PRACTICE OBSERVED

Practice Research

Low levels of ill health among elderly non-consulters in general practice

SHAH EBRAHIM, ROBERT HEDLEY, MICHAEL SHELTON

Abstract

The characteristics of random samples of elderly patients (over 65 years of age), designated as consulters (n=200) and non-consulters (n=196), in a group general practice were compared using a postal questionnaire that was validated by comparison with findings by general practitioners in a random sample of 58 responders. A response rate of 80% was obtained, and all non-responders were visited by their general practitioner. The questionnaire had a sensitivity of 79% and a specificity of 82%, when compared with general practitioner findings. The use of hospital and social services by non-consulters was low in this practice. Measures of disability and state of health showed that non-consulters were a fit group of the aged.

Case finding for problems among elderly people should initially be confined to consulters, who have a high prevalence of problems. Non-consulters are a low risk group that can be assessed only with special effort and extra resources. Once an effective case finding system has been developed it might then be reasonable to consider ways of finding the few patients who have problems but do not consult their doctor.

Department of Health Care of the Elderly and Community Health, Nottingham University Medical School, Nottingham NG7 2UH
SHAH EBRAHIM, MSc, MRCGP, lecturer in health care of the elderly
MICHAEL SHELTON, MSc, MRCGP, general practitioner and senior lecturer in general practice

The Surgery, Borrowash, Derbyshire
ROBERT HEDLEY, MSc, MRCGP, general practitioner
Correspondence to: Dr S. Ebrahim.

Introduction

Case finding as a method of detecting problems among elderly people in general practice is attractive as an alternative to screening because it costs less. Its feasibility depends on the proportion of elderly people who consult their general practitioner. Estimates vary from 93% to 66% a year.¹⁻⁴

Even if consultation rates are high, non-consulters may form a "high risk" group and a surveillance system should therefore try to assess their problems and provide appropriate help. Williams reported the results of a study of 44 elderly non-consulters in general practice and assessed half of them to be in need of treatment.¹ He compared them with national statistics and showed an excess of men and single, widowed, and divorced people in his sample. Goldman reported that just over half of 25 elderly non-attenders required some action to be taken.² The results of these studies suggest that it is useful to try to trace and see non-attenders. Practices, however, vary widely in their attitudes to routine visiting of elderly patients, the numbers of elderly cared for, and the services offered. Making generalisations from practice to practice may therefore be inappropriate.

We decided to compare the characteristics of elderly patients (over 65 years) who were consulters and non-consulters in a group general practice. We thought that contrasting the number of non-consulters with national figures limited the comparisons to demographic variables and also might be invalid because of variation between the small area served by the practice and the general population. By comparing random samples of consulters and non-consulters using similar study methods we intended to produce estimates of difference in morbidity, functional ability, perceived need, and social variables.

Methods

We used a computerised age-sex register, supplied by the family practitioner committee, stratified by age (65-74, 75+) and sex.

frame. Random number tables were used to sample a page in the register and to pick each patient. Case notes were reviewed to check whether a person had consulted his general practitioner in the previous 18 months. People were then classified as consulters or non-consulters, and the sampling continued until 400 individuals had been selected. We aimed at obtaining 100 consulters and 100 non-consulters in each age band. Only 96 elderly non-consulters could be found, so they were all studied.

We developed a postal questionnaire that was piloted in the practice. This recorded information about residence, use of hospital and social services, functional ability, falls, and incontinence of urine. The Nottingham Health Profile was also used to assess each person's perceived health.⁵ The pilot study showed that our questionnaire was easy to fill in and only minor modifications to a question about place of residence were required. Questionnaires were sent to each person with a letter from a partner of the practice. A stamped addressed envelope was included for returning the questionnaire. Non-responders were sent a second form about six weeks later. The remainder were then visited by their general practitioners.

Fifty-eight people were selected from respondents and were also assessed by their general practitioners. The validity of the data on the questionnaire was then checked by comparing it with a semi-structured interview conducted by the general practitioner. The general practitioner was asked to record whether problems of mobility, incontinence, depression, or dementia existed and whether further action was required. Internal consistency was checked by comparing responses to similar questions in the questionnaire.

Non-parametric statistical tests of difference between consulters and non-consulters were made with the Statistical Package for Social Sciences.

Results

There were 1860 people aged over 65, and of these, 650 (35%) were over 75. Ninety six (15%) patients over 75 had not seen a general practitioner over the previous 18 months. A total of 396 questionnaires was sent out; 327 (83%) were returned initially, and a further 44 (11%) were sent back after a second mailing to the remaining 69 people. Three hundred and thirty two (84%) forms were adequate for analysis, and of the remaining 64 individuals, 26 (65%) had died or moved away, 15 (4%) forms were incompletely filled, two were returned by the post office as "not known," and two people did not receive their forms. Nine were unable (prior sight, three, dementia two, in hospital two, mental illness one, on holiday one) to fill in a form. Five forgot to return the form, and five refused to take part. The corrected response rate, allowing for those who had died or moved, was 90%. Visits by general practitioners to those who had not replied to either mailing produced only two non-consulters with problems: a woman with vaginal discharge and stress incontinence and a man with an exacerbation of chronic bronchitis. Two people strongly resented the intrusion of their privacy by a GP and visit.

