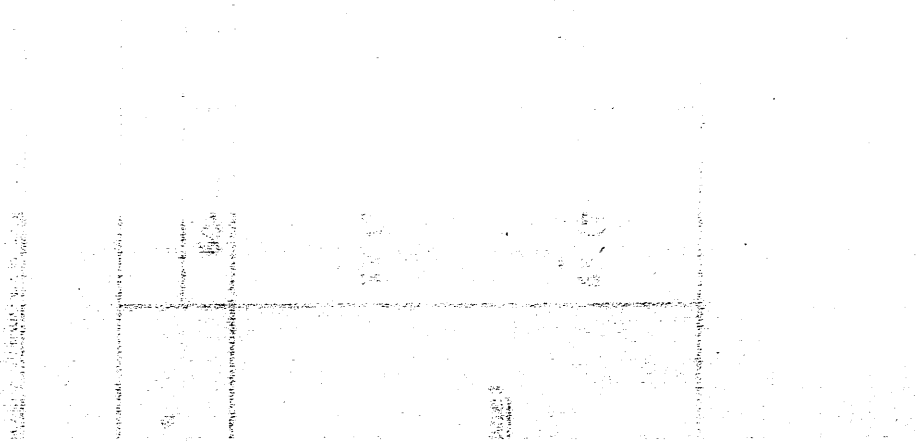


Table 104.

The Church Membership of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

Member of a Church	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	8 (53.3%)	10 (58.8%)	14 (63.6%)	3 (50%)	-
Female	21 (75%)	49 (84.5%)	63 (84%)	60 (82.2%)	33 (86.8%)	13 (92.9%)
Not Living Alone:						
Male	-	40 (67.8%)	54 (59.3%)	41 (73.2%)	27 (75%)	10 (76.9%)
Female	63 (71.6%)	71 (80.7%)	95 (79.8%)	72 (80.9%)	40 (83.3%)	13 (76.5%)

Table 105.

The Church Attendance of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Church Attended	14 (23%)	147 (51.4%)	161 (46.4%)
Not Attended	47 (77%)	139 (48.6%)	186 (53.6%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Church Attended	97 (38%)	196 (43.7%)	293 (41.6%)
Not Attended	158 (62%)	253 (56.3%)	411 (58.4%)
Total	255 (100%)	449 (100%)	704 (100%)

It is seen from this table that while 79 per cent. of those who lived alone were members of a church, only 46.4 per cent. attended the church. Of those who did not live alone, while 74.7 per cent. were members of a church, only 41.6 per cent. attended the church.

There was little difference in the proportions attending church in the two groups considered. In each case it was much less than the proportions who were church members.

More women attended church than men. This difference is notable amongst the elderly who lived alone, where 51.4 per cent. of the women attended church compared with 23 per cent. of the men. The difference was not so marked amongst those who did not live alone. Thus, 43.7 per cent. of the women attended church compared with 38 per cent. of the men (Table 105 and Figure 22).

The influence of women in bringing men to church is probably the cause of the better church attendance of men not living alone. It is to be noted that the greatest proportion taking part in this form of social activity occurred in women living alone.

Table 106.

The Church Attendance of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

Church Attended	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	4 (26.7%)	3 (17.6%)	7 (31.8%)	-	-
Female	19 (67.9%)	40 (69%)	42 (56%)	34 (46.6%)	10 (26.3%)	2 (14.3%)
Not Living Alone:						
Male	-	25 (42.4%)	37 (40.7%)	16 (28.6%)	13 (36.1%)	6 (46.2%)
Female	48 (54.5%)	52 (59.1%)	62 (52.1%)	25 (28.1%)	7 (14.6%)	2 (11.8%)

The proportion of women attending church fell steadily with age after the quinquennium 60-64 had been passed. This is shown in Table 106 where it is also seen that no such trend seemed to exist with men.

The reasons most commonly advanced for not attending church were physical disability, deafness, being unable to sit throughout the service because of frequency, and, quite commonly, because the clothes were too shabby.

Table 107.

The Visitation of the Clergy to the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Clergy Visit	17 (27.9%)	169 (59.1%)	186 (53.6%)
Do Not Visit	44 (72.1%)	117 (40.9%)	161 (46.4%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Clergy Visit	114 (44.7%)	260 (57.9%)	374 (53.1%)
Do Not Visit	141 (55.3%)	189 (42.1%)	330 (46.9%)
Total	255 (100%)	449 (100%)	704 (100%)

The minister or priest visited 53.6 per cent. of the elderly who lived alone and 53.1 per cent. of those who did not live alone. This is shown in Table 107. As with church membership and church attendance, there was no difference in the proportions in the two groups visited by clergymen.

Just as attendance at church by women tended to decrease with advancing age, there was correspondingly a steady increase in the visits paid by the clergymen as age increased. This is shown in Table 108 and was true for men and women living alone and not living alone.

There is no doubt that many fruitful social relationships are achieved through the church. Regular attendance at church and at the various

Table 108.

The Visitation of the Clergy to the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

Clergy Visits	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	3 (20%)	5 (29.4%)	9 (40.9%)	-	-
Female	17 (60.7%)	31 (53.4%)	40 (53.3%)	45 (61.6%)	25 (65.8%)	11 (78.6%)
Not Living Alone:						
Male	-	25 (42.4%)	32 (36.3%)	26 (46.4%)	21 (58.3%)	10 (76.9%)
Female	44 (50%)	50 (56.8%)	73 (61.3%)	48 (53.9%)	34 (70.8%)	11 (64.7%)

church meetings promotes social intercourse. To many elderly people living alone, religion is a great comfort and a bulwark against loneliness. Strauss (1956) makes the point that this feeling of belonging to a religious community is an active deterrent to suicidal impulses.

Most churches have an active visiting service for their sick and house-bound members which in itself is of great value. The visits by the minister or priest were spoken of gratefully by many of the elderly, especially those unable to attend church because of infirmity. Some subjects, however, complained bitterly of a lack of such a visit.

Membership of an Old Age Club.

Those interviewed were asked if they were members of an old age club. The result of this enquiry is shown in Table 109.

Table 109.

The Elderly Who Lived Alone and the Elderly Who Did Not Live Alone Who Were Members of an Old Age Club.

	Male	Female	Total
Living Alone:			
Member	17 (27.9%)	88 (30.9%)	105 (30.3%)
Non-Member	44 (72.1%)	197 (69.1%)	241 (69.7%)
Total	61 (100%)	285 (100%)	346 (100%)
Not Stated		1	1
Not Living Alone:			
Member	41 (16.1%)	81 (18%)	122 (17.3%)
Non-Member	214 (83.9%)	368 (82%)	582 (82.7%)
Total	255 (100%)	449 (100%)	704 (100%)

Of those who lived alone, 30.3 per cent. were members of an old age club, as were 17.3 per cent. of those who did not live alone. It is seen, therefore, that a greater proportion of those who lived alone took part in this form of social activity.

Slightly more women than men were members of an old age club. Thus, of those who lived alone, 30.9 per cent. of the women were members compared with 27.9 per cent. of the men; and of those who did not live alone, 18 per cent. of the women were members compared with 16.1 per cent. of the men (Table 109 and Figure 22).

When related to age, as is shown in Table 110, membership of an old age club by women tended to increase to the quinquennium 70-74 years, after which it tended to decline. No trend with age could be demonstrated for men.

It is probable that people in the younger age groups were not attracted to an elderly persons' club but as they became older diminishing social contacts may have made such a club attractive. After the age of 75, physical infirmity and the inability to form new social relationships might interfere with the attraction of club membership.

The value of the old age club has been stressed by many authors. It provides a centre for entertainment, instruction, dissemination of information and, in certain instances, the provision of part-time employment. In such a club the elderly are with people of their own age, with common interests and attitudes. Many clubs have a visiting service for their house-bound members.

It was rather surprising that less than one-third of the elderly who lived alone were members of such a club, particularly as an excellent old age club exists at Govan Cross within easy reach of the area of the enquiry. The elderly, however, have difficulty in forming new social relationships and unless they are introduced to a club by a friend it is unlikely that they will join.

Wider publicity of the activities and situation of the old age club would have been of value. Some of those interviewed were unaware of the

Table 110.

The Elderly Who Were Members of an Old Age Club, by Age and Sex.

Members of an Old Age Club	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	3 (20%)	3 (17.6%)	8 (36.4%)	3 (50%)	-
Female	7 (25%)	17 (29.3%)	26 (34.7%)	24 (32.9%)	9 (23.7%)	5 (35.7%)
Not Living Alone:						
Male	-	4 (8.8%)	19 (20.9%)	8 (14.3%)	8 (22.2%)	2 (15.4%)
Female	13 (14.8%)	19 (21.6%)	26 (21.8%)	17 (19.1%)	5 (10.4%)	1 (5.9%)

activities of the club. A visiting committee for members desirous of joining the club would be of value in overcoming shyness.

An extension of the scope of the club in performing useful work would be of value. A sense of purpose is often more important to the elderly than being entertained.

Visiting the Cinema.

Those interviewed were asked if they visited the cinema. The result of this enquiry is shown in Table 111. Isolated visits were excluded.

Table 111.

The Cinema Attendance of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Visit Cinema	14 (23%)	82 (28.7%)	96 (27.7%)
Seldom or Never	47 (77%)	204 (71.3%)	251 (72.3%)
Total	61 (100%)	286 (100%)	347 (100%)
Not Living Alone:			
Visit Cinema	48 (18.8%)	102 (22.7%)	150 (21.3%)
Seldom or Never	207 (81.2%)	347 (77.3%)	554 (78.7%)
Total	255 (100%)	449 (100%)	704 (100%)

It is seen from this table that 27.7 per cent. of those who lived alone visited the cinema with some degree of regularity, as did 21.3 per cent. of those who did not live alone. Slightly more of those who lived alone, therefore, sought this form of entertainment but the difference in the proportions in the two groups was not large.

Women went to the cinema more often than men. Of those who lived alone, 28.7 per cent. of the women visited the cinema compared with 23 per cent. of the men. Of those who did not live alone, 22.7 per cent. of the women visited the cinema compared with 18.8 per cent. of the men (Table 111

and Figure 22).

The age incidence of those who visited the cinema was examined. This is shown in Table 112, where it is seen that as the age increased, the proportions attending the cinema decreased. This was true of men and women living alone and not living alone. Such a finding is not unexpected.

It is likely that the cinema, as a form of entertainment, appeals only to a minority of the elderly, and to the younger age groups more than the older. Such a conclusion was also reached by Grey and Beltram (1950), who found that over two-thirds of their group rarely went to the cinema. Box (1946) estimated that 61 per cent. of the elderly rarely visited the cinema.

Several elderly persons gave reasons for not visiting the cinema. These included the cost, fear of the dark, deafness, the noise of the cinema being upsetting, and being unable to sit throughout the programme because of frequency.

For those who enjoy it, the cinema is a good source of entertainment. One of the local cinemas allowed the elderly to enter in the afternoon at a reduced price. Such a practice is to be commended and it is hoped that it will be extended.

Interest in Reading.

Those interviewed were asked if they were interested in reading. The result of this enquiry is shown in Table 113.

Table 112.

The Elderly Who Attended the Cinema, by Age and Sex.

Visit the Cinema	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	6 (40%)	5 (29.4%)	3 (13.6%)	-	-
Female	12 (42.9%)	20 (23.7%)	28 (37.3%)	17 (23.3%)	4 (10.5%)	1 (7.1%)
Not Living Alone:						
Male	-	14 (23.7%)	23 (25.3%)	8 (14.3%)	3 (8.3%)	-
Female	36 (40.9%)	29 (33%)	22 (18.5%)	12 (13.5%)	3 (6.3%)	-

Table 113.

The Interest in Reading of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Interested	54 (88.5%)	247 (86.4%)	301 (86.7%)
Not Interested -			
Poor Eyesight	4 (6.6%)	21 (7.3%)	25 (7.2%)
Illiterate	1 (1.6%)	12 (4.2%)	13 (3.7%)
Lack of Spectacles	1 (1.6%)	5 (1.7%)	6 (1.7%)
Miscellaneous	1 (1.6%)	1 (0.3%)	2 (0.6%)
Total	61 (99.9%)	286 (99.9%)	347 (99.9%)
Not Living Alone:			
Interested	215 (84.3%)	338 (75.3%)	553 (78.6%)
Not Interested -			
Poor Eyesight	18 (7.1%)	55 (12.2%)	73 (10.4%)
Illiterate	9 (3.5%)	19 (4.2%)	28 (4%)
Lack of Spectacles	5 (2%)	7 (1.6%)	12 (1.7%)
Miscellaneous	8 (3.1%)	30 (6.7%)	38 (5.4%)
Total	255 (100%)	449 (100%)	704 (100.1%)

Reading occupied a high place in the interests of the elderly. Thus, 86.7 per cent. of those who lived alone and 78.6 per cent. of those who did not live alone stated that they enjoyed reading. A greater proportion of the elderly who lived alone, therefore, enjoyed reading. Such a situation is not surprising as reading is an excellent form of recreation and comfort for those who lack company.

When examined by sex, little difference was noted in the proportions living alone who enjoyed reading. Thus, 88.5 per cent. of the men and 86.4 per cent. of the women stated that they enjoyed reading. Slightly more of the men not living alone enjoyed reading. Thus, 84.3 per cent. of the men enjoyed reading compared with 75.3 per cent. of the women (Table 113 and Figure 22).

The fact that men tend to be more interested in reading than women

is probably due to their want of interest in the household tasks, which occupy so much of the time of the women.

Interest in reading tends to fall with advancing years. This is shown in Table 114 where it is shown that as the age increased the proportions who enjoyed reading decreased. This trend may be due to failing vision rather than a falling off of interest. The exception to this trend was in men living alone where, as is shown in Table 114, little difference was noted in the various age groups.

It is seen, therefore, that an enjoyment of reading persists even to advanced ages. This is particularly true of those who lived alone where, even in the later years, a large proportion still enjoyed reading.

In most instances the reading material consisted of newspapers and magazines, although in not a few instances books of varying types were produced in answer to the query. Some of the men made a daily visit to the local public library in order to read the newspapers and magazines. In winter, this excursion had the added attraction of a warm room in which to sit.

Forty-six (13.3%) of those who lived alone and 151 (21.4%) of those who did not live alone stated that they were not interested in reading. The main reasons for this lack of interest were as follows:

Of those who lived alone, 25 (7.2%) were unable to read because of poor eyesight, 13 (3.7%) because of illiteracy, six (1.7%) because of a need for proper spectacles and two (0.6%) were not interested (Table 113).

Of those who did not live alone, 73 (10.4%) did not read because of poor eyesight, 28 (4%) because of illiteracy, 12 (1.7%) because of a lack of proper spectacles and 38 (5.4%) because of miscellaneous reasons which included not having time, not being interested, a preference for knitting and having too many other things to do (Table 113).

It can be seen from this group that there is still a small but

Table 114.

The Elderly Who Were Interested in Reading, by Age and Sex.

Interested in Reading	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	15 (100%)	14 (82.4%)	19 (86.4%)	5 (83.3%)	1 (100%)
Female	26 (92.9%)	54 (93.1%)	66 (88%)	61 (83.6%)	31 (81.6%)	9 (64.3%)
Not Living Alone:						
Male	-	55 (93.2%)	83 (91.2%)	48 (85.7%)	23 (63.9%)	6 (46.2%)
Female	75 (85.2%)	73 (83%)	92 (77.3%)	62 (69.7%)	31 (64.6%)	5 (29.4%)

definite need to supply spectacles to the elderly. That such a want should still exist is probably a result of ignorance or apathy on the part of the elderly persons concerned rather than a fault of the ophthalmic service.

When the limited schooling available to the elderly in their youth is considered, it is remarkable that such a low incidence of illiteracy should be encountered.

Reading is probably the commonest recreation of the elderly. It provides them with information and entertainment and it is not expensive. The enjoyment of reading persists well into advanced age and is a great source of comfort and enjoyment to those who live alone.

For those with failing sight, a supply of books of a light nature, printed in large type, would be an advantage. Such books could be kept in the public libraries or made available to the organisations interested in the welfare of the elderly.

Possession of a radio.

Those interviewed were asked if they possessed a radio. The result of this enquiry is shown in table 115.

Table 115.

