Assessment of elderly people in general practice. 1. Social circumstances and mental state

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SUMMARY. A survey of patients aged 75 years and over registered with general practitioners in north and north west London was carried out by trained interviewers to investigate cognitive impairment. A random sample of 239 patients was selected for the more detailed home assessment. General practitioners had seen nearly two thirds (65.3%) of their patients aged 75 years and over in the three months prior to the study, the majority of these consultations (82.1%) being initiated by the patient and occurring at the surgery. Half of the patients lived alone (50.2%), nearly one in three had no living siblings (31.9%), a similar proportion had no living children (29.5%), and contact with neighbours and relatives was relatively infrequent. One in five elderly patients had evidence of depression (22.0%) although this appeared to be severe in only two cases, and 36 participants (15.1%) had scores on the mini-mental state examination suggesting cognitive impairment. General practitioners underdiagnosed both dementia and depression. The population contained a small group of people who consumed alcohol on a daily basis (10.5%).

This study showed that an annual assessment of elderly people as required by the new general practitioners' contract would yield much new evidence of depression and dementia and assist in the identification of heavy drinkers. Up to 30% of patients aged 75 years and over are likely to require further assessment on the basis of screening tests for depression and cognitive impairment, although it remains unclear to what extent identification of these patients will lead to improvements in outcome for them or their carers.

Introduction

THE new conditions of service for general practitioners require general practitioners or members of primary health care teams to undertake an annual assessment of patients aged 75 years and over. The annual assessment will necessitate a home visit to review the home environment and social circumstances of patients; social status (lifestyle and relationships); mobility (including the use of aids); mental condition; hearing and vision; continence; general functional level; and use of medication.[1] While there has been extensive research into the possible benefits of regular surveillance of the elderly, there is still a lack of conclusive evidence that routine screening in the format demanded by the new contract is worthwhile[2] and little information is available about the workload implications of the proposed annual assessment package.

This survey of a random sample of patients over the age of 75 years involved in a study of cognitive impairment in the community[3] covers all the elements of the proposed annual assessment and provides information by which to judge its practicality, the potential yield of new information and the workload implications for the primary care team. This paper focusses on the yield of information from the assessment of social and family support available to this age group, and on evidence of depression, dementia and high alcohol consumption.

Method

Patients aged 75 years and over on the age–sex register of nine practices in the London boroughs of Brent and Islington were asked by their general practitioner to take part in a study of the mental and physical health of the elderly, and their use of medical and social services. All participants had a brief interview which included the mini-mental state examination.[4] Full details of the method are described in an earlier paper.[3]

A random one in five sample of the total study population of 1160 patients were given a fuller interview and the results for this group are presented here. The interview was carried out by trained non-medical fieldworkers and included questions about the individual's actual and potential support network including the character of relationships; housing type and ownership; mobility inside and outside the home; use of aids to daily living; recent contacts with doctors; current medication; current alcohol and tobacco consumption; hearing and vision; and continence. The capacity to perform household tasks and aspects of personal care was assessed using a validated activities of daily living schedule.[5] A depression scale from the comprehensive assessment and referral evaluation (CARE) was also included.[6] CARE is a standard interview used in the cross national project on the elderly in the United States of America and the United Kingdom and has been validated for use in UK populations.

Those patients who needed support and care from others beyond the normal role of spouse, family member, friend or neighbour were judged to be dependent, and those supporting them were judged to be carers. Assignment to carer status was made initially by the fieldworkers using a checklist of domestic tasks as a guide and was later reviewed by the nurse coordinating the fieldwork.

Results were coded and entered on an SAS database and subsequently analysed using Minitab.

Results

The random sample of the total population of patients aged 75 years and over comprised 241 individuals, two of whom could not be fully interviewed and were excluded from the analysis. Difficulties were experienced in interviewing 15 people because of deafness, three because of language or cultural differences, one because of illness and 15 because of the intervention of a

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third party, but their responses have been incorporated into the data. No one refused to be interviewed. Different totals reflect incomplete data collection for some participants.

General practices in Brent provided 103 patients (43.1%) and Islington practices 136 (56.9%). There were 83 men (34.7%) and 150 women (65.3%). Nineteen patients were registered as disabled (7.9%) and five were registered blind (2.1%). The majority were widowed (123, 51.5%), 75 were married (31.4%), 26 were single (10.9%), 10 were separated (4.2%) and only five were divorced (2.1%). The great majority of the sample were europids of UK origin (191, 79.9%) with other europids originating from the Republic of Ireland (20, 8.4%) and Europe (17, 7.1%). Six people were of afro-caribbean origin (2.5%), two of asian origin (0.8%) and three from other ethnic groups (1.3%).

The majority of elderly patients (156, 65.3%) had seen their general practitioner in the previous three months. Most of these contacts had been self-initiated (128, 82.1%) and most consultations had been at the general practitioner's surgery (121, 77.6%).