Comparing the findings on the questionnaire with those from the general practitioners, where the form said a problem existed general practitioners found only the needed action in 15 patients and none in seven. Where no problem was mentioned on the form general practitioners found one in four patients and none in 32. Surprisingly, of eight people saying that they had urinary incontinence or difficulty with bladder control, none was thought by the general practitioner to have a problem. In six of these patients reported incontinence was associated with immobility, which was picked up by the general practitioner. The sensitivity and the specificity of the questionnaire were 79% and 82%, respectively. Internal consistency of the responses

TABLE 1—Use of services and characteristics of consulters and non-consulters

Service	Consulters (%)		Non-consulters (%)	
	65-74 (n=90)	75+ (n=87)	65-74 (n=86)	75+ (n=69)
Outpatients	22	18	12	4
Admission in past year	12	12	12	4
Home help in past week	5	29	2	0
Home help in past month	1	2	0	0
Day centre in past week	1	6	0	0
Sheltered residence	1	2	0	0
Living alone	23	41	24	39

TABLE 1—Functional problems experienced by consulters and non-consulters

Problem	Consulters (%)		Non-consulters (%)	
	65-74 (n=90)	75+ (n=87)	65-74 (n=86)	75+ (n=69)
Unable to go outdoors alone	11	9	0	0
Unable to climb stairs	12	9	0	0
Unable to walk	12	9	0	0
Use of stairer frame	20	9	1	1
Use of walking stick	22	9	1	1
Unable to do housework	6	18	1	0

TABLE 2—Perceived health problems (Nottingham Health Profile scores) among consulters and non-consulters. Figures are percentages with *n* scores in parentheses in a health area

Health area	Consulters (%)		Non-consulters (%)	
	65-74 (n=90)	75+ (n=87)	65-74 (n=86)	75+ (n=69)
Energy	40	42	44**	41
Emotion	37	32	34**	38†
Social isolation	34	50	22**	30†
Physical mobility	37	44	12**	28†

Comparison by Mann-Whitney U test. Age 65-74, consulters vs non-consulters, $p=0.001$, $p=0.001$, $p=0.001$, $p=0.001$. Age 75+, consulters vs non-consulters, $p=0.0001$, $p=0.0001$, $p=0.0001$, $p=0.0001$.

was high; two questions about urinary incontinence showed 91% agreement. There was 93% agreement between two questions about difficulty getting about outdoors.

Table 1 shows the use of hospital and social services, the proportion of elderly people living alone, and the residence of consulters and non-consulters by age groups. The differences in the use of hospital and social services between consulters and non-consulters were all statistically significant. The proportion living alone did not differ, but appreciably more of the users of general practitioner services were living in sheltered accommodation.

Table 2 shows the functional problems that patients experienced. Consulters were appreciably more handicapped than non-consulters. Table 3 shows perceived problems derived from the Nottingham Health Profile. All differences were statistically highly significant.

Discussion

In most practices it is likely that between 10% and 30% of the elderly people will not have been seen by a general practitioner in a year. Postal questionnaires are a cheap and easy method of surveillance for these people. People may be willing to reveal such problems on an anonymous form but reluctant to discuss them with a doctor, particularly if the patient is a woman and the doctor is a man. Levels of sensitivity and specificity, however, were acceptable for assessing differences between consulters and non-consulters.

The use of hospital and social services by non-consulters was low. Measures of disability and perceived state of health indicated that non-consulters are a fit group of the aged. In response to a question about the use of meals on wheels one person pointed out that he delivered them! Non-responders appeared to have low levels of disability or need for medical or social services.

This contrasts with Williams's findings, where health visitors thought that half of 44 people required some help or service, although 41 of these were either physically independent or had only partial restriction of mobility and were coping with any illness present. Probably the need for services varies among practices and would also depend on the type and severity of problems identified as well as the expectations of the patient and the person doing the screening. Goldman found that most of the non-attenders over 75 in his practice "were remarkably fit and not suffering unduly as a result of their lack of attention."² Undoubtedly, in this practice the greatest need is among consulters, the non-consulters forming a low risk group.

There is still a need for randomised trials of the efficacy of identifying medical problems and intervening for improving the quality of life and well being of the elderly. Studies have given equivocal results or have tested only limited interventions.^{1-3,6} Many practices, however, do some routine visiting of their elderly patients. Once we are satisfied that we are using an opportunistic approach with each consultation, then our energies could be turned to a questionnaire approach, which we have shown to be practicable, for the non-consulters. This practice would probably require more health visitor support to develop such a service.

Hart said: "If new scientific knowledge is to be applied we must have an appropriate structure of primary care, and doctors' shops dealing hastily conceived remedies to symptomatic customers will not do."⁷ We have to accept that with elderly people in particular the symptoms presented to the doctor may not be the only problem or even the most important one. We need to structure our consultations so that we seek out unmet need whenever we see our patients. Inquiring into problems with mobility, vision, hearing, falls, incontinence, depression,

and medication are relevant. Deliberately placing a patient into a functional health group, as suggested by Williams *et al.*, would help concentrate our minds on this.¹¹

We thank Drs Paveley, Stark, Doughty, Hunt, and Thomson and the health visitors, nurses, and practice staff at Borrowash and Chadderton for their help in this study, and the Department of Community Health for help with data processing and printing. SE was supported by a Wellcome Trust training fellowship.

