

# Frequent attenders in general practice: medical, psychological and social characteristics

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**SUMMARY.** *A group of frequent attenders at a general practice surgery have been studied by comparison with a group of age- and sex-matched controls. Frequent attenders are distinguished by a high predisposition to neurotic illness (as measured by the 'N' score of the Eysenck personality questionnaire) and a high prevalence of affective neurosis. Poor past physical health was commonly found among the frequent attenders and comprised for the most part the common chronic physical illnesses. Of the social characteristics studied only marital breakdown was found significantly more often in frequent attenders than controls.*

## Introduction

A NUMBER of previous studies in general practice have examined the characteristics of patients with high consultation rates. Though consistent patterns are evident for the variation in consultation rates with age, sex and occupation, when other factors are examined the findings are much less consistent. One reason for the poor agreement between different studies is the method used to select frequent attenders. Since there are variations in consultation rates with age and sex, those studies which have taken a fixed cut-off point in consultation rate, above which patients are defined as frequent attenders, will select an excess of those age and sex groups who attend most frequently (for instance middle-aged women). The studies of Wamosher,<sup>1</sup> Semmence<sup>2</sup> and Hood and Farmer<sup>3</sup> fall into this trap, and only Courtenay's study<sup>4</sup> has attempted to select an upper percentile of frequent attenders for separate age and sex groups.

The use of controls is unusual and only the studies of Anderson<sup>5</sup> — a study of users and non-users of doctors rather than frequent attenders — and Hood and Farmer<sup>3</sup> have attempted a comparison between two groups with differing attendance patterns.

There are a number of recurring themes in these studies of frequent attenders, which may be grouped under the headings of social and family aspects, medical aspects and psychological aspects.

Colling's study entitled 'The sick family'<sup>6</sup> concentrates on the adverse social and psychological factors within a family which appear to render the family members more likely to consult. Such adverse social factors include the presence of disturbed individuals (Colling<sup>6</sup> cites those with alcoholism and schizophrenia), unemployment and loneliness. Kellner<sup>7</sup> is more concerned to identify dynamic processes within families which predispose individual family members to seek medical attention.

The presumption that adverse social circumstances predispose a person towards frequent attendance at the doctor is evident in the study of McArdle.<sup>8</sup> Social factors, particularly unemployment for men and loneliness in women, were seen as contributing factors in the presentation of more formal medical or psychological problems.

When the medical factors which underlie frequent attendance

are examined, it is clear that many studies agree that physical illness is a major factor. Courtenay found that 67 per cent of his frequent attenders had a 'major diagnosis' (44 per cent a physical diagnosis).<sup>4</sup> Similar figures are given by Wamosher (43 per cent with pure organic complaints),<sup>1</sup> who expresses surprise at his findings, presumably expecting trivial or non-organic conditions to predominate.

The third aspect in the analysis of frequent attenders — that of their psychological characteristics — can be considered in two ways. First, formal psychological illness constitutes a major cause of common ill-health and is likely to figure highly in groups of frequent medical attenders. Secondly, other aspects of psychological make-up, particularly personality and attitudes, may influence the way an individual perceives and reacts to his symptoms.

Among Wamosher's frequent attenders 12 per cent fell into an exclusively 'functional' group with a marked preponderance of females, but a mixed group (functional and organic) accounted for more than 50 per cent of the cases.<sup>1</sup> Among Semmence's chronic users 'mental' problems were the second commonest reason for consultation.<sup>2</sup> Those studies that have attempted to identify the characteristics of mental disorder among frequent attenders have commented on the overwhelming preponderance of psychoneurotic disorders, the high prevalence in females and the tendency for the disorders to be chronic.<sup>2,9</sup>

Non-medical aspects of psychological make-up, particularly personality, have been studied by several workers. Two studies have attempted to measure personality using standardized scales. Hood and Farmer<sup>3</sup> found higher mean scores on the neuroticism (N) scale of the Eysenck personality questionnaire among their frequent attenders, although the differences were not significant. Anderson,<sup>5</sup> comparing users and non-users of doctors, found higher mean scores on the somatic anxiety scale of the Cattell 16 personality factor (16PF) questionnaire, a dimension closely correlated with Eysenck's 'N' scale.