Home environment

Home owners were in a majority in the sample (79, 33.2%) with the single largest group being council tenants (97, 40.8%). Twenty four participants (10.1%) lived in property rented from private landlords, 11 lived in warden-controlled accommodation (4.6%) and only four lived in residential homes (1.7%). Twenty one participants lived in tower blocks and needed to use lifts to reach their flats; three reported that their lifts were rarely working and 11 reported that their lifts were usually working. Telephones were present in the homes of 206 interviewees (86.2%).

Support networks and carers

Half of the participants (120, 50.2%) lived alone and of the remainder 92 (38.5%) had one other person in the household, 21 (8.8%) had two others and six (2.5%) had three or more. Of the sample 70 (29.5%) had no living children and 76 (31.9%) had no living siblings. Large families were uncommon, with only 31 respondents (13.1%) having four or more living children and only 29 (12.2%) having four or more living siblings. Actual contact with neighbours and family members was not extensive (Table 1).

Voluntary helpers were rarely in contact with the sample population, seeing only four respondents (1.7%) at frequencies varying from fortnightly to several times a day. Visitors from churches and clubs were more common, seeing 17 (7.1%) individuals at frequencies varying from monthly to several times a day.

Despite the apparently limited range of outside contacts, 183 interviewees (77.5%) said that they were able to leave a front door key with someone else, for use in an emergency. In addition, 197 elderly people (83.8%) had someone from whom they could get immediate help during the day, but this number fell to 186 (78.8%) when they were questioned about sources of immediate help at night.

Contacts outside the home. Contact with people outside the home was very limited, with 158 respondents (67.5%) not going to social events at all on a regular basis, 37 (15.8%) going out at least once a month but not more than once weekly, 37 (15.8%) going out at least once a week but not daily and only two (0.9%) going out daily.

The quality of relationships. Thirty four interviewees (14.4%) reported that they had nobody in whom they could confide. Of the remainder 131 (55.5%) had one confidant, 51 (21.6%) had two, and 20 (8.5%) three or more. Most confidants were relatives, followed by spouses, friends then neighbours. Professionals were rarely perceived as confidants.

Carers. Of the 239 individuals interviewed 79 (33.1%) had carers. Spouses and children made up the majority of these carers (34.2% and 24.1%, respectively), but in nearly a third of cases (32.9%) the main or only carer was a professional. Only one carer was a sibling and five were other relatives. Most carers lived with the dependent person (52, 69.3%) but 23 (30.7%) lived apart; information was not recorded for four carers.

Lifestyle

The majority of participants in the study did not admit to drinking any alcohol at all (163, 68.2%). Seventy six (31.8%) participants did drink alcohol, 25 (10.5%) drinking every day and 20 (8.3%) once a week or less. Of the daily drinkers 13 drank spirits, nine beer and five wine. The mean weekly alcohol consumption for the 76 drinkers varied from less than seven units for 44 participants to 51 units for one participant.

The majority of the respondents were non-smokers (184, 78.6%) of whom 85 had been smokers. The 50 smokers consumed between one and 40 cigarettes or cigars per day.

Mental state

Depression scores are shown in Table 2. Mild to severe depression was significantly more common among women than men ($P<0.02$). There was no significant association between depression scores and age. However, of the 116 patients aged 75–79 years 16.4% showed some degree of depression compared with 31.4% of the 35 patients aged 85 years and over. Medical records were available for analysis for 234 patients. 'Depression' was recorded in the medical notes of only three patients, but six were being prescribed antidepressants (either monoamineoxidase inhibitors or tricyclic drugs).

Seven patients were too demented to answer any of the basic demographic questions in the brief interview, and so were allocated mini-mental state examination scores of zero. Cognitive impairment was found in 4.6% of the total sample and possi-

Table 1. Reported rates of contact with neighbours and family.

	Percentage of respondents in contact with:		
Rates of contact	Neighbours ($n=235$)	Children ($n=219$)	Other family ($n=229$)
Never	*42.6*	*43.4*	*56.3*
Monthly to weekly	*14.0*	*29.2*	*14.8*
More than weekly, less than daily	*18.3*	*13.7*	*11.8*
Daily	*14.0*	*6.4*	*3.5*
More than once daily	*11.1*	*7.3*	*13.5*

n = total number of respondents.

Table 2. Frequency of depression scores.