The Possession of a Radio by the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Male	Female	Total
Living Alone:			
Radio Possessed	31 (50.8%)	178 (62.2%)	209 (60.2%)
Radio Broken	2 (3.3%)	11 (3.8%)	13 (3.7%)
No Radio	28 (46%)	97 (33.9%)	125 (36%)
Total	61 (100.1%)	286 (99.9%)	347 (99.9%)
Not Living Alone:			
Radio Possessed	209 (82%)	387 (86.2%)	596 (84.7%)
Radio Broken	3 (1.2%)	7 (1.6%)	10 (1.4%)
No Radio	43 (16.9%)	55 (12.2%)	98 (13.9%)
Total	255 (100.1%)	449 (100%)	704 (100%)

A radio was owned by 60.2 per cent. of those who lived alone and by 84.7 per cent. of those who did not live alone. A further 3.7 per cent. of those who lived alone and 1.4 per cent. of those who did not live alone had a radio which did not function.

It is seen, therefore, that those who lived alone were less fortunate in this respect. The elderly who live alone are, as a rule, financially incapable of installing a radio and when one exists it is probably a relic of pre-retirement days. A radio is sometimes the possession of a younger member of the family which may be taken away when he leaves the household. The increased proportion of radios in the households of those who did not live alone is probably a reflection of their more fortunate financial background and the presence of a younger generation. Several of the radios belonging to the elderly who lived alone were gifts of their family.

Those who had a radio which was broken were almost unanimous in saying that it was the cost of the repair which prevented them from having it restored. Again, more of the elderly who lived alone had a broken radio than did those who did not live alone.

More women had a radio than men. Thus, of those who lived alone, 62.2 per cent. of the women had a radio compared with 50.8 per cent. of the men. A similar situation was also found in those not living alone although the difference was not so marked (Table 115 and Figure 22).

It may be that women, being more at home than men, make greater efforts to obtain a radio or once having one make greater efforts to keep it. On the other hand, the higher incidence of deafness in males and the greater interest in extra-domiciliary pursuits may make a radio of less interest.

No trend with age could be shown with regard to the possession of a radio although, as is shown in Table 116, a sharp decline in the proportions

Table 116.

The Elderly Who Possessed a Radio (including Broken Radios), by Age and Sex.

Radio Possessed	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	7 (46.7%)	7 (41.2%)	14 (63.6%)	4 (66.7%)	1 (100%)
Female	20 (71.4%)	38 (65.5%)	55 (73.3%)	47 (64.4%)	22 (57.9%)	7 (50%)
Not Living Alone:						
Male	-	53 (89.8%)	81 (89%)	42 (75%)	23 (63.9%)	13 (100%)
Female	79 (89.8%)	78 (88.6%)	106 (89.1%)	77 (86.5%)	39 (81.3%)	15 (88.2%)

possessing a radio took place in women living alone over the age of 80.

Generally speaking, when a radio was possessed it was greatly appreciated, particularly by women living alone. Many such women commented on the brightness that a radio brought to their homes and how it prevented boredom and monotony. A few of their comments were noted: "It is a good friend;" "It is like having someone in the house;" "I have it on all the time;" "Many a quarrel I have with it;" "I like to join in the singing;" "It is my church on Sundays."

Many of the elderly made appreciative comments on the religious broadcasts.

The only adverse comments noted were made, as a rule, by elderly persons who had young members of the family in the home. They sometimes complained that the radio was played too loud or too long or at times when they wished to sleep. A few complained of the noise of the radios of their neighbours.

Many of the elderly who lived alone who did not own a radio stated that they would like to have one. Others appeared to have no wish for one. Some of the latter were deaf, others disliked noise, and some said that they heard enough of it when they visited their family.

The radio is a great boon to those who live alone. It helps relieve boredom, monotony and loneliness. It is not surprising that so many afforded the cost of licensing their set. The cost of a licence, however, is a serious outlay from their limited finances. It was clear in some cases that it was ill-afforded.

There is a need to give the elderly who live alone some concession in licence fees. A scheme to issue radio sets similar to the "Wireless for the Blind" scheme would also be of advantage to needy cases.

Two (5.8%) of the elderly who lived alone had television sets, bought

in each case by the family.

Hobbies.

Very few of the elderly persons interviewed had a constructive hobby with which to occupy their leisure.

The commonest leisure activity in the case of women was carrying out the various domestic tasks involved in managing a home. With both men and women alike, a great deal of time was occupied in "pottering" about the house, that is, with the unplanned filling in of time with various minor activities. This was much more common than any real interests or hobbies.

Nevertheless, certain elderly persons were encountered who had constructive hobbies. One man, living in an attic, kept pigeons which with the help of his son he occasionally raced. One male made intricate Chinese boxes and puzzles from wood. Another made models of furniture and kitchen utensils. One elderly man, a retired entertainer, gave concerts at old folks' parties and meetings. One lady, a retired school teacher, was a skilled wood carver.

Knitting was not encountered as frequently as might have been expected. Those who did knit usually stated that they had to have the wool provided for them. One lady who lived alone made a hobby of knitting very intricate Shetland patterns which she sold to her friends and neighbours.

One man was encountered who made a hobby, if it can be called a hobby, of keeping his house clean. He worked several hours each day at this, with a result that his house was the best kept in the enquiry. A photograph of this house is shown.

There was, on the whole, little evidence of real hobbies during the course of the enquiry. Aimless and unplanned activities were by far the more common.

General Summary and Conclusions to Chapters 24 and 25.

This enquiry revealed the large amount of family visitation given to the elderly who lived alone. Almost half of those who had a family received a daily visit from them. A further third were visited at least once a week. Apart from serious illness and advanced age, these visits were not made for any specific reason but were the outcome of the natural impulses of affection and family feeling.

The importance of the family visit cannot be over-stressed. It is probably the most fruitful social relationship that the elderly who live alone can have. It fosters a sense of security and a sense of being wanted. It is a mental stimulus and helps to prevent the formation of bad social habits.

It was clear that many of the elderly who lived alone were, in fact, an active part of a family unit, albeit a unit which was scattered over several houses. Such elderly persons were only alone in the sense that they occupied a separate dwelling. They were not alone from the point of view of family contact or help in times of stress.

Many of these people depended for day-to-day social contact on the presence of their neighbours. Neighbourly visits are of great help in defeating loneliness and boredom. The interchange of such visits prompts a feeling of belonging to a community. Those who lived in old tenement properties, where neighbourliness is highly developed partly because of overcrowding, were probably more fortunate in this respect than their better housed fellows. While not always extending to help in illness, such social relationships nevertheless help to make life under poor conditions more bearable.

For those who had no family, or who had limited or negligible contact with their family, an official visitor would have been of value. Relatively few of the elderly who lived alone were visited by a voluntary or official

visitor. There is a need to extend and develop this type of service. Visitors are particularly needed for those with limited social contacts and for those who, because of disability and restricted mobility, have their social intercourse restricted to a minimum. It is suggested that the health visitor is ideal for this task.

Many elderly persons living alone had a well-developed social life but many more could have made better use of the available organised activities. Participation in church functions and the local old age club was not as full as might have been expected. Women, as is shown in Figure 22, tended to make better use of the organised activities available to them than did men. The latter seemed to prefer the enjoyment of aimless walks and casual meetings with their friends to the organised activities of the church and old age club.

With the exception of listening to the radio, a recreation influenced by financial factors, the elderly who lived alone took a greater part in the leisure activities examined than did those who did not live alone. This is shown in Figure 21. In the absence of company at home, entertainment and recreation must be sought elsewhere.

It seemed that many of the elderly in retirement made little constructive use of their leisure. Hobbies and active interests were not common in the groups interviewed. With women, much of the time was occupied by carrying out the various domestic tasks necessary to keep a home clean, tidy and functioning. Men, uninterested in domestic routine, occupied themselves with minor activities inside and outside the home.

There is a need for education to teach elderly folk how to retire without losing interest in life. Some may take up hobbies or revive earlier interests in the few years before they stop working. The aim is to teach those who lack the knowledge or shirk the effort required how to remain active, occupied and interested enough to counter the boredom apt to attack

in declining years. How to bring information on this subject to the people needing it is a problem. The churches could help and so could the health authorities, for after all, it is a matter of "healthy" retirement against a morbid declension as the few remaining years slip away.

CHAPTER 26.

MISCELLANEOUS ENQUIRIES.

Attitude to a Home.

One pertinent question put to these old folk was, would they be prepared to enter a home for the elderly if it became difficult for them to continue living by themselves?

Only eleven (3.2%) stated that they would be prepared to do this; five (8.2%) men and six (2.1%) women. Most of them answered that they would manage "somehow." Some said that they would go to hospital and then return home; others that they would go to their families. Some stated emphatically that they would be found dead before giving up their homes.

This attitude is a feature of the spirit of independence which characterises the elderly who live alone, but it contains an element of fear of change. There was no doubt, however, that many elderly people regard removal to an old people's home with fear and apprehension. To most the idea represented an end of their freedom and particular way of life, and pressure by relatives was quite capable of producing serious depression.

There is still a great distrust of the old people's home in the minds of the elderly. These feelings are easy to understand but difficult to overcome when persuading those in need to enter such a hostel. It may be that as time goes by and the character of the modern elderly persons' home becomes more widely known, these feelings will alter. But it is doubtful. Uprooting can be very painful.

Financial Help from the Family.

This section is not considered to be an accurate representation of the situation. Many were reluctant to discuss the financial help they received from the family for fear of the information reaching the ears of the National Assistance Board.

Seven (2.9%) of the females who had a family said that they received regular financial help. Ten (22.2%) of the men and 77 (32.4%) of the women

stated that they received irregular financial help from their families.

This is almost certainly an under-statement of the position. It seemed that many of the elderly who live alone who have a family received some financial help from them. The extent of this help is difficult to ascertain.

Source of Income.

Those who lived alone were asked the sources of their income. The result of this enquiry is shown in Table 117.

Table 117.

The Sources of Income of the Elderly Who Lived Alone.

Source	Male	Female	Total
Retirement Pension Only	7 (11.5%)	18 (6.3%)	25 (7.2%)
Retirement Pension and N.A.B. Grant	44 (72.1%)	233 (81.5%)	277 (79.8%)
Retirement Pension and Other Source	5 (8.2%)	19 (6.6%)	24 (6.9%)
N.A.B. Grant Only	1 (1.6%)	11 (3.8%)	12 (3.5%)
No Government Income	-	5 (1.7%)	5 (1.4%)
Wages	4 (6.6%)	-	4 (1.2%)
Total	61 (100%)	286 (99.9%)	347 (100%)

Almost all were in receipt of an income from the Government. Thus, 79.8 per cent. had a retirement pension and a grant from the National Assistance Board, 7.2 per cent. had a retirement pension only, 3.5 per cent. had a National Assistant Board grant only and 6.9 per cent. had a retirement pension and an income from other sources. Four (6.6%) of the men were in full-time employment and five (1.7%) of the women had no Government income.

There was little difference in the sources of income among the two sexes.

National Assistance Board grants were received by 82.3 per cent.

of the elderly who lived alone. This is a large proportion and may be a feature of the relatively poor area in which the enquiry took place. Most of those interviewed were of the artisan and unskilled working classes. Because of their industrial and social background they would be aware of the National Assistance Board and its benefits.

It may also be a result of a bias in the sampling technique. Many of those who were interviewed were discovered via the lists supplied by the National Assistance Board. This bias, however, is more apparent than real. It was evident from conversations with the elderly both within and without the enquiry and with those who have to deal with the social problems of the elderly that it was fairly common knowledge that those who live alone are eligible for a supplementary grant from the National Assistance Board.

Five women received no income from the Government. All were living on their savings or other source of income. Three stated that they were ineligible for a retirement pension and were unwilling to approach the National Assistance Board for fear of being considered charity cases. The remaining two were of independent means and had not sought to uplift their pension. The poor generally hate "charity" though they themselves may be charitable.

Employment.

It was not found possible to investigate the attitudes of the elderly to employment and retirement. Nevertheless the following data are given for the sake of completeness.

Four (1.2%) of those who lived alone were in full-time employment. All four were men (6.6%). The four in question were two general labourers, a night watchman and a gate-keeper. Their ages were 65, 69, 74 and 76 years respectively. It may be that due to the technique of sampling a few elderly persons in full-time employment were not discovered.

Four (1.2%) of those who lived alone were in part-time employment. These consisted of three (4.9%) of the men and one (0.2%) of the women. They were a "knocker-up," a tailor, a shop assistant and a woman cleaner.

Sixty-two (8.8%) of those who did not live alone were in full-time employment - fifty-nine (23.1%) of the men and three (0.7%) of the women. The occupations of this group are shown in Table 118.

Table 118.

The Occupations of the Elderly in Full-Time Employment.

Occupation	Number of Subjects
Living Alone:	
General Labourer	2
Night Watchman	1
Gate-Keeper	1
Total	4
Not Living Alone:	
General Labourer	25
Watchman	8
Gateman/Handyman/Groundsman	4
Engineer	3
Hammerman	2
Pattern-Maker	2
Night Porter	1
Bricklayer	1
Sheet Metal Worker	1
Brass Finisher	1
Painter	1
Wireworker	1
Independent Trader	1
Crane Driver	1
Checker at Docks	1
Storeman	1
Caulker	1
Carpenter	1
Shipwright	1
Riveter	1
Clerk	1
Bag Classifier (Female)	1
Shop Assistant (Female)	1
Kitchen Superintendent (Female)	1
Total	62

It is seen from this table that the commonest occupations of the males were general labouring followed by that of watchman. Only 20 (33.9%) of the group could be said to be in skilled or semi-skilled work. The remainder were in unskilled work. This situation supports Richardson's (1953) contention that there is a considerable drift from skilled to unskilled work in the elderly employee.

When those who were in full-time work were examined by age it was found that the proportions in each age group declined steadily with age. This is shown in Table 119.

Five (2%) of the men and four (0.9%) of the women who did not live alone were in part-time employment. Two of the men were general labourers, one was a shop assistant, one was a clerk and one was a showground attendant. Three of the women were cleaners and one assisted in a showground.

The attitudes and capacity of the elderly in relation to employment are being investigated in other quarters, particularly by the Nuffield Research Unit at Cambridge under the direction of Sir Frederick Bartlett. It is a subject worthy of study.

Table 119.

The Elderly Who Were in Full-Time Employment, by Age and Sex.

In Full-Time Employment	Age in Years					
	60-64	65-69	70-74	75-79	80-84	85+
Living Alone:						
Male	-	2 (13.3%)	1 (5.9%)	1 (4.5%)	-	-
Female	-	-	-	-	-	-
Not Living Alone:						
Male	-	28 (47.8%)	24 (26.4%)	6 (10.7%)	1 (2.8%)	-
Female	1 (1.1%)	-	1 (0.8%)	1 (1.1%)	-	-

CHAPTER 27.

WEIGHTS, HAEMOGLOBIN LEVELS AND BLOOD PRESSURES - I.

INTRODUCTION.
WEIGHTS.

Introduction.

At the conclusion of the medico-social survey an investigation was made of the weights, haemoglobin levels and blood pressures of a small group of those who had been previously interviewed. These examinations were carried out in the elderly persons' own homes.

The investigation was embarked upon with caution as it was not known how the elderly would react to the suggestion of permitting these examinations. However, they co-operated well. Little difficulty was experienced in persuading those selected to undergo the examinations.

Seventeen (9.2%) of the 184 subjects selected refused their co-operation. As far as could be judged from their appearance and the medical history obtained at the previous interview, the refusal was not because of illness. Three more (1.6%) were rejected owing to circumstances having changed since the time of the initial interview. A small number, while agreeing to the other examinations, refused to allow blood to be withdrawn.

An attempt was made to make the sample a random one. This was only partly successful as it was decided not to examine those who were ill, those who were senile, those who were excessively frail and those who had a history of pernicious anaemia.

The method adopted was to select names at random from the case sheets of those living alone who had previously been interviewed. Subjects who came into any of the above categories were excluded. Similarly, names were taken from the list of those who did not live alone, but if one was a member of a married couple both members were asked to co-operate. It was originally decided to make a ten per cent. sample, but as the standard of co-operation proved to be high this was extended. Rather more than this proportion was examined.

Those selected were approached a few days prior to the examination.

After some general conversation had been made, the subject of the examinations was broached. An explanation was made of the purpose of the examinations and exactly what was involved. In most cases an assurance had to be given that the tests were painless. It was emphasised that they would be carried out in the subject's own home. As stated previously, co-operation was on the whole freely given. Several elderly persons rearranged their movements in order to be at home at a convenient time.

The examinations consisted of the measurement of the height, weight and blood pressure of the elderly person selected. A sample of venous blood was also withdrawn for examination at a later period. The examinations were made in every case by the writer, assisted by the same health visitors who assisted him in the medico-social survey.

Almost all of those examined were keenly interested in the examinations. Most asked if any abnormalities had been found. It became routine practice to reassure those examined that all was well. A comment of a general nature was usually made that the tests were satisfactory. Any gross abnormalities of the blood were notified to the subject's medical practitioner.