The present study compares a range of social, medical and psychological characteristics of a group of habitual frequent surgery attenders with those of a group of controls matched for age and sex. The 10 per cent most frequent surgery attenders were selected from decade age and sex groups on the basis of recorded surgery attendances over a four-year period, and compared with age- and sex-matched controls who were not frequent attenders. This method allowed their characteristics to be compared independently of the influence of age and sex.

The practice in which the study was undertaken is a two-man practice based in Whitehaven. When the study was undertaken, the practice consisted of three partners and a list of approximately 4000 patients. The practice is mainly urban with approximately one quarter of patients living in surrounding rural areas.

## Method

### *Selection of patients*

A sample of the practice population was taken by selecting every second medical record card (FP6/7). Patients were excluded if they were less than 20 years of age on 1 January 1975; or were newly registered with the practice after 1 January 1975; or had

incomplete records for the period 1 January 1975 to 31 December 1978.

Surgery attendance rates were determined for each patient selected by counting attendances recorded on the cards between 1 January 1975 and 31 December 1978. The names, addresses and dates of birth of these patients were entered into a register by decade age group, along with the four year consultation rates. Frequent attenders (cases) were selected as the 10 per cent most frequent attenders in each decade age group for each sex. An equal number of age- and sex-matched controls were selected by taking the next name in the register for each selected case, discounting patients with the same surname as their corresponding cases so as to avoid selecting related cases and controls.

An initial check on the lists eliminated a number of individuals who had withdrawn from the practice in the intervening period or whose records were incomplete or who were known to be absent from the practice. These were mainly young or early middle-aged males (14 individuals). A further four patients were eliminated because they were considered unsuitable on account of dementia (two male frequent attenders, one female frequent attender and one female control). Six men (five frequent attenders, one control) died in the intervening period.

An attempt was made to contact all remaining individuals by personal approach. It was explained that they were part of a random sample of practice patients and that the purpose of the study was to examine psychological aspects of health and illness. If the subject could not be contacted personally on two visits, the questionnaires were left at the house with a brief explanatory letter. A stamped addressed envelope accompanied each questionnaire. At four to six weeks non-respondents were reminded by telephone or letter.

*Medical, psychological and social characteristics*

Three methods were used to obtain information about the medical, psychological and social characteristics of cases and controls. First, the medical records of cases and controls were examined and a note made of past episodes of significant physical illness or psychological disorder. Individuals were then allocated to the categories, good, average, poor or very poor, in respect of both past physical health and past psychological health. Though such a method might be open to bias on account of a doctor's prior knowledge of a patient, a preliminary study had shown a high reliability (in excess of 90 per cent) when comparing the assessment of two doctors, one of whom was the patient's own general practitioner and one a doctor unfamiliar with the patient.<sup>10</sup>

Secondly, cases and controls were visited and asked specific questions about their housing, children and occupation. Thirdly, at the same interview, subjects were asked to complete two self-administered questionnaires, concerning psychological health and personality, and to return the completed questionnaire by post. The questionnaires used were the Eysenck personality questionnaire,<sup>11</sup> a structured and extensively validated personality scale, and Goldberg's general health questionnaire,<sup>12</sup> a questionnaire designed for the express purpose of identifying probable cases of minor affective neurosis in general practice surveys.

The Eysenck personality questionnaire provides scores on three individual personality scales and a fourth ('lie') scale. This last scale is intended to indicate the tendency on the part of the subject to dissimulate, or to bias his response in accordance with his expectation of the purpose of the questionnaire. The other three scales, E (extraversion/introversion), N (neuroticism) and

P (psychoticism) are clinically relevant scales derived by factor analysis.

