Prevalence and treatment of symptoms of rheumatism and arthritis among over 65 year olds: a community profile

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SUMMARY. A group of people aged 65 years and over was given a self-completion questionnaire requesting information about symptoms compatible with arthritis and rheumatism. Such symptoms were very common, more so in women than in men and were associated with marked degrees of disability and some dependency. The great majority of respondents said that they regarded their general practitioner as the best person for the treatment of such symptoms, but those with symptoms were slightly less likely than those without to suggest the general practitioner. Many people with symptoms had not reported them to any health service personnel, but had chosen to treat them themselves, suggesting a degree of scepticism about the effectiveness of professional treatment.

Introduction

ARTHRITIS and rheumatism are important causes of disability and discomfort in elderly people. The management of such cases is not simple, partly because no effective cure is available and partly because of the wide range of impairment suffered by patients. Few health districts have a coherent plan for the management of elderly sufferers despite or possibly because of these factors.

This survey was set up in order to draw up a profile of arthritis and rheumatism in the community in people over the age of 65 years living at home. The prevalence of self-reported symptoms and the degree of disability and dependency with which they were associated were established. Subjects' opinions about the best person to treat these symptoms were sought, and those who had been treated were asked about the success of the treatment.

Method

During February and March 1986 the Cardiff health survey was carried out to investigate health attitudes, knowledge, practices and beliefs in the community. A systematic random sample of 5145 people, one in 40 of those on the electoral register for the four Cardiff parliamentary constituencies, was drawn. Questionnaires were delivered and collected by 150 medical students in their first clinical year as part of their curricular activities in community medicine. Self-completion questionnaires were received from 4266 subjects (83%). Comparison of the study population with data for the same area from the 1981 census in respect of age, sex, marital status and social class showed the sample to be representative. Further details of the survey have been given elsewhere.[1] The present paper was based upon information gained from 712 people aged over 65 years old who were approached, although some information was missing for some people.

A general population estimate of the prevalence of the problem in this study group was made by asking the question 'Do you have, or have you ever had, stiffness or pain in your joints caused by arthritis or rheumatism?' This question was based upon a broad definition of arthritis because of the impossibility of defining the different forms in a simple questionnaire.[2]

Subjects indicated their degree of disability from arthritis and rheumatism using a nine-point scale originally described by Townsend.[3] This assigns a score to a series of activities considered to be important for normal daily living. These scores were added and grouped into 'none', 'mild', 'moderate' or 'severe' disability. The degree of dependency was measured according to the length of time individuals could manage on their own without help from others for their basic activities of daily living: no assistance required; assistance required more than once a week but less than once a day ('weekly' dependents); help required at least once a day ('daily' dependents); or 'constantly' dependent upon others.

Information was obtained from the individuals in the study on whom they considered the best person to go to for treatment of rheumatism and arthritis by asking the questions: 'Even if you have never had problems with your joints, who do you think is the best person to go to for treatment?' and 'If you have had joint problems who has actually tried to help you with them, or treated them?' Those who had been treated were asked how successful that treatment had been.

The main statistical methods used to analyse this data were the chi-squared test and Cox's test for trend. The latter is useful for determining trends between discrete groups of data such as in a severity classification. It assigns a weighting to each grade of severity or other arbitrary value, then using these weightings in a method analogous to the chi-squared test an observed and estimated value are calculated. The observed and estimated values are then checked to see if they are significantly significant. The final test criterion, c, is read from tables of the standard normal distribution, so that if $c > 1.96$ the probability that the null hypothesis is correct is less than 5%.

Results

Prevalence of symptoms

Table 1 shows respondents' experiences of symptoms associated with arthritis and rheumatism. Overall, 41% of men and 49% of women aged over 65 years admitted to a current problem. Table 1 also shows that there was no clear trend of symptoms with age, but a consistently higher proportion of women of all ages currently had symptoms compared with men ($\chi^2 = 3.8$,

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Table 1. Rheumatic and arthritic symptoms by age and sex of respondents.