The information gained was recorded on cards and the various analyses done by hand.

Altogether 164 elderly persons were examined out of 184 selected. Sixty-four (39%) of the 164 consisted of elderly persons living alone and 100 (61%) were of those who did not live alone.

Sixteen (25%) of those who lived alone were men and 48 (75%) were women. Of those who did not live alone, 43 (43%) were men and 57 (57%) were women. The groups examined, therefore, contained a slightly greater proportion of men than the groups interviewed.

The age distribution of the groups examined is in Table 120 which shows that the age distributions of the men in the two groups are comparable.

The age distribution of the women who lived alone varied slightly from that of the females who did not live alone. There was a greater proportion in the age groups over the age of 75 and a smaller proportion in the quinquennium 65-69 years. It is not thought, however, that these differences in proportion bias the subsequent findings.

Table 120.

The Age Distribution of the Elderly Who Were Examined, Living Alone and Not Living Alone.

Age	Male	Female	Total
Living Alone:			
60-64	-	6 (12.5%)	6 (9.4%)
65-69	2 (12.5%)	8 (16.7%)	10 (15.6%)
70-74	6 (37.5%)	13 (27.1%)	19 (29.7%)
75-79	6 (37.5%)	15 (31.3%)	21 (32.8%)
80-84	2 (12.5%)	6 (12.5%)	8 (12.5%)
Total	16 (100%)	48 (100.1%)	64 (100%)
Not Living Alone:			
60-64	-	9 (15.8%)	9 (9%)
65-69	7 (16.3%)	20 (35.1%)	27 (27%)
70-74	15 (34.9%)	17 (29.8%)	32 (32%)
75-79	14 (32.6%)	11 (19.3%)	25 (25%)
80-84	5 (11.6%)	-	5 (5%)
85+	2 (4.7%)	-	2 (2%)
Total	43 (100.1%)	57 (100%)	100 (100%)

Weight.

The height and weight of each of the 164 members of the sample were measured. Each subject was weighed on a portable spring balance wearing his or her indoor clothes but without shoes. The height was measured by standing each subject, without shoes, against a flat vertical surface. A ruler was projected from the crown of the head to the surface and the distance from this point to the floor was measured.

Hobson and Pemberton recorded the weights but not the heights of

the elderly in their sample. They found that older women tended to be lighter than younger women but that this was not so with the men. Weight, they found, also varied with social class.

Anderson and Cowan (1955) weighed a group of elderly persons attending the Rutherglen consultative health centre and made comments on the incidence of those who were overweight.

The adverse effects of obesity are mentioned in most medical text-books. Comments on the ill-effects of obesity in the elderly have been made, amongst others, by Sheldon (p. 30, 36, 65), Hobson and Pemberton (1955), Exton-Smith (1955) and Langley (1950).

The distribution of the heights of the 164 members of the sample is shown in Table 121. The distribution of the weights is shown in Table 122.

Taking the arbitrary values of 100 lbs. and 160 lbs. as representing the limits of normal weight within an average height range, the proportions of those overweight and underweight were estimated.

It is seen from Table 122 that of the men, three (18.7%) of those who lived alone were overweight, as were nine (20.9%) of those who did not live alone. Of the women, eleven (22.9%) of those who lived alone and ten (17.5%) of those who did not live alone were overweight.

This table also shows that, of the men, one (6.3%) was underweight, as was one (2.3%) of those who did not live alone. Of the women, nine (18.8%) of those who lived alone were underweight and so were three (5.3%) of those who did not live alone.

A greater proportion of those, then, who lived alone were underweight than those who did not live alone.

Women living alone showed the greatest weight range. There was a greater proportion of those overweight and underweight than of men living alone or than men or women not living alone.

Table 121.

The Distribution of the Heights of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

	Height in Inches							
	-52	53-55	56-58	59-61	62-64	65-67	68-70	71-73
Living Alone:								
Male	-	-	-	2 (12.5%)	5 (31.3%)	3 (18.8%)	5 (31.3%)	1 (6.3%)
Female	-	2 (4.2%)	9 (18.8%)	25 (52.1%)	11 (22.9%)	1 (2.1%)	-	-
Not Living Alone:								
Male	-	1 (2.3%)	1 (2.3%)	8 (18.6%)	14 (32.6%)	13 (30.2%)	5 (11.6%)	1 (2.3%)
Female	2 (3.5%)	1 (1.8%)	16 (28.1%)	21 (36.8%)	16 (28.1%)	1 (1.8%)	-	-

Table 122.

The Distribution of the Weights of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone, by Age and Sex.

	Weight in lbs.								
	-79	80-99	100-119	120-139	140-159	160-179	180-199	200-219	220+
Living Alone:									
Male	-	1 (6.3%)	4 (25%)	4 (25%)	4 (25%)	3 (18.7%)	-	-	-
Female	2 (4.2%)	7 (14.6%)	12 (25%)	9 (18.8%)	7 (14.6%)	9 (18.8%)	1 (2.1%)	1 (2.1%)	-
Not Living Alone:									
Male	-	1 (2.3%)	18 (41.9%)	11 (25.6%)	4 (9.3%)	7 (16.3%)	1 (2.3%)	1 (2.3%)	-
Female	1 (1.8%)	2 (3.5%)	17 (29.8%)	15 (26.3%)	12 (21.1%)	4 (7%)	2 (3.5%)	2 (3.5%)	2 (3.5%)

Such an assessment, however, has a limited value as the height of the subject was not considered. While the shortcomings of the estimation of ideal weights from standard tables is fully realised (Sinclair, 1953), it was thought that such an estimation would provide a more accurate assessment of the position. Using a table of ideal weights for various heights of adults, an estimation was made of the ideal weight of each subject examined. The table given by Greene (1951) was used. It is reproduced here as Table 123.

Table 123.

The Ideal Weights of Adult Males and Females at Various Heights.
(From R. Greene. The Practice of Endocrinology, 1951.)

Male		Female	
Height	Ideal Weight (lbs.)	Height	Ideal Weight (lbs.)
5 ft.	126	4 ft. 8 ins.	112
5 ft. 1 in.	128	4 ft. 9 ins.	114
5 ft. 2 ins.	130	4 ft. 10 ins.	116
5 ft. 3 ins.	133	4 ft. 11 ins.	118
5 ft. 4 ins.	136	5 ft.	120
5 ft. 5 ins.	140	5 ft. 1 in.	122
5 ft. 6 ins.	144	5 ft. 2 ins.	124
5 ft. 7 ins.	148	5 ft. 3 ins.	127
5 ft. 8 ins.	152	5 ft. 4 ins.	131
5 ft. 9 ins.	156	5 ft. 5 ins.	134
5 ft. 10 ins.	161	5 ft. 6 ins.	138
5 ft. 11 ins.	166	5 ft. 7 ins.	142
6 ft.	172	5 ft. 8 ins.	146
6 ft. 1 in.	178	5 ft. 9 ins.	150
6 ft. 2 ins.	184	5 ft. 10 ins.	154
6 ft. 3 ins.	190	5 ft. 11 ins.	157
6 ft. 4 ins.	196	6 ft.	161
6 ft. 5 ins.	201		

The ideal weight of each subject, as calculated from Table 123, was compared with the actual weight and the difference noted. The average difference of the actual weight from the ideal weight was calculated for the groups examined.

The average difference from the expected weight in men was, for

those who lived alone, -8 lbs. (S.D. 17.5), and for those who did not live alone, -6.4 lbs. (S.D. 23.3). Of the women, the average difference from the ideal weight was, of those who lived alone, +8.2 lbs. (S.D. 28.1), and for those who did not live alone, +16.3 lbs. (S.D. 29.7).

Whether living alone or not, males tended to be under the ideal weight and females tended to be over the ideal weight. When those who lived alone were compared with those who did not live alone, the former were, on the average, less heavy than the latter.

These groups are rather small for accurate statistical comparison. If the standard difference of averages is applied, however (Hill, 1949), no statistically significant difference is found between the average difference from the ideal weight of those who lived alone and the average difference from the ideal weight of those who did not live alone.

The difference of the actual weight from the ideal weight was also calculated as a percentage of the ideal weight. The distribution of the percentage difference from the ideal weight is shown in Table 124 and Figure 23. Taking the arbitrary values of plus or minus 20 per cent. from the ideal weight as the range of normality, the proportions of those overweight and underweight were calculated.

It is seen from Table 124 that of the men 6.3 per cent. of those who lived alone were at least 20 per cent. overweight, as were 6.9 per cent. of those who did not live alone. None of the men who lived alone was more than 30 per cent. overweight but 4.6 per cent. of the men who did not live alone were in this category. One (2.3%) of the men who did not live alone was over 40 per cent. overweight.

Of the women, 29.2 per cent. of those who lived alone were at least 20 per cent. overweight as were 29.8 per cent. of those not living alone. Of the same groups, 20.9 per cent. of those who lived alone were at least

FIGURE 23

The Distribution Of The Variation from The Expected Weight.

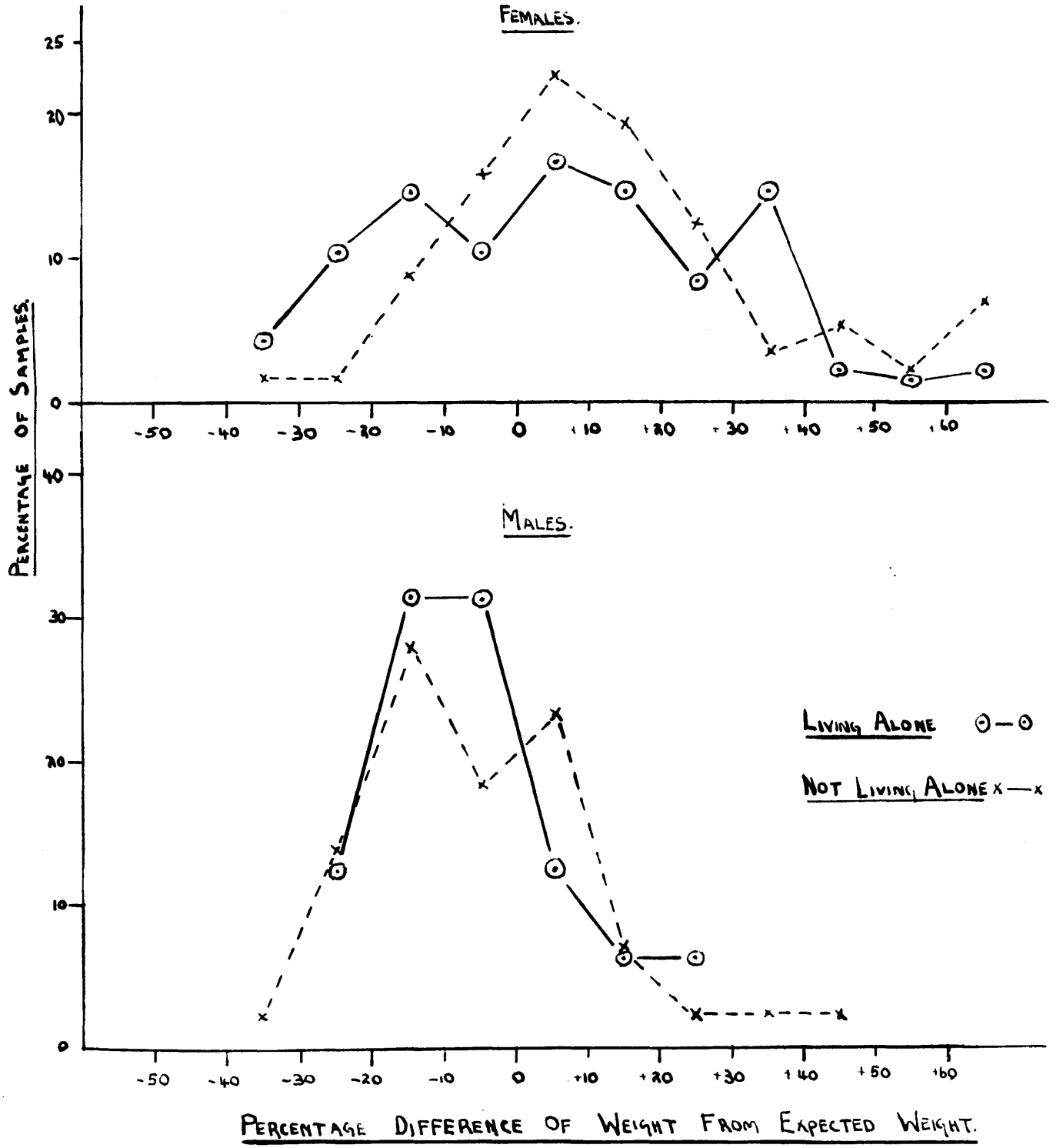


Table 124.

The Distribution of the Elderly Who Were Overweight as a Percentage of the Ideal Weight, by Age and Sex.

	Percentage Overweight						
	0-9	10-19	20-29	30-39	40-49	50-59	60+
Living Alone:							
Male	2 (12.5%)	1 (6.3%)	1 (6.3%)	-	-	-	-
Female	8 (16.7%)	7 (14.6%)	4 (8.3%)	7 (14.6%)	1 (2.1%)	1 (2.1%)	1 (2.1%)
Not Living Alone:							
Male	10 (23.3%)	3 (7%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	-	-
Female	13 (22.8%)	11 (19.3%)	7 (12.3%)	2 (3.5%)	3 (5.2%)	1 (1.8%)	4 (7%)

30 per cent. overweight as were 17.5 per cent. of those who did not live alone; 6.3 per cent. of those who lived alone were at least 40 per cent. overweight as were 14 per cent. of those who did not live alone; and 4.2 per cent. of those who lived alone and 8.8 per cent. of those who did not live alone were at least 50 per cent. overweight. Seven per cent. of those who did not live alone and 2.1 per cent. of those who lived alone were at least 60 per cent. overweight.

While there was little difference in the over-all incidence of those overweight in the two groups, more of those who did not live alone were in the more advanced degrees of being overweight.

As might be expected, a greater proportion of women were overweight than men.

The distribution of those underweight is shown in Table 125. It is seen from this table that of the men, 12.5 per cent. of those who lived alone and 16.3 per cent. of those who did not live alone were at least 20 per cent. underweight. None of the men who lived alone was more than 30 per cent. underweight, but one (2.3%) of those who did not live alone was in this category.

Of the women, 14.2 per cent. of those who lived alone and 3.6 per cent. of those who did not live alone were at least 20 per cent. underweight; 4.2 per cent. of those who lived alone and 1.8 per cent. of those who did not live alone were at least 30 per cent. underweight.

There was, then, little difference in the incidence of those underweight in the two groups of men. Of the women, a greater proportion of those who were underweight existed amongst those who lived alone.

There was little difference in the incidence of those underweight in men and women living alone. Of those who did not live alone, there was a greater proportion of those underweight amongst the men.

Table 125.

The Distribution of the Elderly Who Were Underweight as a Percentage of the Ideal Weight, by Age and Sex.

	Percentage Underweight			
	0-9	10-19	20-29	30-39
Living Alone:				
Male	5 (31.3%)	5 (31.3%)	2 (12.5%)	-
Female	5 (10.4%)	7 (14.6%)	5 (10.4%)	2 (4.2%)
Not Living Alone:				
Male	8 (18.6%)	12 (27.9%)	6 (14%)	1 (2.3%)
Female	9 (15.8%)	5 (8.8%)	1 (1.8%)	1 (1.8%)

Commentary.

Whether they lived alone or not, it was obvious that a fair proportion of those examined were in need of dietary regulation. Some were overweight and would have benefited from a reduction. This is a common condition in the elderly for which advice is frequently given.

It is not so readily recognised that a fair proportion of the elderly are underweight. Even when recognised, remedies in these times of financial stress are hard to find. There is no doubt that many of the elderly would benefit from dietary supplements at reduced prices. A simple but effective remedy would be the provision of whole or dried milk at a reduced price.

Summary.

The heights and weights of the elderly persons in the sample were examined and the proportions of those overweight and underweight ascertained.

The average weight of the women tended to be over the ideal weight and the average weight of the men under the ideal weight. Those who lived alone tended to be less heavy than those who did not live alone.

There was little difference in the proportions of those who were overweight in the two groups, the elderly who lived alone and the elderly who did not live alone. More women were overweight than men.

There was little difference in the proportions of those underweight in men and women living alone. There was a greater proportion of those underweight in women living alone than in women not living alone. There was little difference in the proportions in the two groups of men.

CHAPTER 28.

WEIGHTS, HAEMOGLOBIN LEVELS AND BLOOD PRESSURES - II.

HAEMOGLOBIN LEVELS.