The general health questionnaire gives a score between 0 and 60. Those individuals scoring 12 or more on the questionnaire are considered probable psychiatric cases, and the proportion of such high scorers can be used as an estimate of the prevalence of minor neurotic illness in a population. The general health questionnaire is designed to identify illnesses of recent onset and might tend to miss chronic cases. It is not designed to detect cases of psychosis, organic brain disorders or personality disorders.

The third indicator of psychological health comes from the assessment of past psychological health by examination of the medical record cards. This assessment was carried out without prior knowledge of the scores obtained on the Eysenck personality questionnaire and the general health questionnaire.

**Results**

The sample selected from the practice population consisted of 732 males and 759 females. Their age distribution and annual attendance rates are shown in Table 1. Response rates to the approaches were 80 per cent for both male and female frequent attenders, 75 per cent for male controls and 63 per cent for female controls. Complete data were available for 109 frequent attenders (55 males : 54 females) and 86 controls (41 males : 45 females) (Table 2). In order to ensure that the two groups were still adequately matched for age and sex, the mean ages of the groups were compared (Table 3). Only small and non-significant differences were found between the mean ages (males 1.5 years : females 2.2 years).

**Table 1.** Sample selected from the practice population, showing distribution of age and annual attendance rate.

| Age (years) | Males  |                             | Females |                             |
|-------------|--------|-----------------------------|---------|-----------------------------|
|             | Number | Mean annual attendance rate | Number  | Mean annual attendance rate |
| 20-29       | 133    | 2.1                         | 126     | 3.9                         |
| 30-39       | 152    | 2.4                         | 147     | 3.5                         |
| 40-49       | 135    | 2.5                         | 156     | 3.4                         |
| 50-59       | 145    | 3.5                         | 127     | 3.7                         |
| 60-69       | 109    | 3.3                         | 109     | 4.2                         |
| 70 plus     | 58     | 2.6                         | 94      | 3.6                         |

**Table 2.** Mean surgery attendance rates of frequent attenders and controls over four years (number of patients in parentheses).

| Age (years) | Males              |          | Females            |          |
|-------------|--------------------|----------|--------------------|----------|
|             | Frequent attenders | Controls | Frequent attenders | Controls |
| 20-29       | 7.0 (10)           | 1.5 (8)  | 8.6 (11)           | 1.7 (7)  |
| 30-39       | 8.9 (12)           | 1.0 (8)  | 9.5 (13)           | 1.6 (9)  |
| 40-49       | 8.8 (12)           | 0.9 (6)  | 11.0 (11)          | 1.3 (10) |
| 50-59       | 11.7 (8)           | 1.7 (7)  | 10.4 (8)           | 1.3 (11) |
| 60-69       | 11.5 (10)          | 1.3 (8)  | 10.2 (7)           | 1.3 (5)  |
| 70 plus     | 8.8 (3)            | 1.6 (4)  | 8.7 (4)            | 1.0 (3)  |

*Personality and psychological health*

Of the four scales of the Eysenck personality questionnaire only the N scale (neuroticism) was found to differ significantly between the frequent attenders and controls: higher mean scores

**Table 3.** Mean age of frequent attenders and controls.

|                             | Mean age<br>(years) | SD   |
|-----------------------------|---------------------|------|
| <i>Males</i>                |                     |      |
| Frequent attenders (n = 55) | 45.9                | 15.7 |
| Controls (n = 41)           | 47.4                | 16.6 |
| <i>Females</i>              |                     |      |
| Frequent attenders (n = 54) | 44.4                | 15.6 |
| Controls (n = 45)           | 46.6                | 14.6 |

SD = standard deviation.