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(Accepted 17 September 1984)

Measles immunisation: profit and loss in a general practice

G A C BINNIE

Abstract

A survey in one general practice of the occurrence of measles and of immunisation in patients who were born between 1963 and 1982 showed that immunisation not only brought some financial reward to the practice, but by preventing measles reduced the number of consultations related to measles by 40%. Although practice policy often entailed a home visit to immunise a patient, measles disease was three times more likely to require a visit.

It is surprising that, considering the efficacy and safety of measles immunisation, in Britain measles has not become the rarity it now is in the United States.

Introduction

Measles vaccine was introduced in the United Kingdom in 1968 and there is now an overall immunisation rate of about 50%.

7 Pedwell Way, Norham, Berwick upon Tweed TD15 2LD

G A C BINNIE, MRCGP, general practitioner

which has resulted in the number of notified cases of measles falling to about one third of the figures reported in the 1950s.¹ There is, however, great variation in immunisation rates, from over 80%, in some areas, to as low as 28%, in others.

In practice records of all immunisations and diseases have been kept since 1964; children who were born in 1963 were the first to be included in the initial campaign against measles in 1968. By comparing the incidence of measles in immunised and non-immunised children in the practice who were born over the past 20 years it was possible to assess the value of measles immunisation in terms of morbidity, workload, and finance.

Method

I am a single handed doctor in a rural practice of about 1300 patients; about 95% of the population live within eight miles of the surgery. The place and date of consultations are recorded for all patients, and it has been a policy of the practice for all children to be immunised as recommended by the Department of Health and Social Security. This has been helped by the enthusiasm of my health visitor and my receptionist, who use a manual age-sex register, and by educating the mothers in the practice to expect immunisation for all children. Public transport is poor, and if necessary home visits are made to immunise patients.

The records of 335 patients who were born between 1963 and 1982 were inspected, of whom 197 (59%) had been in the practice all their lives. Twenty seven records (8%) had no indication that the patient

either had had measles or been immunised. These patients had moved into the practice with incomplete records and often had not seen their previous general practitioner. There was no certain method of confirming the diagnosis of measles or the fact of immunisation in this group, and they were excluded from the study, leaving a total of 308 patients.

Sixty children were recorded as having had measles, but in 21 there was no record of the place of consultation or other details. The 39 complete records were inspected to determine the place and number of consultations and any complications. The place of immunisation of the 197 patients who had been in the practice all their lives was noted. On 1 January 1984 the fee for notifying infectious diseases was 25p and the fee for measles immunisation was £2.85.

Results

Table 1 shows the measles case and incidence of measles in five groups by years of birth; the increasing uptake of immunisation is evidence of greater parental acceptance, which coincides with a diminishing incidence of the disease, so that on average only one case of measles has been seen in this practice in each of the past five years. The 1978-82 group included three children who had had measles before they were old enough to be immunised. Three immunised

TABLE 1—Cases of measles in immunised and non-immunised children 1963-82

Year of birth	Immunised		Cases of measles		Not immunised		Cases of measles	
	Records available	No. %	No. %	No. %	Records available	No. %	No. %	No. %
1963-7	70	46	71	—	21	29	20	95
1968-72	133	83	82	61	30	18	20	100
1973-7	66	56	84	1	18	12	12	92
1978-82	56	56	84	1	18	12	12	92
Total	325	249	81	3	99	19	57	97

* Includes three children too young to be immunised routinely.
* Five complications: three otitis media and two chest infections.

TABLE 2—Consultation rate and financial return for immunised and non-immunised children

	Recorded consultations				Financial return			
	Surgery		Visit		Total		Immunisation fees (£4)	
	No of records available	Rate per patient	No	Rate per patient	No	Rate per patient	No	Rate per patient
Immunised	197	120	77	4	197	6	796.65	0.75
Non-immunised	99	18	0.5	47	0.4	1.7	106.45	14.25

children (1.5%) developed measles; the last was immunised in 1975, and the longest interval between immunisation and disease was eight years. Fifty nine children were not immunised; only two of these (3.4%) have not yet had clinical measles.

Table 2 shows that by comparing immunised and non-immunised patients over the 20 years there is an obvious financial advantage and a reduction in workload, with patients with measles requiring 40% more consultations and three times the number of visits as the children who required immunisation.

Discussion

Measles is a serious illness with a mortality of 0.2/1000 in the United Kingdom and up to 20% in the Third World;² morbidity in cases notified included neurological complications in 0.4%, and hospital admission in 1%; chest infections in 4% and otitis media in 5% (5% and 8% respectively in this study).

in the first three months of 1983, causing an additional workload at the busy time of the year.³

I thank my health visitor, Mrs P Collinson, for helping with the practice immunisation and Mrs F Colford for considerable secretarial help.

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(Accepted 21 August 1984)