The haemoglobin levels, erythrocyte counts and blood groups were determined of 157 elderly persons living in their own homes. Seven (4.3%) of the 164 persons in the selected group refused to allow the withdrawal of blood. One man was excluded as his blood picture was that of polycythaemia vera. He was referred to his medical practitioner.

The group examined, therefore, consisted of 156 elderly persons. Sixty-two (39.7%) of the group lived alone. There were 100 women in the group, of whom 47 lived alone. There were 56 men, of whom 15 lived alone.

The method adopted was to withdraw two millilitres of venous blood, using a sterilised syringe which was carried to the home in an autoclaved pack. The blood was transferred to a small bottle containing a measured quantity of Wintrobe's solution (potassium and ammonium oxalate) which had been evaporated to dryness (Dacie, 1950). The blood was examined within three hours of withdrawal.

The haemoglobin level was estimated by Haldane's method (Whitby and Britton, 1950) in a haemoglobinometer which was standardised before and after the investigation (100 per cent. = 14.8 gms. Hb. per 100 ml. of blood).

The erythrocytes were counted by a standard method using an improved Neubauer counting chamber. The blood group was determined with standard anti-sera using the approved tile technique (Dacie, 1950).

There have been several studies of the blood in old age but almost all have been of hospitalised or institutional groups. Few have been concerned with the elderly living in their own homes.

Miller (1939) examined the bloods of 160 men over the age of 60 who lived in a home for the elderly. He found an average haemoglobin level of 14.3 gms. per 100 ml. of blood. He concluded that the haemoglobin level and erythrocyte count were diminished in old age.

McIntosh and Morris (1941) examined the bloods of a group of

Glasgow citizens who were receiving public assistance or who were attending an outdoor medical clinic. They found the mean haemoglobin level in men over the age of 65 to be 13.63 gms. per 100 ml. of blood. In women of the same age group the level was 13.58 gms. per 100 ml. of blood. They concluded that anaemia was infrequent in the adult over the age of 50.

The Committee on Haemoglobin Surveys (1945) found that the mean haemoglobin level tended to fall in later life. They found that the mean haemoglobin level in women fell between the ages of 30 and 49 years but rose again after that. They found the mean haemoglobin level for elderly men to be 13.6 gms., and for elderly women 13.3 gms. per 100 ml. of blood.

Olbrich (1947) examined the bloods of a group of 89 elderly persons living in a home for the elderly. He found the mean haemoglobin level in men to be 13.9 gms. per 100 ml. of blood, and in women to be 13.2 gms. per 100 ml. of blood.

Howell (1950), in a hospital for the chronic sick, found the mean haemoglobin level for elderly men to be 18.3 gms. per 100 ml. of blood and for elderly women 16.6 gms. per 100 ml. of blood. He concluded that he was unable to agree that "old people are anaemic."

Shapleigh et al (1952), in a study of elderly ambulant hospital patients, found that the mean haemoglobin level for men was 14.1 gms. per 100 ml. of blood and for women 13.7 gms. per 100 ml. of blood.

Only one previous study has been carried out on the bloods of the elderly who lived in their own homes. This was done by Hobson and Blackburn (1953) in Sheffield. They found that the mean haemoglobin level for men was 14.4 gms. per 100 ml. of blood and for women 13.8 gms. per 100 ml. of blood. In a very complete investigation they discussed the incidence of anaemia and the relationship of the haemoglobin level to age, social class, emphysema and the state of living alone.

Haemoglobin Level.

The distribution of the haemoglobin levels of the elderly persons examined in this enquiry is shown in Table 126 and Figure 24.

Whether they lived alone or not, the mean haemoglobin level in men was found to be higher than that of women. It was also found that the mean haemoglobin levels in men and women living alone were lower than those of their counterparts not living alone.

Thus, the mean haemoglobin level of men living alone was found to be 13.54 gms. per 100 ml. of blood (S.D. 1.45), and of women living alone 12.42 gms. per 100 ml. of blood (S.D. 1.6). Of those who did not live alone, the mean haemoglobin level of the men was 13.87 gms. per 100 ml. of blood (S.D. 0.69) and of women 13.04 gms. per 100 ml. of blood (S.D. 1.07).

While the samples are rather small for statistical comparison, nevertheless the standard error of difference of means was calculated for the various groups (Hill, 1949).

Whether they lived alone or not, the mean haemoglobin level in men was significantly higher than that of women (standard error of difference of means, living alone, 0.65; standard error of difference of means, not living alone, 0.34).

The mean haemoglobin level of women living alone was found to be significantly lower than that of women not living alone (standard error of difference of means, 0.47). While the mean haemoglobin level of men living alone was lower than that of men not living alone, the difference was not found to be statistically significant. A larger sample of men living alone might have made the position clearer.

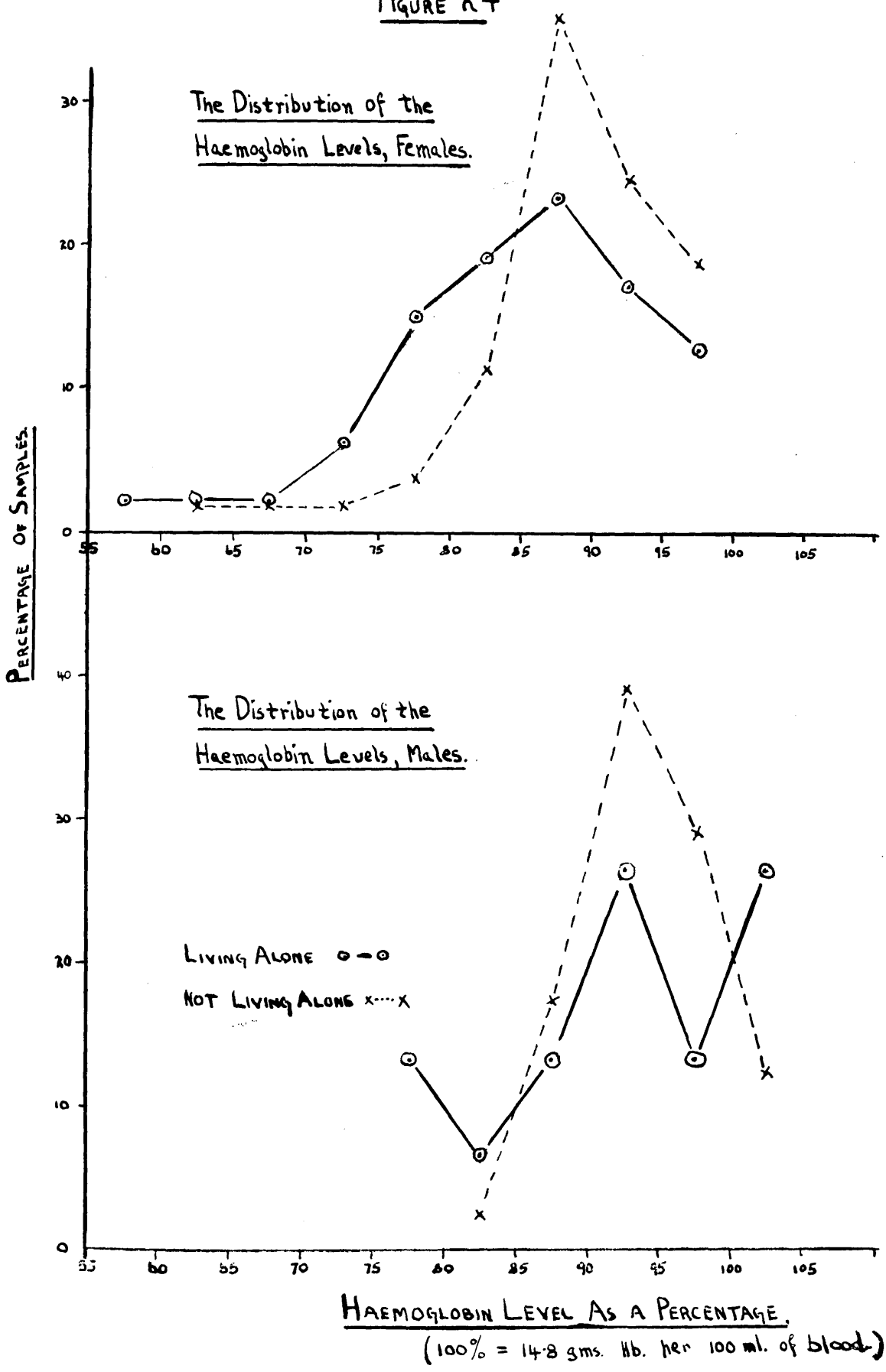
Hobson and Blackburn, in common with many other investigators, also found that women had a significantly lower mean haemoglobin level than men. Their findings, however, in relation to the elderly who lived alone are not

Table 126.

The Distribution of the Haemoglobin Levels of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Gms. Haemoglobin per 100 ml. of Blood									
	8.1-	8.9-	9.6-	10.4-	11.1-	11.8-	12.6-	13.3-	14-	14.8-
Living Alone:										
Male	-	-	-	-	2 (13.3%)	1 (6.7%)	2 (13.3%)	4 (26.7%)	2 (13.3%)	4 (26.7%)
Female	1 (2.1%)	1 (2.1%)	1 (2.1%)	3 (6.4%)	7 (14.9%)	9 (19.1%)	11 (23.4%)	8 (17%)	6 (12.8%)	-
Not Living Alone:										
Male	-	-	-	-	-	1 (2.4%)	7 (17.1%)	16 (39%)	12 (29.3%)	5 (12.2%)
Female	-	1 (1.9%)	1 (1.9%)	1 (1.9%)	2 (3.8%)	6 (11.3%)	19 (35.8%)	13 (24.5%)	10 (18.9%)	-
Total Males	-	-	-	-	2 (3.6%)	2 (3.6%)	9 (16.1%)	20 (35.7%)	14 (25%)	9 (16.1%)
Total Females	1 (1%)	2 (2%)	2 (2%)	4 (4%)	9 (9%)	15 (15%)	30 (30%)	21 (21%)	16 (16%)	-

Figure 24


The Distribution of the Haemoglobin Levels, Females.
The Distribution of the Haemoglobin Levels, Males.
Living Alone
Not Living Alone
Percentage of Samples.
0
10
20
30
40
55
60
65
70
75
80
85
90
95
100
105
Haemoglobin Level As a Percentage.
(100% = 14·8 gms. Hb. per 100 ml. of blood.)

in agreement with the present findings. These investigators found that men living alone had significantly lower haemoglobin levels than men living with their spouses, but that there was no difference in the case of the women.

The mean haemoglobin level for the men as a whole was found to be 13.78 gms. per 100 ml. of blood (range : 11.4-15.1). For women as a whole the mean haemoglobin level was 12.75 gms. per 100 ml. of blood (range : 8.73-14.65). These levels are rather lower than those found by Hobson and Blackburn. The level for men is in close agreement with that found by Olbrich and by McIntosh and Morris. The mean haemoglobin level of women not living alone is in close agreement with that found for the women by Olbrich.

Erythrocyte Count.

The distribution of the erythrocyte count in the elderly persons examined is shown in Table 127 and Figure 25.

Whether they lived alone or not, men had a higher mean erythrocyte count than women. It was also found that the mean erythrocyte count of those who lived alone was lower than that of those who did not live alone.

Thus, the mean erythrocyte count of men living alone was 4.62 million per millilitre of blood (S.D. 0.348) and of women living alone 4.23 million per millilitre of blood (S.D. 0.355). Of those who did not live alone, the mean erythrocyte count was for men 4.7 million per millilitre of blood (S.D. 0.387) and for women 4.36 million per millilitre of blood (S.D. 0.329).

The mean erythrocyte count for the men as a whole was found to be 4.67 million per millilitre of blood (range : 3.95-6.1 million). For women as a whole the mean erythrocyte count was 4.36 million per millilitre of blood (range : 3.3-5.5 million).

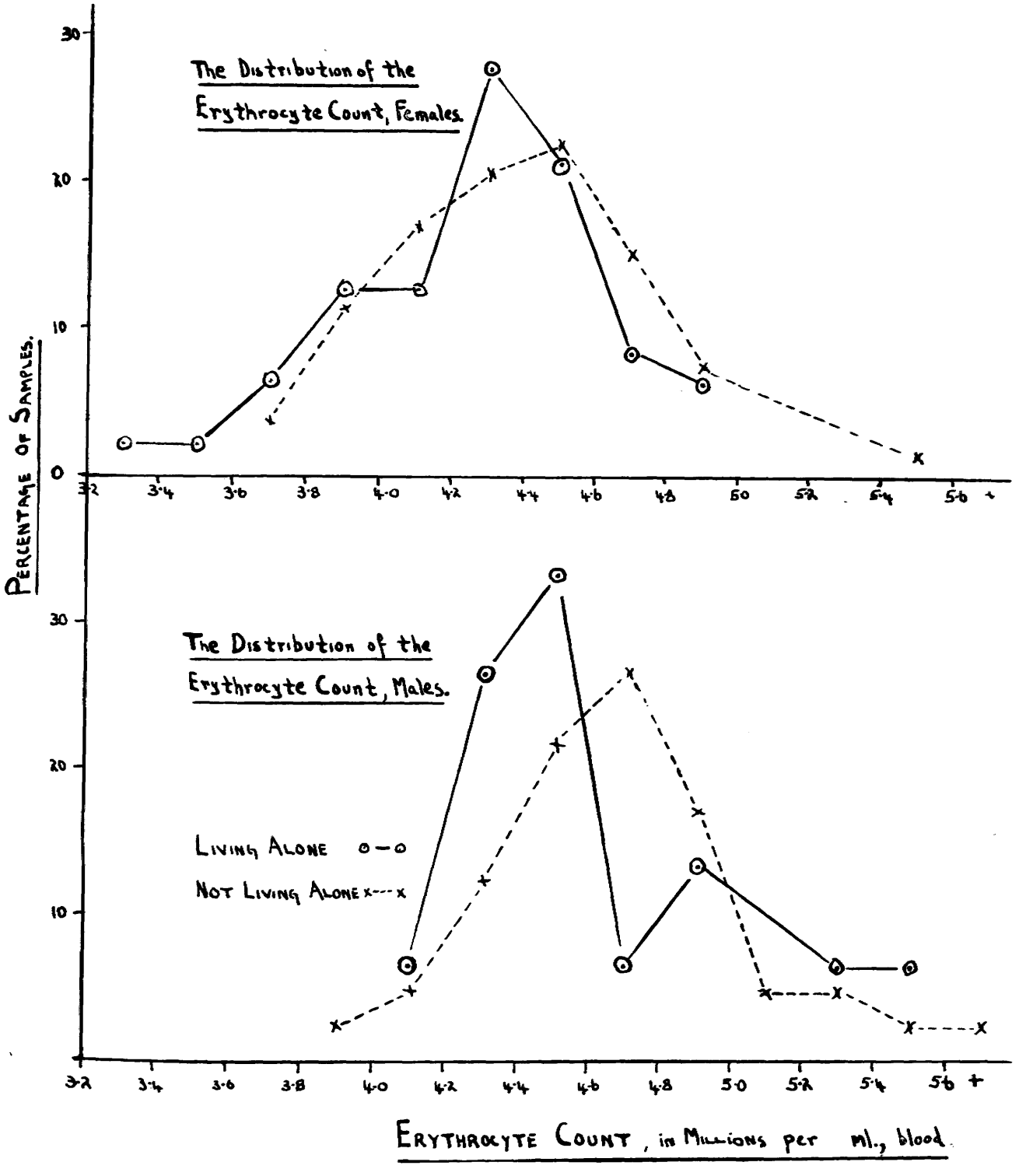
No further analysis was made of these findings as it is known that

Table 127.

The Distribution of the Erythrocyte Counts of the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Million Erythrocytes per Millilitre of Blood											
	3.2-	3.4-	3.6-	3.8-	4.0-	4.2-	4.4-	4.6-	4.8-	5.0-	5.2-	5.4+
Living Alone:												
Male	-	-	-	1 (6.7%)	4 (26.7%)	5 (33.3%)	1 (6.7%)	2 (13.3%)	-	1 (6.7%)	1 (6.7%)	-
Female	1 (2.1%)	1 (2.1%)	3 (6.4%)	6 (12.8%)	13 (27.7%)	10 (21.3%)	4 (8.5%)	3 (6.4%)	-	-	-	-
Not Living Alone:												
Male	-	-	-	1 (2.4%)	2 (4.9%)	5 (12.2%)	9 (21.9%)	11 (26.8%)	7 (17.1%)	2 (4.9%)	2 (4.9%)	2 (4.9%)
Female	-	-	2 (3.8%)	6 (11.3%)	9 (17%)	11 (20.8%)	12 (22.6%)	8 (15.1%)	4 (7.5%)	-	-	1 (1.9%)

FIGURE 25


The Distribution of the Erythrocyte Count, Females.
The Distribution of the Erythrocyte Count, Males.
LIVING ALONE o—o
NOT LIVING ALONE x---x
PERCENTAGE OF SAMPLES.
30
20
10
0
3·2
3·4
3·6
3·8
4·0
4·2
4·4
4·6
4·8
5·0
5·2
5·4
5·6 +
ERYTHROCYTE COUNT, in MILLIONS per ml., blood.

the erythrocyte count may vary considerably in the same person within a short period of time.