Age and sex	n	Experience of symptoms (% of respondents)		
		Symptoms at present	Symptoms only in the past	Never had symptoms
Men				
65–69 yrs	84	*45*	*13*	*42*
70–74 yrs	94	*39*	*16*	*45*
75–79 yrs	65	*32*	*22*	*46*
80–100 yrs	36	*50*	*17*	*33*
Women				
65–69 yrs	116	*47*	*25*	*28*
70–74 yrs	105	*52*	*21*	*27*
75–79 yrs	64	*42*	*23*	*34*
80–100 yrs	58	*55*	*24*	*21*

n = total number of respondents. Data missing for 90 subjects.

df = 1, $P<0.05$). Overall, 16% of men and 23% of women said that they had previously had symptoms but did not at present. Therefore a total of 57% of men and 72% of women aged over 65 years had experienced symptoms of arthritis or rheumatism.

Table 2 shows the degree of functional disability among those who said they had symptoms and those who had not. Fourteen per cent of those with symptoms at present had a severe degree of functional disability compared with 7% of those who had had symptoms in the past. There was a clear relationship between current symptoms and higher severity of disability (Cox's test for trend, $c = 7.6$, $P<0.001$). Those who had had symptoms in the past but no longer had them showed no difference in severe and moderate disability rates. When level of disability for different age groups was examined there was a general trend for the older age groups with arthritis symptoms to be more disabled with 10% of the 65–69 year olds severely disabled, compared with 33% of the over 80 year olds.

Table 2 also shows the data for the degree of dependency. Arthritic symptoms did not have as close a relationship with dependency as with disability; in particular, there was little difference between those with previous symptoms and those who had never had them.

Treatment of symptoms

The study group was then asked who they considered the most appropriate person to treat arthritic or rheumatic symptoms (Table 3). Overall, 91% of the group considered the general practitioner the best person to go to for treatment, although those who had had experience of symptoms were less likely to suggest the general practitioner. Most of this difference was made up by those who preferred self-help. Two people suggested alternative therapists as the first choice, the others suggested conventional services.

Table 4 shows the respondents' opinions about how effective treatment was for those who currently had or had previously had symptoms. Overall, only 50% of men and 51% of women who had had symptoms thought that treatment had been effective at all. An interesting group were those with symptoms who had not sought treatment — 33% of men and 40% of women with symptoms. There was a general trend for older people never to have been treated but this reached significance only for men (men, $c = 2.1$, $P<0.05$; women, $c = 1.6$, not significant). The proportion who had had no treatment were not just those who

Table 4. Respondents' opinions of effectiveness of treatment by age and sex for those with symptoms.

Age and sex	n	Effectiveness of treatment (% of respondents)			
		Completely better	Improved	No effect	Not treated
Men					
65–69 yrs	49	*2*	*55*	*20*	*22*
70–74 yrs	52	*2*	*50*	*15*	*33*
75–79 yrs	35	*9*	*34*	*17*	*40*
80–100 yrs	24	*0*	*42*	*13*	*46*
Women					
65–69 yrs	83	*5*	*52*	*12*	*31*
70–74 yrs	77	*0*	*51*	*6*	*43*
75–79 yrs	42	*2*	*43*	*12*	*43*
80–100 yrs	46	*4*	*41*	*9*	*46*

n = number of respondents who had experienced symptoms.

Table 2. Degree of disability and dependency by respondents' experiences of rheumatic and arthritic symptoms.

Experience of symptoms	n	Disability (% of respondents)				n	Dependency (% of respondents)			
		None	Mild	Moderate	Severe		None	Weekly	Daily	Constant
Symptoms at present	290	*15*	*54*	*17*	*14*	271	*80*	*10*	*5*	*4*
Symptoms only in the past	131	*34*	*53*	*7*	*7*	120	*90*	*7*	*2*	*2*
Never had symptoms	212	*52*	*36*	*5*	*7*	205	*89*	*4*	*3*	*3*

n = total number of respondents. Data missing for 79 subjects (disability), 116 subjects (dependency).