	Percentage of respondents		
Depression score	Men ($n=82$)	Women ($n=154$)	Total ($n=236$)
Not depressed 0–7	*86.6*	*73.4*	*78.0*
Mild/moderate depression 8–17	*13.4*	*25.3*	*21.2*
Severe depression >17	*0.0*	*1.3*	*0.8*

n = total number of respondents.

ble impairment in 10.5% (Table 3). There was a more than six-fold increase in cognitive impairment between the youngest and oldest age groups but this difference did not reach statistical significance. There was only a two-fold increase in possible cognitive impairment across the same age range. There was no statistically significant difference in mini-mental state examination scores between sexes at either level of severity, nor were there significant differences in the scores of patients interviewed by the three fieldworkers who undertook the majority of the assessments. Cognitive impairment did not vary significantly with marital status or social class, although the proportion with mini-mental state examination scores of 25 and above was slightly lower among social classes 4 and 5.

Table 3. The prevalence of cognitive impairment with age.

Mini-mental state examination score	Percentage of respondents aged: 75–79 years (*n* = 114)	80–84 years (*n* = 85)	85–89 years (*n* = 26)	90+ years (*n* = 12)	Total (*n* = 237)
Cognitive impairment 0–18	*2.6*	*4.7*	*7.7*	*16.7*	*4.6*
Possible cognitive impairment 19–24	*8.8*	*11.8*	*11.5*	*16.7*	*10.5*
No cognitive impairment 25–30	*88.6*	*83.5*	*80.8*	*66.7*	*84.8*

n = total number of respondents.

Dementia was recorded in the records of only one of the 11 patients with mini-mental state examination scores of less than 19, and for only four patients in the whole sample, one of whom had a mini-mental state examination score above 25.

Only one patient had both cognitive impairment and a depression score above seven, while eight had possible cognitive impairment and depression scores above seven.

Discussion

The social networks of this population of elderly people were limited with approximately half of the participants living alone, nearly one third having either no living children or no living siblings and large minorities having only infrequent contact with family and neighbours. These findings suggest that this population had less social support than populations described in other studies[7,8] but confirm the trends towards smaller family size and the increasing proportion of elderly people living alone.[8,9] These results may reflect the particular characteristics of an inner city population in the late 1980s and probably do not suggest neglect of elderly people by family or community. A recent literature review suggests that families now offer more care than in the recent past,[10] but the numbers of elderly people have increased faster than the provision of community services.[11]

Nearly one in three of the study population had carers, two thirds of whom were family members. The problems of carers are a major source of psychiatric morbidity and recent research shows that psychiatric morbidity among carers can be reduced through the provision of supportive services.[12] Surprisingly the problems of carers are not an area of investigation specifically included in the terms of the new general practitioner contract.

The proportion of the study population living in warden-controlled accommodation was similar to the national average of 5%[13] but there were considerably fewer participants living in residential homes than would be expected from national figures.[11] This may be because some of those who are more disabled or demented have moved to residential homes or longstay hospitals on the edge of London.

There was little overlap between the populations with cognitive impairment and depression, since only nine out of 88 participants had scores below 25 on the mini-mental state examination and above seven on the depression scale. Of the 79 participants who were identified as being possibly cognitively impaired or depressed, or both, only six appeared to have been diagnosed already by their general practitioner. Inner city general practitioners appear less likely to record diagnoses of dementia and depression than their colleagues elsewhere.[14-16]

The results of this study therefore suggest that up to 30% of those aged 75 years and over might need further assessment by their general practitioner or a specialist on the basis of their scores on well-validated instruments for detecting depression and cognitive impairment administered by trained fieldworkers, depending on the criteria and cut-off scores used. The prevalence of depression in this study (22.0%) is slightly higher than that found in previous studies[17] and probably reflects the greater sensitivity of the instrument used, the majority of cases detected being mild to moderate in intensity.

There is little doubt that the treatment of severe depression is beneficial[18] but less is known about the treatment of previously undiagnosed mild and moderate depression in the elderly. More information is required from controlled trials before optimum management can be determined. Cognitive impairment is probably worth detecting because of its importance to the patient and carer alike, although no randomized trial focussing on the detection of dementia appears to have been reported. Several studies have shown beneficial effects of surveillance programmes among elderly people but it is unclear which elements of such programmes are important.[19]

This survey has also resulted in the detection of a small group of heavy drinkers. Little has been written on this topic[20] but elderly heavy drinkers are likely to have associated pathologies and may use services disproportionately.[21] Some of these individuals may have started drinking heavily later in life, in response to life events, and may be more suitable candidates for therapeutic intervention aimed at reducing their alcohol consumption than are lifelong heavy drinkers.[22]

General practitioners implementing the new contractual obligation to make annual assessments of elderly people will face a number of management dilemmas once they have collected information about their patients' support networks and mental state. They will need to develop ways of influencing the support networks of their elderly patients, particularly through provision of services to carers, and therefore will need close working relationships with local social services. Early diagnosis of cognitive impairment may be helpful in planning service provision, but it is unclear whether treatment for those with mild to moderate depression is worthwhile, and the value of intervention among elderly patients with high levels of alcohol consumption also remains uncertain. Further studies in these areas are essential if the annual assessment of elderly people required of general practitioners is to be worthwhile.

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