The Incidence of Anaemia.

In attempting to assess the incidence of anaemia an arbitrary level must be taken, below which the subject has to be considered as suffering from anaemia. Whitby and Britton (1950) and Wintrobe (1951) give the lower limits of normality as 14 gms. of haemoglobin per 100 ml. of blood in the male and 12 gms. of haemoglobin per 100 ml. in the female. Israels (1955), however, considers that "normality" should be based on a narrower range. He states that 13 gms. of haemoglobin per 100 ml. of blood should be taken as the lower limit in the female.

Irrespective of sex, Hobson and Blackburn adopted a standard of 11.7 gms. of haemoglobin per 100 ml. of blood or less as an indication of anaemia. This standard was adopted in the present enquiry in the case of the females. In the case of the males a slightly higher level was adopted, namely, 12.6 gms. of haemoglobin per 100 ml. of blood.

Thus, in the present enquiry any woman who had a haemoglobin level of less than 11.8 gms. per 100 ml. of blood (80% Haldane), and any man with a haemoglobin level of less than 12.6 gms. per 100 ml. of blood (85% Haldane), was considered to be suffering from anaemia.

The distribution of the haemoglobin levels of the groups investigated is shown in Table 126. From this table it is seen that of those who lived alone 13 (27.6%) of the women and three (20%) of the men were suffering from anaemia. Of those who did not live alone, five (9.5%) of the women and one (2.4%) of the men suffered from anaemia.

Whether living alone or not, there was a higher incidence of anaemia amongst women than men. It was also found that there was a higher incidence of anaemia amongst men and women living alone than in their counterparts not living alone.

The proportion of women who lived alone who suffered from anaemia was found to be significantly higher than that of the women who did not live alone (standard error of difference, 12.2). While the incidence of anaemia was higher in men living alone than in men not living alone, the difference in proportion was not statistically significant. A larger sample of men living alone would probably have made the position clearer.

For the purposes of comparison, the incidence of anaemia in the men and women as a whole was calculated using the standard adopted by Hobson and Blackburn. Two (3.6%) of the men and 18 (18%) of the women had haemoglobin levels of less than 11.8 gms. per 100 ml. of blood.

While the incidence of anaemia in the men was only slightly below that found by Hobson and Blackburn (5.1%), that of the women was found to be very much higher than the incidence found by these investigators (6.5%). This increased incidence in women is due to the high incidence of anaemia found in women living alone. The incidence of anaemia in women not living alone (9.5%) is comparable with the incidence found by Hobson and Blackburn among women as a whole.

No attempt was made in the present enquiry to ascertain the probable causes of the anaemia. According to Hobson and Blackburn, the chief factors in the causation of anaemia in the elderly who live at home are a poor diet and rheumatoid arthritis. Apathy and a low income were the chief causes of the poor diet.

Of the 22 cases of anaemia in the present enquiry, 21 appeared to be microcytic and one was macrocytic. Absolute values, however, were not obtained.

Haemoglobin Level and Age.

The distribution of the haemoglobin levels in two age groups for males and females is shown in Table 128.

Table 128.

The Distribution of the Haemoglobin Levels of the Elderly in Two Age Groups, by Sex.

	Gms. Haemoglobin per 100 ml. of Blood									
	8.1-	8.9-	9.6-	10.4-	11.1-	11.8-	12.6-	13.3-	14-	14.8-
Male:										
Under 75	-	-	-	-	1 (3.4%)	2 (6.9%)	4 (13.8%)	9 (31%)	7 (24.1%)	6 (20.7%)
Over 75	-	-	-	-	1 (3.7%)	-	5 (18.5%)	11 (40.7%)	7 (25.9%)	3 (11.1%)
Female:										
Under 75	-	2 (2.9%)	1 (1.5%)	2 (2.9%)	6 (8.8%)	11 (16.2%)	21 (30.9%)	15 (22.1%)	10 (14.7%)	-
Over 75	1 (3.1%)	-	1 (3.1%)	2 (6.3%)	3 (9.4%)	4 (12.5%)	9 (28.1%)	6 (18.8%)	6 (18.8%)	-

The numbers in the samples are too small to allow definite conclusions but within the limits of the numbers examined little difference in the distribution of the haemoglobin levels could be demonstrated between those under the age of 75 and those over that age.

Blood Groups.

The distribution of the occurrence of the four blood groups in the 156 subjects examined is shown in Table 129. This investigation was stimulated by a letter from Dr. T.M. Allan to the Lancet (1954). Allan suggested that individuals with group B blood, particularly males, had a shorter life span than those of other blood groups.

While the present sample is very small, the proportion of subjects with group B blood did not differ markedly from and was, in fact, slightly in excess of the proportion in the population of the United Kingdom with group B blood as found by Dobson and Iken (1946). Nor did the incidence fall in the older age group when the sample was divided into those over and those under the age of 75.

An interesting feature of this sample is the increased proportion of those with group O blood and the decreased proportion of those with group A blood in the older age group. The sample, however, is too small to support any conclusion.

Commentary.

The results of this investigation into a relatively small sample of the elderly revealed that the mean haemoglobin level and the mean erythrocyte count were lower in the elderly who lived alone when compared with the elderly who did not live alone. The incidence of anaemia was greater in the former group, particularly in the case of females.

With the exception of women living alone, the incidence of anaemia in the groups investigated was not great. An investigation into the

Table 129.

The Distribution of the Blood Groups of the Elderly Persons Examined.

Blood Group	Number in Each Group	Male	Female	Under 75 Years	Over 75 Years	Distribution found by Dobson and Iken
O	91 (58.3%)	29 (51.8%)	62 (62%)	55 (56.7%)	36 (61%)	46.7%
A	43 (27.6%)	20 (35.7%)	23 (23%)	30 (30.9%)	13 (22%)	41.7%
B	17 (10.9%)	6 (10.7%)	11 (11%)	10 (10.3%)	7 (11.9%)	8.6%
AB	5 (3.2%)	1 (1.8%)	4 (4%)	2 (2.1%)	3 (5.1%)	3%
Total	156 (100%)	56 (100%)	100 (100%)	97 (100%)	59 (100%)	100%

haematology of a larger group of men living alone would, however, be of value.

One agrees with Rudd (1951) and Hobson and Blackburn that a simple haemoglobin estimation would be a useful routine examination in old people. Such an examination could readily be undertaken by the general practitioner with little inconvenience to the elderly person concerned.

Summary.

The haemoglobin level, erythrocyte count and blood group were determined of 156 elderly persons living at home.

The mean haemoglobin level of men was found to be 13.78 gms. per 100 ml. of blood, and for women 12.75 gms. per 100 ml. of blood.

The mean erythrocyte count for men was found to be 4.67 million per cmm. of blood, and for women 4.36 million per cmm. of blood.

The mean haemoglobin level of the women who lived alone was significantly lower than that of women not living alone. While the mean haemoglobin level of men living alone was lower than that of men not living alone, the difference was not statistically significant.

The incidence of anaemia was significantly higher amongst women who lived alone when compared with women who did not live alone. While the incidence of anaemia was higher in men living alone when compared with men not living alone, the difference was not statistically significant.

The proportion of those with group B blood was not smaller than the proportion in the United Kingdom as a whole.

CHAPTER 29.

WEIGHTS, HAEMOGLOBIN LEVELS AND BLOOD PRESSURES - III.

BLOOD PRESSURES.

The blood pressures of 163 elderly persons living in their own homes were determined. One member of the selected group, while permitting the other examinations, refused to allow her blood pressure to be taken.

The blood pressures were taken with a standard sphygmomanometer. The subject was seated on a chair, after having been allowed to sit quietly for five minutes. The examination was carried out after the height and weight had been determined but before the sample of blood had been withdrawn.

The reading was checked approximately one minute after the first observation had been made, with the sphygmomanometer cuff still in position. The diastolic blood pressure was taken as the point of complete disappearance of sound. All those examined were reassured that the blood pressure was "quite normal."

There have been several investigations of the blood pressure in the elderly, either as a separate group or as part of a larger investigation. Such investigations have been carried out, for example, by Bowes (1917), Thompson and Todd (1922), Robinson and Brucer (1939), Miller (1941), Master et al (1943), Howell (1950), Gavey (1949), Droller et al (1952), Hamilton et al (1954), Anderson and Cowan (1955) and Maddison et al (1955).

Generally speaking, it has been found that the systolic blood pressure tends to rise with age, especially in females. The diastolic blood pressure does not seem to rise significantly with age. As a result, the pulse pressure increases with age. It has also been found that hypertension commonly occurs in the elderly, especially amongst females.

Two of the above investigations have been concerned with the elderly who lived in their own homes. Droller et al (1952) in Sheffield investigated the blood pressures of 476 elderly persons living in their own homes. They were unable to show any significant correlation between the height of the systolic or diastolic blood pressure and vertigo, tinnitus,

angina of effort, clinically detectable arterio-sclerosis, and the subjects' well-being and activity.

Maddison et al (1955) recorded the blood pressure in their admittedly biassed group. Using a complicated system of factor analysis they were able to associate the height of the blood pressure with certain groups of illnesses. They concluded that as the blood pressure increased, subjects so afflicted tended to have more and severer disabilities. As with Droller et al, they could find no significant association between high blood pressure and many of the signs and symptoms traditionally assigned to it.

Systolic Blood Pressure.

The distribution of the systolic blood pressures of the group examined in this enquiry is shown in Table 130 and Figure 26.

The mean systolic blood pressure of the men who lived alone was found to be 163.1 mm. of Hg. (S.D. 27.1), and of women living alone 173.6 mm. of Hg. (S.D. 27.2). Of those who did not live alone, the mean systolic blood pressure of the men was found to be 163.8 mm. of Hg. (S.D. 29.4) and of the women 174.7 mm. of Hg. (S.D. 27.5).

There was, therefore, no appreciable difference in the mean height of the systolic blood pressure of those who lived alone when compared with those who did not live alone.

The mean systolic blood pressure of the men as a whole was found to be 163.6 mm. of Hg. (S.D. 28.8). For women as a whole the mean systolic blood pressure was found to be 174.2 mm. of Hg. (S.D. 27.3). Females were found, therefore, to have a higher mean systolic blood pressure than males and the difference was statistically significant (standard error of difference of means, 9.2). This finding is in keeping with that of previous investigators.

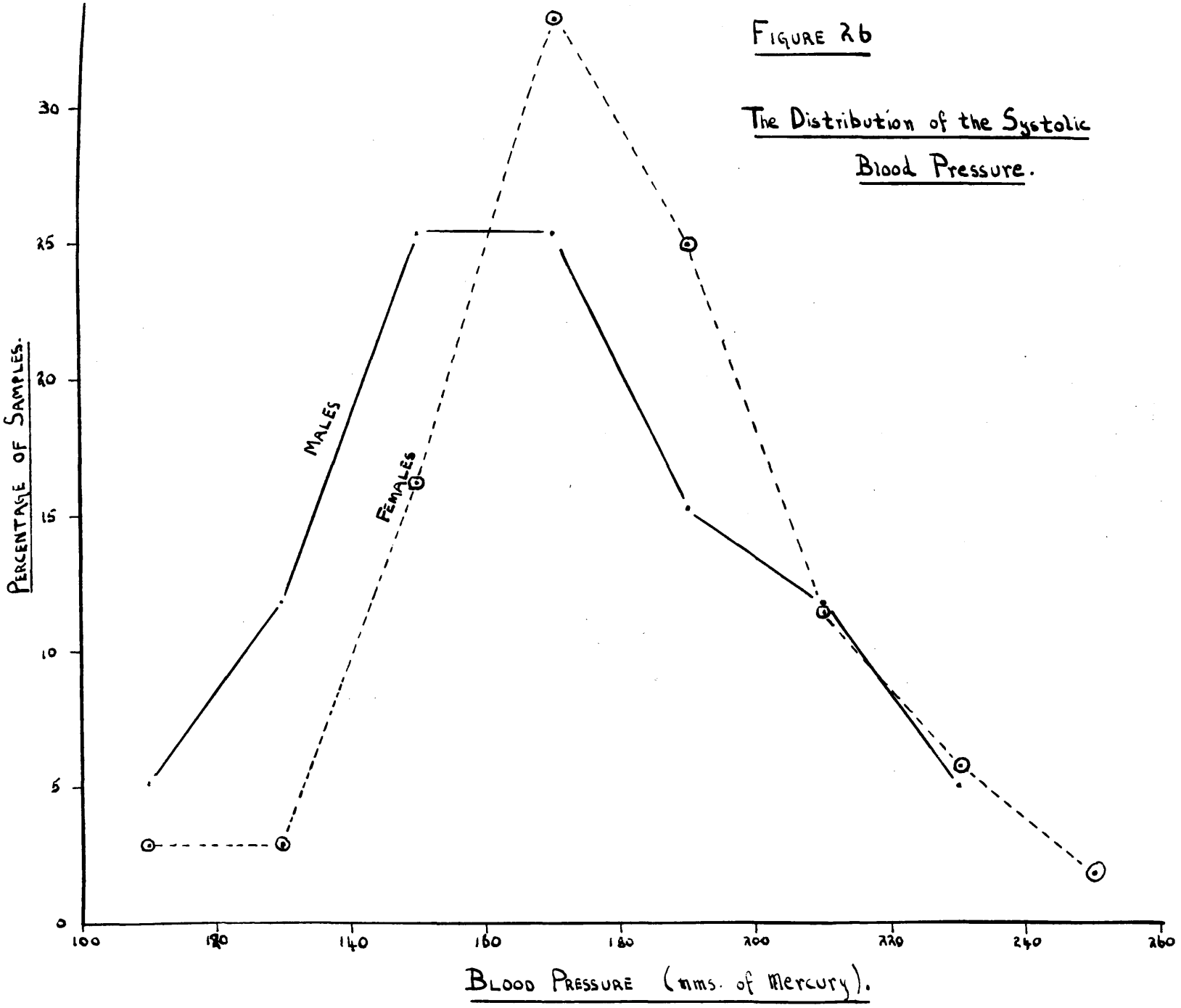
Table 130.

The Distribution of the Systolic Blood Pressure in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Mm. of Hg.							
	100-119	120-139	140-159	160-179	180-199	200-219	220-239	240-259
Living Alone:								
Male	1 (6.3%)	2 (12.5%)	4 (25%)	3 (18.8%)	3 (18.8%)	3 (18.8%)	-	-
Female	2 (4.3%)	1 (2.1%)	8 (17%)	15 (31.9%)	11 (23.4%)	7 (14.9%)	2 (4.3%)	1 (2.1%)
Not Living Alone:								
Male	2 (4.7%)	5 (11.6%)	11 (25.6%)	12 (27.9%)	6 (14%)	4 (9.3%)	3 (7%)	-
Female	1 (1.8%)	2 (3.5%)	9 (15.8%)	20 (35.1%)	15 (26.3%)	5 (8.8%)	4 (7%)	1 (1.8%)
Total Male	3 (5.1%)	7 (11.9%)	15 (25.4%)	15 (25.4%)	9 (15.3%)	7 (11.9%)	3 (5.1%)	-
Total Female	3 (2.9%)	3 (2.9%)	17 (16.3%)	35 (33.6%)	26 (25%)	12 (11.5%)	6 (5.8%)	2 (1.9%)

FIGURE 26

The Distribution of the Systolic Blood Pressure.



The mean systolic blood pressures of the various age groups are shown in Table 132. While the numbers in each age group are too small to support any definite conclusions, it is seen from Table 132 that the mean systolic blood pressure in both males and females increased to the quinquennium 70-74 years, after which it decreased with advancing age.

It may be that over the age of 75 those who suffer from high blood pressure succumb to its effects, leaving behind those with lower blood pressures. The range of blood pressures, however, was quite considerable. There were several subjects over the age of 75 who had blood pressures of 200 mm. of Hg. or more.

Diastolic Blood Pressure.

The distribution of the diastolic blood pressures of the group examined is shown in Table 131 and Figure 27.