Table 3. Respondents' opinions of the best person to treat rheumatic and arthritic symptoms.

Experience of symptoms	n	Best person to treat symptoms (% of respondents)						
		GP	Self	Family	Hospital doctor	Health visitor	Chemist	Alternative therapist
Symptoms at present	289	*88*	*8*	*2*	*1*	*<1*	*<1*	*<1*
Symptoms only in the past	135	*91*	*7*	*0*	*1*	*1*	*0*	*0*
Never had symptoms	226	*95*	*1*	*3*	*1*	*0*	*0*	*<1*

n = total number of respondents. Data missing for 62 subjects.

were relatively mobile; 45% of those with no disability and 33% of those with severe disability had had no treatment.

Those who had been treated were then asked whose treatment helped most (Table 5). Seventy eight per cent of these men and 75% of these women found the general practitioner most effective, self-help came next with 10% of both men and women finding it most effective, the hospital doctor was the third most effective, mentioned by 9% of men and 7% of women. There were no clear trends for differences with age. Other forms of treatment were not commonly undertaken, although nine patients (4%) had found alternative or private treatment the most effective.

Discussion

A major national study of disability has recently shown that musculoskeletal disorders are the commonest *International classification of diseases* chapter causing disabilities and that arthritic and rheumatoid symptoms are responsible for the great majority of such cases.[4]

This survey found a current prevalence of symptoms of arthritis and rheumatism of 41% in men and 49% in women over 65 years old, thus confirming that such symptoms are very common in older people and commoner in women than in men.[4,5,7,8] A further fifth of older people had previousy had symptoms which were currently in remission, thus emphasizing the fluctuating nature of this problem.

Functional disability was increased for the individuals with symptoms and this was independent of age, but dependency on others was not so closely related to the presence of symptoms. So, although arthritic symptoms are associated with reductions in function this is not to such an extent that complete loss of function and hence dependency results.

With regard to treatment the great majority of individuals considered the general practitioner to be the best person to obtain treatment, but those who had experience of arthritis and rheumatism were significantly less likely to suggest the general practitioner than those who had never had symptoms. The main alternative was self-help. Few other methods of therapy were suggested.

The large proportion of people who stated that they had not had treatment for their symptoms (33% of men and 40% of women) presumably reflect a group which had not sought help, as most of them could identify the general practitioner as the initial source of help for alleviation of their problem. This suggests that a proportion of elderly people with symptoms either do not regard the symptoms as important enough to take to the general practitioner or do not believe that any therapy will be effective. The fact that one third of those with a severe degree of disability had not had treatment, suggests that the latter argument is more likely.

When only those who had had symptoms were questioned about the effectiveness of their care, older people were less likely than younger ones to have had effective treatment. In addition, an increasing proportion of the very elderly had not had any treatment at all. This suggests that very old people may regard even quite severe symptoms as normal for their age and consequently untreatable.

These figures suggest that for the great majority of older people the care of arthritis is seen as a non-specialist task, often left to self-medication and often not reported or felt worthy of treatment. There is a need for much more health promotion to be directed towards older people and for the management of arthritis and rheumatism to be better coordinated if this situation is to be improved.

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Table 5. Most effective source of treatment by age and sex for those treated.

	Most effective source of treatment (number of respondents)						
Age and sex	GP	Self	Hospital doctor	Physio-therapist	Osteo-path	Other[a]	Total
Men							
66–69 yrs	22	4	4	0	0	2	32
70–74 yrs	30	3	2	0	0	1	36
75–79 yrs	12	2	3	0	0	0	17
80–100 yrs	12	1	0	0	0	0	13
Women							
65–69 yrs	42	6	5	1	1	1	56
70–74 yrs	28	5	4	3	2	1	43
75–79 yrs	19	2	1	0	0	1	24
80–100 yrs	20	1	0	0	0	2	23

[a] Includes chemist, herbalist, acupuncturist, private rheumatologist, direct outpatient visit to orthopaedic clinic or rheumatic clinic.