The mean diastolic blood pressure of the men who lived alone was found to be 78.8 mm. of Hg. (S.D. 23.8), and of women living alone 87.4 mm. of Hg. (S.D. 19.6). Of those who did not live alone, the mean diastolic blood pressure of the men was 87.3 mm. of Hg. (S.D. 19.4), and of the women 86.3 mm. of Hg. (S.D. 15.5).

There was, therefore, no significant difference in the mean heights of the diastolic blood pressure of those who lived alone when compared with those who did not live alone. The lower mean value of the diastolic blood pressure in males living alone is probably a result of the small number in the sample.

The mean diastolic blood pressure of the men as a whole was found to be 85 mm. of Hg. (S.D. 20.6). Of the women as a whole the mean diastolic blood pressure was found to be 86.8 mm. of Hg. (S.D. 17.5). There was, therefore, no significant difference in the mean heights of the diastolic blood pressure in males and females in the present sample.

Table 132.

The Mean Systolic and the Mean Diastolic Blood Pressures of the Elderly in Various Age Groups, by Sex.

	Age in Years				
	60-64	65-69	70-74	75-79	80+
Mean Systolic B.P. (Mm. of Hg.)					
Male	-	155	170.7	164	155.6
Female	169.4	175	182.1	169.4	167.5
Mean Diastolic B.P. (Mm. of Hg.)					
Male	-	87.2	90.7	77.3	86.7
Female	82.4	88.5	84.1	91.7	84.2
Total Males	-	9	21	20	9
Total Females	15	28	29	26	6

FIGURE 27

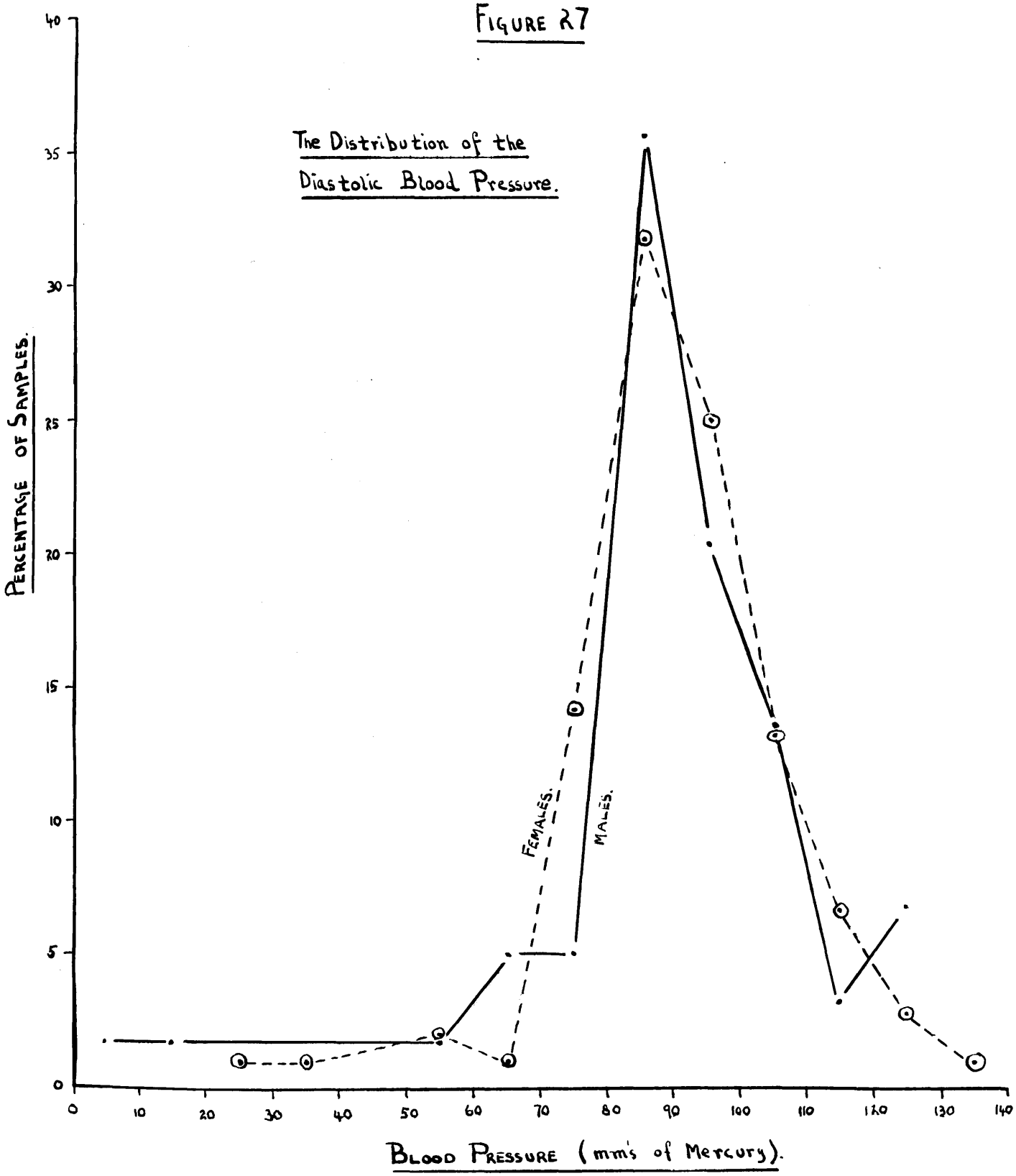

The Distribution of the
Diastolic Blood Pressure.
PERCENTAGE OF SAMPLES.
0
5
10
15
20
25
30
35
40
FEMALES.
MALES.
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
BLOOD PRESSURE (mm's of Mercury).

Table 131.

The Distribution of the Diastolic Blood Pressure in the Elderly Who Lived Alone and the Elderly Who Did Not Live Alone.

	Mm. of Hg.													
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130+
Living Alone:														
Male	-	1 (6.3%)	-	-	-	1 (6.3%)	1 (6.3%)	1 (6.3%)	5 (31.3%)	4 (25%)	3 (18.8%)	-	-	-
Female	-	-	1 (2.1%)	1 (2.1%)	-	-	-	6 (12.8%)	15 (31.9%)	11 (23.4%)	5 (10.7%)	5 (10.7%)	3 (6.4%)	-
Not Living Alone:														
Male	1 (2.3%)	-	-	-	-	-	2 (4.7%)	2 (4.7%)	19 (44.2%)	8 (18.6%)	5 (11.6%)	2 (4.7%)	4 (9.3%)	-
Female	-	-	-	-	-	2 (3.5%)	1 (1.8%)	9 (15.8%)	18 (31.6%)	15 (26.3%)	9 (15.8%)	2 (3.5%)	-	1 (1.8%)
Total Male	1 (1.7%)	1 (1.7%)	-	-	-	1 (1.7%)	3 (5.1%)	3 (5.1%)	24 (40.7%)	12 (20.3%)	8 (13.6%)	2 (3.4%)	4 (6.8%)	-
Total Female	-	-	1 (1%)	1 (1%)	-	2 (1.9%)	1 (1%)	15 (14.4%)	33 (31.7%)	26 (25%)	14 (13.4%)	7 (6.7%)	3 (2.9%)	1 (1%)

The mean diastolic blood pressure of various age groups is shown in Table 132. As stated previously, the numbers in the various age groups are too small to support any definite conclusions, but as is shown in Table 132 no definite trend with age can be demonstrated either with the males or with the females.

Hypertension.

The distribution of the systolic blood pressures of the elderly persons examined is shown in Table 130, and of the diastolic blood pressures in Table 131.

Based on the standards laid down by Exton-Smith (1955), Gavey (1949) and Droller et al (1952), any elderly person with a systolic blood pressure of 160 mm. of Hg. or over, or a diastolic blood pressure of 100 mm. of Hg. or over was considered to be hypertensive.

It is seen from Table 130 that 34 (57.7%) of the men and 81 (74.8%) of the women had a systolic blood pressure of 160 mm. of Hg. or more. From Table 131 it is seen that 14 (23.8%) of the men and 25 (24%) of the women had a diastolic blood pressure of 100 mm. of Hg. or more. Taken from the standpoint of the systolic blood pressure, a greater proportion of females had hypertension than males. The difference in proportions is statistically significant (standard error of difference, 15.4).

The incidence of hypertension, from the standpoint of the systolic blood pressure, closely resembles that found by Droller et al (57 per cent. of the males and 77 per cent. of the females), Gavey (67.4 per cent. of his group as a whole), and Anderson and Cowan (51.9 per cent. of the males and 72.8 per cent. of the females with a systolic blood pressure of 169 mm. of Hg. or over).

The incidence of hypertension, from the standpoint of the diastolic blood pressure, also closely resembles that found by Droller et al in the case

of the males (28%), but the incidence of hypertension in females found in the present enquiry is very much lower than that found by these authors (48%).

The incidence of hypertension in the groups of elderly who lived alone and who did not live alone was examined. Of those who lived alone, 56.4 per cent. of the men and 76.6 per cent. of the women had a systolic blood pressure of 160 mm. of Hg. or more. Of those who did not live alone, 58.2 per cent. of the men and 79 per cent. of the women had a systolic blood pressure of 160 mm. of Hg. or more.

There was, therefore, no appreciable difference in the incidence of hypertension amongst those who lived alone when compared with their counterparts who did not live alone.

During this enquiry, the subjects were not asked any specific questions about their health. The record of the previous interview, however, was always examined. From an examination of those records there did not seem to be any difference in the general well-being of those subjects who had hypertension when compared with those who had not.

For example, 35 (31.5%) of those who had a systolic blood pressure of 160 mm. of Hg. or more suffered from vertigo, compared with 15 (28.8%) of those whose systolic blood pressure was below this level. There was, therefore, no appreciable difference in the incidence of vertigo in the two groups, those who had hypertension and those who had not. This agrees with the findings of Droller et al and Maddison et al that hypertension and vertigo are not associated in the elderly.

There was a higher incidence of obesity in the group suffering from hypertension. Thirty-one (27.9%) of those who had a systolic blood pressure of 160 mm. of Hg. or over were at least 20 per cent. overweight compared with four (7.7%) of those whose blood pressure was below that level.

This difference in proportion is statistically significant (standard error of difference, 11.6). Such findings are not unexpected in view of the well known association between obesity and hypertension.

On the other hand, the incidence of those underweight did not differ significantly in the two groups. Eleven (9.9%) of those who had a systolic blood pressure of 160 mm. of Hg. or more were at least 20 per cent. underweight compared with seven (13.5%) of those whose blood pressure was under this level.

Maddison et al have speculated on whether a rising blood pressure is a deficiency disorder rising from bad dietary habits. While the numbers in the present series are small, the high incidence of hypertension in the two groups most in need of dietary assistance is noteworthy.

Commentary.

Within its limits, this enquiry tended to confirm the previously established facts that the systolic blood pressure is raised in the elderly, particularly elderly women. It also confirmed that the diastolic blood pressure is not raised to the same extent and does not increase with age. In the present enquiry, it was found that while the systolic blood pressure increased with age to the quinquennium 70-74 years, thereafter it declined with advancing years.

There was no appreciable difference in the mean height of the systolic blood pressure, the mean height of the diastolic blood pressure and the incidence of hypertension in the two groups of the elderly, those who lived alone and those who did not live alone.

In common with other investigators, a high incidence of hypertension was found in the elderly persons examined, particularly in elderly women. The condition was often present without symptoms and without apparent ill-effects on the subject's general well-being. Vertigo was not more common

in the hypertensive group than in the non-hypertensive.

It has been suggested in a previous section that the discovery of hypertension in an elderly subject should be treated with some circumspection. As Gavey (1949) and Bourne (1955) point out, because the blood pressure is elevated it does not necessarily follow that treatment should be instituted. This is particularly true for the elderly where the mild sedation and general advice which is the usual treatment are likely to induce apprehension and nervous symptoms, particularly when the elderly patient is told that his or her blood pressure is "high."

It is suggested that when the blood pressure of an elderly person is taken a general reassurance should be given that all is well. This would probably pay a dividend in the reduction of apprehension. It may even in itself, as has been suggested by Kyser (1956), lead to a reduction in the height of the blood pressure.

Summary.

The systolic and diastolic blood pressures were determined of 163 elderly persons living at home.

The mean systolic blood pressure of men was found to be 163.6 mm. of Hg. and of women 174.2mm. of Hg.

The mean diastolic blood pressure of men was found to be 85 mm. of Hg. and of women 86.8 mm. of Hg.

The incidence of hypertension, based on a standard of 160 mm. of Hg. or over, was determined. Of the men, 57.7 per cent. were hypertensive as were 74.8 per cent. of the women.

The mean systolic blood pressure of women was greater than that of men, and the incidence of hypertension was greater in women. There was no appreciable difference in the level of the mean diastolic blood pressure in the two sexes.

There was no appreciable difference in the mean height of the systolic blood pressure or diastolic blood pressure of the elderly who lived alone when compared with those who did not live alone. Nor did the incidence of hypertension differ in the two groups.

Hypertension was often present without apparent effect on the subject's general well-being. Vertigo was not associated with hypertension. Hypertension was more common in those who were overweight.

It is suggested that when high blood pressure is diagnosed in an elderly person, the subject should not be told of the diagnosis.

CHAPTER 30.

GENERAL SUMMARY AND CONCLUSIONS.

As the proportion of old people in the community increases, it becomes important to gain as much knowledge as possible of their needs and the patterns of their lives. Experience of the elderly in need of care and attention notified to the Glasgow Health and Welfare Department suggested that those with the greatest difficulties were the elderly who lived alone. Yet relatively little information about them was available.

To gain the further information desired, a series of old people living alone were interviewed in the Govan ward of the city of Glasgow. Questions were asked about various aspects of their lives and the replies recorded on a special form. The same questions were asked of a group of old people not living alone and the two sets of data obtained were compared. The intention was that the elderly living alone should be the subject of an experimental enquiry and that the findings regarding their lives and condition should be examined against those of a control group who could be regarded as living the normal life of old folk in our social structure.

Visits were made unexpectedly, but co-operation was almost always freely given by those interviewed. To show that the visits were bona fide and to help put the old folk at ease, the investigator was accompanied by a health visitor in uniform. All the interviews were conducted by one person, the writer.

Interviews were obtained with 347 old people living alone and 704 not living alone. Women formed the large majority of those who lived alone. Because of her more intimate associations with the home, a woman when left alone is probably more likely to remain so and is less likely to be urged to join her family than a man similarly situated.

Over half of those who lived alone were in the decade 70-79 years. Elderly folk in earlier age groups are still likely to be living with their marriage partners or with their families, and in the later age groups

disability, frailty and death reduce the numbers living alone.

Most of those interviewed belonged to the artisan or unskilled worker classes and most lived in tenement properties, the older of which in Glasgow are notorious for their lack of amenities. The ill-effects of the inconveniences of such dwellings on the elderly were often noticed. Nevertheless, while complaints were common, few wanted a change to more congenial surroundings, the trouble of moving and the pain of uprooting evidently weighing heavily against the advantages of a better environment.

No evidence was found that in Govan the solitary elderly were keeping overcrowded families out of larger houses. Only 14 per cent. occupied houses of three apartments or more and only two per cent. were in houses which were excessively large for a single person.

Although most of those interviewed lived in tenement houses in an industrial area, the standard of personal and domestic cleanliness was high. Really dirty houses were not often seen and when they were their occupants were usually old men living alone. There was a high standard of personal and domestic cleanliness among women living alone, and this was maintained well into advanced years.

Nevertheless, when encountered, the unclean old person in a dirty house presented a serious social problem which in practice was found difficult to remedy. There is no special group of cleaners available to clean these houses, and hospitals and geriatric units are reluctant to admit old people solely for cleansing. When vermin abound, the situation is even more difficult, and there was considered to be a need for a more comprehensive service for the rectification of this situation and for better co-operation with the hospitals and geriatric units.

Most of those living alone were able to perform their domestic tasks satisfactorily, either alone or with some help. Women, as might be

expected, were better able to manage the home than men and received less help, but the ability to cope with the household tasks unaided decreased as age increased. Almost all would have benefited, for instance, from some help with the weekly wash.

Far from being left to manage their homes unaided, two-thirds of those who lived alone received some help with their household duties. This help varied in nature and quantity, ranging from aid with a single task to comprehensive help in the running of the home. Most of this help was supplied by the families of the elderly persons concerned, but the assistance provided by the neighbours was considerable. Only one-tenth received assistance from the home-help service.

Over four-fifths of those who lived alone felt that they had someone to turn to in times of illness and, as far as could be judged, this faith was justified. Nevertheless those who lived alone were naturally much less fortunate in this respect than those not living alone. Forty per cent. said that they had no one, or only neighbours, to turn to for help in times of illness. An examination of the family background of this group revealed that in most cases this was only too true. Only a quarter had families to whom they could readily turn and in many instances relationships were strained.

One-fifth of those who lived alone did not know who would help them if they fell ill. These were the true social isolates of the sample.

Only one per cent. of those who lived alone were totally bedridden and nine per cent. partially: but almost all required nursing care. The small number of solitary bed-fast patients indicated that when serious illness occurred most were fortunate enough to be transferred to hospital or to the home of a relative. But it was evident that those who were wholly or partially confined to bed had help, when available, from the younger generations who took an active interest in the care of their sick parents

and relatives. The help they rendered was both extensive and freely given and little supplementary aid was asked of the hospital or home care services.

Few of these invalids were on the waiting list for admission to hospital and relatively little help was being given by the home care services, certainly much less than could have been utilised, particularly from the home nursing service. Certainly it could not be shown that those who lived alone had an excessive share of those services. While a greater proportion of those who lived alone had a home help compared with those not living alone, fewer had the services of a home nurse; and there was little difference in the proportions awaiting hospitalisation.

The help given by neighbours in time of illness was considerable. Without ties of blood or desire for monetary reward, many neighbours gave extensive and cheerful help out of a spirit of sheer good-will. Such help, and the knowledge that it is at hand, is a great solace to solitary elderly people.

Fifteen per cent. of those wholly or partially confined to bed had neither family nor neighbours to look after them, and among these occurred the most obvious cases of neglect.

Even when nursing attention was being freely given, most of the elderly sick were left alone at night. Such a situation leaves much to be desired, particularly when there is serious illness or when people are awaiting admission to hospital. A service of evening and night "sitters" would help to solve this problem and would relieve the strain on nursing relatives.

Perhaps the group in greatest need of help were the incontinent and those who had to nurse them. These patients impose a great strain on nursing attendants, especially untrained ones, and stretch the bonds of family affection to breaking point. Little assistance is offered to them

officially other than the promise of removal to hospital - a promise that sometimes cannot be quickly fulfilled. There is urgent need to help families nursing an incontinent old person. A particular need is a laundry service for soiled linen. Advice to those who have bedfast elderly charges, the provision of certain appliances and a more extensive use of the home nursing service are sorely needed.

It was evident that many of those who lived alone were part of a family unit, a member for whom help in sickness and in health was automatically given. This was often observed. Four-fifths of the women and three-quarters of the men with families were visited by them at least once a week, and almost half were visited daily. These visits were not usually prompted by any specific cause but were the outcome of the natural impulses of affection and family feeling. The importance of such visits cannot be over-stressed. They give the old people a sense of belonging to a group and a sense of being wanted, and they also prevent the formation of bad social habits and self-neglect.

These old people were only alone in the sense that they occupied a separate dwelling; they were not alone from the point of view of family help or family communion. In fact, twelve per cent. lived virtually next door to one of their family and seven per cent. had a younger relative, usually a grand-child, sleeping in the house with them at night.

For those who have no family and for those who are being neglected by their family, an official visitor would be of great value. Such a visiting service has some of the advantages of the family visit. Many old folk would welcome a regular friendly visitor. Health visitors might be allocated to this useful work.

Many of those who lived alone led a well-developed social life with fruitful family and neighbourly relationships and an interest in outside

affairs. But many others had limited or negligible social intercourse.

On the whole, little constructive use was made of leisure time and much better use could have been made of the available social activities. Less than half attended church regularly and less than a third were members of an old-age club. Women made better use of their leisure than men, who, it seemed, preferred aimless walks and casual encounters with their cronies to the organised activities of the church and old-age club.

Apart from listening to the radio, a recreation influenced by financial factors, those who lived alone participated more in the leisure activities examined than did those not living alone. In the absence of company at home, those who live alone must seek entertainments in other quarters.

Hobbies and active interests were not common. Women spent much time in carrying out the various domestic tasks required to keep a home clean, tidy and functioning; men spent much time in aimless and unplanned minor activities inside and outside the home. There seemed to be need for education for retirement.

Many of those who lived alone failed to maintain an adequate diet, chiefly because of the cost and a lack of interest in cooking for one person. Meat was eaten daily by only a quarter, and vegetables by only two-fifths of those who lived alone. Fruit was clearly a luxury. Although scurvy was suspected in only one instance, it was evident that in many the intake of vitamin C was insufficient. The dietary of seven per cent. of those who lived alone was grossly inadequate.

Under-nourishment was more common in solitary elderly people than in those not living alone, and meat, vegetables and fruit were eaten less frequently. Fifteen per cent. of those living alone were considered under-nourished, more men than women. Under-nourishment was associated with

loneliness, mental deterioration and possibly an inability to do the shopping without help.

It would be very helpful if malnutrition and vitamin deficiency states, when encountered, were notified to the Medical Officer of Health in order that adverse social circumstances could be ameliorated. There would appear to be good grounds for issuing vitamin supplements and concentrated protein foods to many of the elderly who live alone.

The average level of mental health among those who lived alone was high, and the proportions in the various grades of mental health did not differ greatly from those of the elderly who did not live alone. As might be expected, mental deterioration was more common over the age of 75 but neither sex was more affected than the other. The state of living alone, of itself, did not appear to be a factor of importance in the production of mental deterioration. It seems that the mental alertness and mental energy required to maintain an independent existence compensate for the ill-effects of loneliness and a sense of isolation. The challenge is met successfully.

The solitary elderly person with mental deterioration is a danger to himself and others. Of the eight old persons considered senile, seven had to be removed to a hospital or institution. As has been pointed out by many writers, there is a need for special accommodation for senile dements. It is deplorable that they must be certified as lunatics in order to obtain hospital accommodation. Nevertheless, for the solitary senile person certification is at present the only practicable way of meeting the situation.

Following Sheldon's example, environmental and other factors which might be associated with mental deterioration in the elderly who live alone were sought. The following were considered to influence the production of mental deterioration: confinement to the home; difficulty with locomotion;

impaired hearing (possibly); lack of a family; and when a family existed, infrequent family visitation; lack of communion with others; and loneliness and a sense of isolation.

Liability to loneliness would be commonly regarded as a feature of the lives of those who live alone and it is sometimes assumed that all who live alone must feel lonely. This is not so. Over half of those who lived alone said that they seldom felt lonely. "Waiting for the end" had no part in their lives.

Many people living alone are well integrated socially and lead happy and active lives. The danger of loneliness is often realised and steps are taken to avoid it. These include participation in organised social and religious activities, visits to the family and friends, and the companionship and care of pets.

Nevertheless, old people living alone suffer more from loneliness than those not living alone, and when they do, their feelings may become unbearable and cause character changes for the worse, changes in behaviour, slipping of standards and positive ill-health. Some are able to counteract loneliness by their own efforts but others need help, and to this end alone a visiting service to solitary old people would pay a dividend.

Nine per cent. of those who lived alone gave a history of a recent accident in the home, women being involved more than men. Domestic accidents can cause serious disability or even death, and reports of fatal falls, burns and gassing accidents are now far from uncommon. Over three-quarters of the domestic accidents reported were associated with falls and 16 per cent. resulted in fractures. There is a need for further investigation into methods of preventing domestic accidents in the elderly.

During the enquiry an assessment was made of certain disabilities. In the absence of physical examination, these estimates are liable to error,

but they provide, nevertheless, an insight into the general state of health of the group investigated. Deafness, failing vision, chronic bronchitis, vertigo, digestive upsets, painful feet, varicose veins, articular and non-articular rheumatism were amongst the conditions investigated and described.

With some exceptions, the incidences of the various conditions did not differ significantly in the two groups of the elderly. The exceptions were non-articular rheumatism, "nervousness," and apparent anaemia which were commoner in those who lived alone, and articular rheumatism, which was less common.

Men were more affected by deafness, chronic bronchitis and varicose ulceration, and women with vertigo, articular and non-articular rheumatism and painful feet. Generally speaking, as the age increased so did the incidence of the various conditions investigated.

More or less, deafness may almost be regarded as a natural accompaniment of old age. Thirty-eight per cent. of the men and 15 per cent. of the women had impaired hearing, and as age increased so did the incidence of deafness. Hearing aids were not seen as often as might have been expected, probably because of a lack of knowledge and experience in this form of aid. They were, however, more commonly used by the deaf who lived alone than the deaf who did not.

Like deafness, failing vision is almost a natural part of the ageing process. Only four per cent. of those who lived alone had satisfactory sight without spectacles, and even with them, 26 per cent. complained of unsatisfactory vision. Five per cent. had no spectacles but needed them, and 20 per cent. more needed their spectacles renewed. While the proportion with unsuitable spectacles was not so great as that found by Sheldon in the period immediately prior to the inception of the National Health Service, nevertheless the position has not improved to the extent that might have been

expected. This is because many old people are not fully aware of the facilities available for the renewal and replacement of unsatisfactory or damaged spectacles.

Eight per cent. of those who lived alone retained their own teeth but almost all had dental caries. Thirteen per cent. were edentulous and 78 per cent. owned dentures, but of these 18 per cent. wore them only occasionally. More women than men owned dentures, probably for cosmetic reasons. Most of those who were edentulous and those who did not wear their dentures seemed to manage quite well without teeth, their toughened gums functioning admirably.

Those who lived alone complained more of difficulty in getting about than did those not living alone, but in spite of this their general mobility was better. This was true of both sexes and of every age group except the very oldest. Such a finding suggests that the better mobility of old folk living alone is born of necessity and that disabilities, pain and frailty are overcome by spirit and will-power to maintain a separate and independent existence. That this in fact happened was obvious in many instances.

Further insight into the health of those who lived alone was given by the frequency with which medical attention was sought. Only half of the group received regular medical attention and this proportion did not increase as the age increased. Most of those in receipt of medical attention visited their doctors' surgeries; home visits by the doctor were commonest in the older age groups. The proportion in receipt of regular medical attention was only slightly greater than that of those who did not live alone.

At the conclusion of the medico-social survey an investigation was made of the heights, weights, haemoglobin levels and blood pressures of a small group of those previously interviewed. These examinations, including

withdrawal of blood samples, were carried out in the homes of the old people concerned. One-hundred-and-sixty-four elderly persons were examined, of whom 64 lived alone.

The ideal weight of each person was calculated and compared with the actual weight. The mean weight of the women tended to be over, and the mean weight of the men under the ideal weight; and the mean weights of men and women living alone were less than those of their counterparts not living alone.

As might be expected, more women were overweight than men, but the proportions of those overweight in the two groups of the elderly did not differ significantly. More women living alone were underweight than women not living alone, but there was little difference among the men. Several of those examined were obviously in need of dietary assistance.

The haemoglobin levels, erythrocyte counts and blood groups were determined of those examined. The mean haemoglobin level of the men was 13.78 gms. per 100 ml. of blood, and of the women 12.75. The mean haemoglobin levels of men and women living alone were lower than those of the counterparts not living alone.

Twenty-eight per cent. of the women and twenty per cent. of the men suffered from anaemia, and the incidence of anaemia was greater than in those who did not live alone. A routine haemoglobin estimation of all old people who seek medical advice might often be of value.

An examination of blood pressures confirmed the previously established facts that the systolic blood pressure is raised in the elderly, particularly in elderly women, but that the diastolic blood pressure is not raised to the same extent. No appreciable difference was found in the mean heights of the systolic or diastolic blood pressures or in the incidence of hypertension in the two groups of the elderly: those who lived alone and those who did not.

As recorded by others, a high incidence of hypertension was discovered among the people examined, particularly in the elderly women. The condition was often present without symptoms and without apparent ill-effect on general well-being. No information about "blood pressure" was ever given to these people for fear of iatrogenic repercussions.

The outstanding and lasting impression received from this enquiry was the great determination, fortitude and spirit of independence of those old men and women living alone. Many overcame pain, disability and frailty in order to maintain their own way of life, and few sought any help other than a little more money. Only three per cent. viewed the prospect of an old people's home with any favour; the remainder said they would continue to live as they were, however difficult it might be. Memories of the old workhouse system live still in the minds of the aged poor.

None the less, the enquiry revealed that for those too old (or too ill) to work and who lived alone, the present scheme of social security often fails to be the sustaining power that it should be. Some of these people do not get the benefits to which they are entitled, mostly because of ignorance. Pride also in some old folk, though understandable, is sometimes a formidable obstacle.

The alleged negligence of the younger generation towards their elders was rarely uncovered. On the contrary, Sheldon's concept of an instinct which is an inherent urge in the young to care for the old was recognisable; and the proverbial generosity among neighbours - the traditional goodness of the poor to the poor - was there in abundance. Friendly and interested neighbours have great social value in maintaining the elderly who have to live alone as part of an active and sympathetic community, which helps to remove the feeling of abandonment and promotes comfort of mind, particularly among those left without family.

All things considered, it is perhaps not to be wondered at that few of these old people want to leave their often ill-provided homes for better environmental conditions, though for some, as they are now situated, the essentials of sufficient food, warmth and clothing may be almost luxuries.

But it is perhaps pertinent to remark that local authorities would do well to look more closely at the human distress hidden behind their welfare services.

Moving among these old people, hearing of their attitudes towards life, and seeing their improvisations to overcome difficulties, often with a wry, grim sense of humour - but still travelling with hope - was a memorable experience.

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APPENDIX A.

Table I.

The Population of Great Britain, 1851-1951, and as Projected to 1979.*

Year	Total Population (Millions)	Number aged 65 Years and Over (Millions)	Number aged 65 as a Percentage of Total Population
1851	20.8	1.0	5
1861	23.1	1.1	5
1871	26.1	1.3	5
1881	29.7	1.4	5
1891	33.0	1.6	5
1901	37.0	1.7	5
1911	40.8	2.1	5
1921	42.4	2.6	6
1931	44.8	3.3	7
1951	48.8	5.3	11
	Projection ‡		
1954	49.6	5.5	11
1964	50.9	6.2	12
1979	52.2	8.0	15
2004	51.8	7.9	15.2

* Based on Tables 1, 8 and 11 of the Memorandum of the Government Actuary to the Commission on the Economic and Financial Problems of the Provision for Old Age, 1954.

‡ The projections assume that fertility rates fall steadily to the equivalent of a national reproduction rate of 0.95 in 1979 and are constant thereafter; and that mortality rates fall at the same rate as in the past fifty years until 1979 and are constant thereafter.

Table II.

The Population of Great Britain in Age Groups, 1951.*

Age in Years	1951		1891	
	Population in Thousands		Population in Thousands	
	Male	Female	Male	Female
0-4	2,132.8	2,056.5	2,030	2,026
5-9	1,827.4	1,740.7	1,935	1,938
10-14	1,639.3	1,589.6	1,840	1,836
15-19	1,488.8	1,565.2	1,676	1,693
20-24	1,582.6	1,639.4	1,421	1,589
25-29	1,796.5	1,828.6	1,256	1,407
30-34	1,672.2	1,748.4	1,107	1,191
35-39	1,810.5	1,888.6	979	1,040
40-44	1,860.7	1,903.1	843	909
45-49	1,710.9	1,798.5	727	793
50-54	1,465.3	1,677.9	624	699
55-59	1,209.2	1,480.3	469	539
60-64	1,405.8	1,327.9	406	480
65-69	866.7	1,153.3	293	358
70-74	648.0	929.7	210	269
75-79	416.6	594.8	116	153
80-84	177.0	305.3	51	74
85-89	55.6	111.6	19	33
90-94	9.4	27.3		
95+	1.5	3.2		

* From the one per cent. sample tables of the Census, 1951, and the Report of the Royal Commission on Population, 1949.

Table III.

The Number and Proportion of Deaths of the Elderly in Glasgow, 1914-1953.*

Year	Population (Thousands)	Total Deaths (Thousands)	Total Aged Deaths (Thousands)	Total Non-Aged Deaths (Thousands)	Aged Female Deaths (Thousands)	Aged Male Deaths (Thousands)	Aged Deaths as Percentage of Total Deaths
1914	1,028	17.5	3.5	14.0	1.97	1.52	20
1915	1,035	20.2	4.2	16.0	2.34	1.87	20.9
1916	1,042	16.6	3.8	12.8	2.10	1.75	23.2
1917	1,048	16.7	3.7	13.0	1.94	1.80	22.4
1918	1,055	18.3	3.7	14.6	1.99	1.78	20.5
1919	1,062	18.2	4.3	13.9	2.41	1.88	23.5
1920	1,068	16.8	3.8	13.0	1.93	1.84	22.5
1921	1,075	15.6	3.9	11.7	2.06	1.80	24.7
1922	1,075	17.9	4.3	13.6	2.32	1.93	23.8
1923	1,074	14.9	4.1	10.8	2.26	1.84	27.6
1924	1,073	16.9	4.5	12.4	2.47	2.00	26.5
1925	1,073	15.3	4.4	10.9	2.33	2.02	28.4
1926	1,090	15.7	4.5	11.2	2.43	2.08	28.7
1927	1,090	15.4	4.6	10.8	2.43	2.18	29.9
1928	1,090	15.7	4.7	11.0	2.50	2.18	29.8
1929	1,089	17.8	5.9	11.9	3.17	2.73	33.2
1930	1,089	15.5	5.0	10.5	2.59	2.39	32.2
1931	1,088	15.5	5.1	10.4	2.66	2.46	33.0
1932	1,088	16.1	5.3	10.8	2.77	2.49	32.8
1933	1,088	14.7	5.3	9.4	2.74	2.51	35.6
1934	1,088	15.2	5.3	9.9	2.71	2.55	34.5
1935	1,087	15.5	5.8	9.7	2.98	2.82	37.3
1936	1,087	16.4	6.0	10.4	3.05	2.96	36.6
1937	1,087	16.4	6.0	10.4	2.92	3.04	36.3
1938	1,093	15.0	5.7	9.3	2.92	2.76	37.8
1939	1,093	15.0	6.2	8.8	3.12	3.05	41.1
1940	1,092	17.6	7.2	10.4	3.67	3.56	41.1
1941	1,092	16.3	6.5	9.8	3.25	3.27	39.4
1942	1,092	14.7	5.9	8.8	2.91	3.02	40.4
1943	1,092	14.8	6.3	8.5	3.11	3.14	42.2
1944	1,091	14.6	6.1	8.5	2.99	3.13	41.9
1945	1,091	13.9	6.3	7.6	3.17	3.15	45.3
1946	1,091	14.5	6.7	7.8	3.48	3.24	46.3
1947	1,091	15.3	6.9	8.4	3.46	3.42	45.1
1948	1,091	13.6	6.5	7.1	3.29	3.26	48.0
1949	1,090	14.2	7.2	7.0	3.82	3.42	51.0
1950	1,090	14.1	7.6	6.5	3.86	3.61	53.0
1951	1,090	14.3	7.9	6.4	4.02	3.87	55.1
1952	1,087	13.8	7.8	6.0	3.99	3.85	56.7
1953	1,085	12.8	7.3	5.5	3.72	3.58	56.9

* Adapted from the Annual Reports of the Medical Officer of Health.

Table IV.

The Glasgow Home Help Service, 1945-1954.

Year	Number of Home Helps	Number in Receipt of a Home Help aged 60 and Over	Total in Receipt of a Home Help	Number of New Cases Granted Extended Aid
1945	146	98	416	
1946	310	534	1,525	
1947	376	1,013	1,788	42
1948	498	1,263	2,017	87
1949	708	1,953	2,808	229
1950	1,007	2,974	4,077	529
1951	995	3,048	4,017	570
1952	1,006	2,977	3,880	593
1953	1,004	2,835	3,667	578
1954	958	3,031	3,766	480

APPENDIX B.

OLD PEOPLE OF GOVAN WHO LIVE ALONE.

SOME EXAMPLES OF HOUSES IN THE GOVAN WARD.

Helen Street.

Aboyne Street.

Govan Road.

Orkney Street.

Nethan St.

Craigton Road (Lower).

Nethan Street.

Nethan Street.

Elderpark Street.

Golspie Street.

Ardlaw St.

Ardneil St.

Harmony Row.

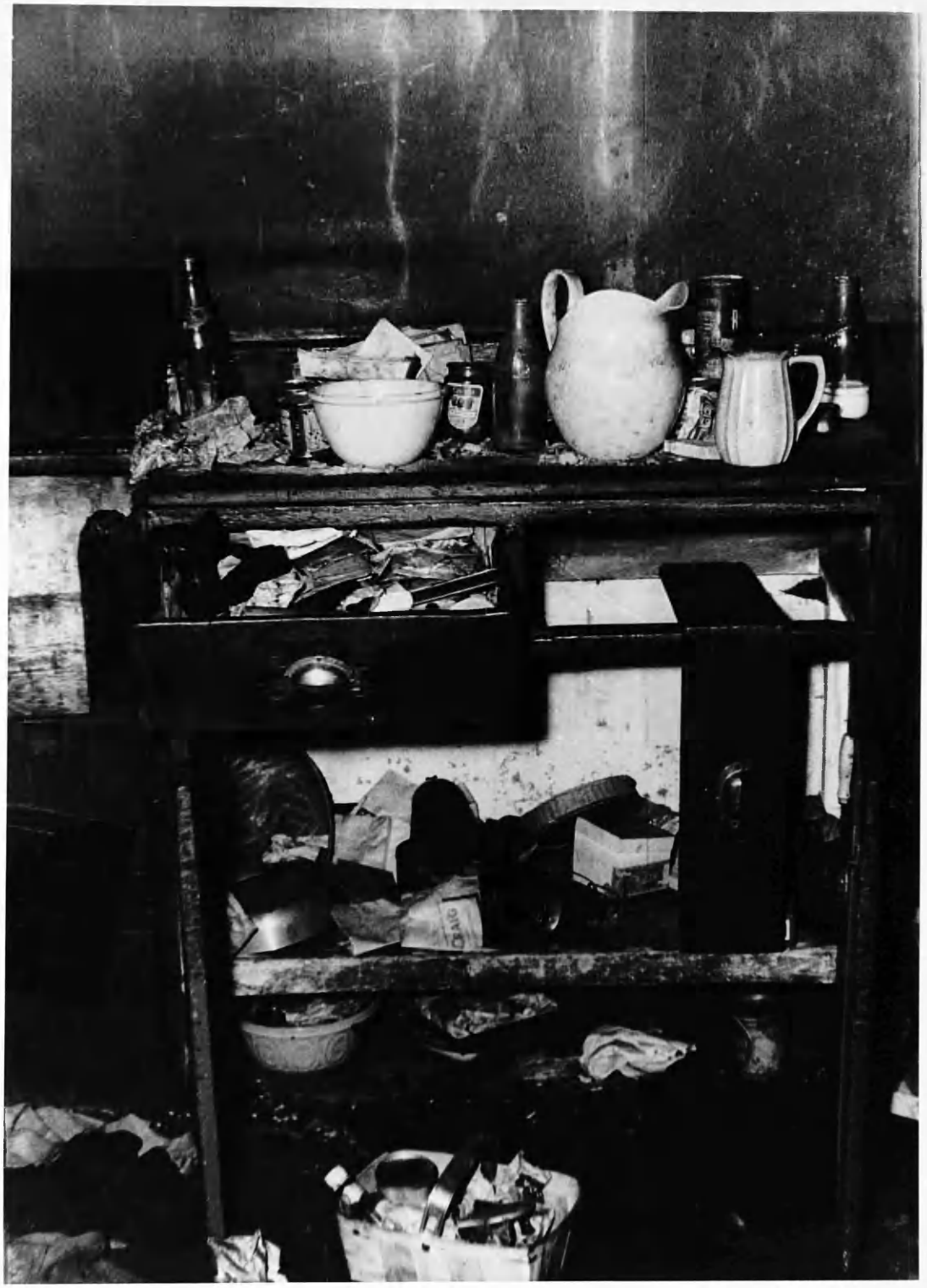
Nethan Street.

Craigton Road (Upper).

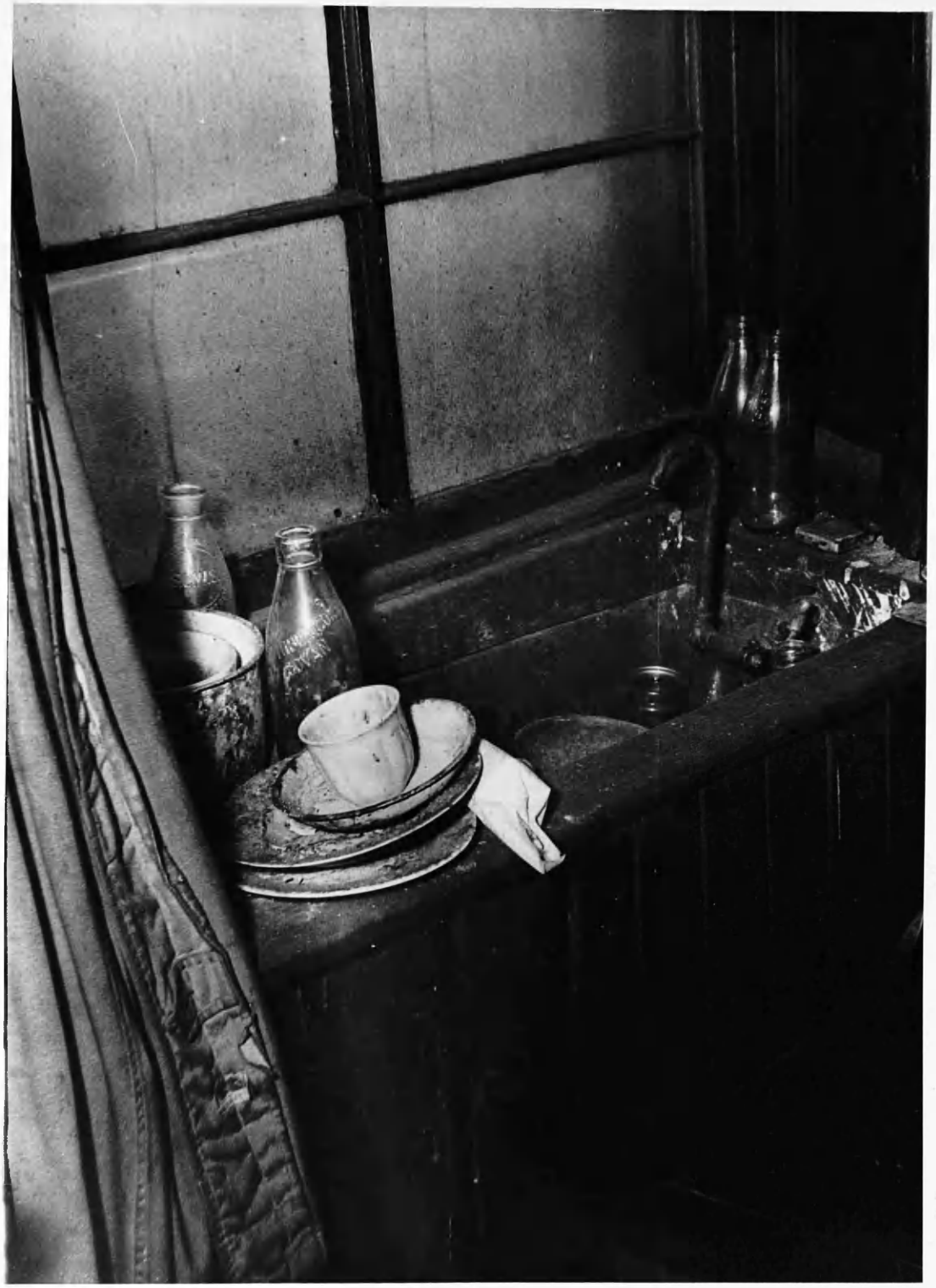
Luss Road.

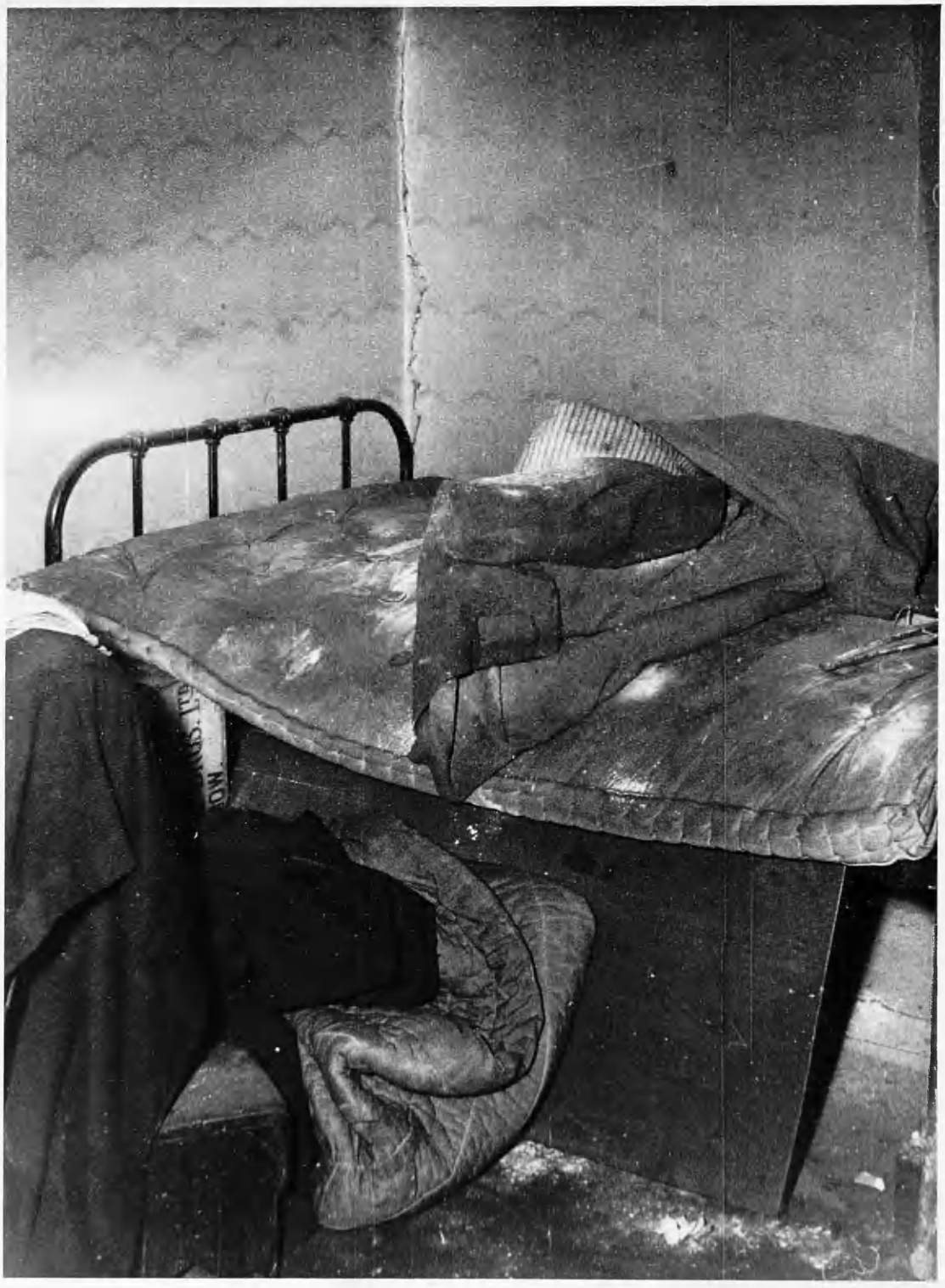
Copland Place.

SOME EXAMPLES OF DIRTY HOUSES.



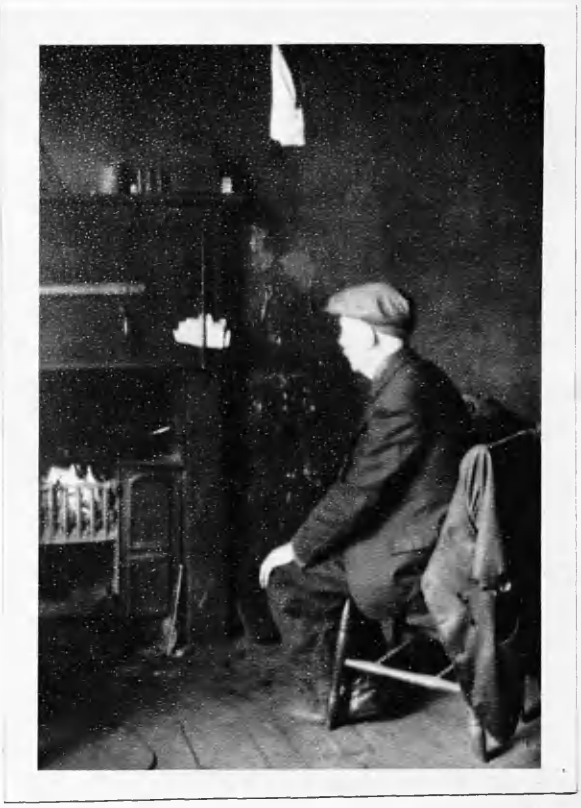

Breakfast
Oats
PHYLLOSAN






Tide


57



ILLUSTRATIONS OF OUTSIDE LAVATORIES.