**Table 4.** Eysenck personality questionnaire: mean scores for frequent attenders and controls.

|                                |      | Personality scales |       |                    |       |
|--------------------------------|------|--------------------|-------|--------------------|-------|
|                                |      | P                  | E     | N                  | L     |
| <i>Males</i>                   |      |                    |       |                    |       |
| Frequent attenders<br>(n = 55) | Mean | 2.75               | 10.25 | 11.74 <sup>a</sup> | 9.69  |
|                                | SD   | 2.20               | 5.10  | 6.15               | 4.25  |
| Controls (n = 41)              | Mean | 2.24               | 10.12 | 9.00               | 10.51 |
|                                | SD   | 2.09               | 4.60  | 4.64               | 4.47  |
| <i>Females</i>                 |      |                    |       |                    |       |
| Frequent attenders<br>(n = 54) | Mean | 1.94               | 11.31 | 13.20 <sup>b</sup> | 12.35 |
|                                | SD   | 1.76               | 4.79  | 6.14               | 4.41  |
| Controls (n = 45)              | Mean | 2.20               | 10.13 | 9.78               | 11.18 |
|                                | SD   | 2.40               | 4.80  | 5.45               | 4.41  |

Personality scales: P = Psychoticism; E = Extraversion/introversion; N = Neuroticism; L = Lie. <sup>a</sup>t = 2.39, P < 0.05 versus controls.<sup>b</sup>t = 2.9, P < 0.01 versus controls.

were found for both male and female frequent attenders than controls (Table 4).

Persons with high N scores may be described as anxiety-prone or by nature worriers. They are more likely to worry about their health or other problems in general and to develop neurotic illness, particularly anxiety or depressive disorders. Though modest elevations in terms of the figures for populations of psychiatric patients, these differences were significant.

The scores on the general health questionnaire were significant (P < 0.05) for both males and females and suggest a much higher prevalence of minor neurotic illness in male frequent attenders (47 per cent) than in their controls (12 per cent), and in female frequent attenders (43 per cent) than in their controls (18 per cent) (Table 5). Since frequent attenders have been excluded from the controls, these prevalence rates are

**Table 5.** Scores on the general health questionnaire for frequent attenders and controls.

|                    | General health questionnaire scores |     |
|--------------------|-------------------------------------|-----|
|                    | ≥12                                 | <12 |
| <i>Males</i>       |                                     |     |
| Frequent attenders | 26                                  | 29  |
| Controls           | 5                                   | 36  |
|                    | $\chi^2 = 10.28, \text{d.f.} = 1$   |     |
| <i>Females</i>     |                                     |     |
| Frequent attenders | 23                                  | 31  |
| Controls           | 8                                   | 37  |
|                    | $\chi^2 = 5.92, \text{d.f.} = 1$    |     |

Yate's correction used for chi-square tests.

underestimates for a random sample of the practice population. Correcting these figures for a random sample of the practice gives probable prevalence rates of 17.6 per cent (males) and 20.3 per cent (females).

Casting the net wide, 36 out of 55 (65 per cent) male frequent attenders and 30 out of 54 (60 per cent) female frequent attenders had general health questionnaire scores of 12 or more or a history of significant psychological disorder or have been assessed as having poor or very poor past psychological health. This compares with six out of 41 (15 per cent) of male controls and 12 out of 45 (27 per cent) of female controls.

If only individuals with high general health questionnaire scores were considered, the affective neuroses — anxiety and depressive illnesses — made up the bulk of the diagnostic categories. A similar pattern was found for the distribution of diagnosis in those individuals rated poor or very poor according to past psychological health, with the addition of three patients with schizophrenia (two frequent attenders, one control). The general health questionnaire is of course not designed to identify cases of psychosis.

The pattern that emerges among frequent attenders is one of a high predisposition to and a high prevalence of neurotic disturbances in the form of anxiety states and depressive disorders. There are important differences between the sexes, with alcohol playing an important part in the psychiatric morbidity of male frequent attenders, usually in association with other overt psychiatric disturbances, especially anxiety and phobic states. Whereas in male frequent attenders anxiety states and depressive disorders occur with equal frequency, among female frequent attenders depressive disorders are found twice as often as anxiety states.

**Table 6.** Past physical health of frequent attenders and controls.

| Past health    | Frequent attenders               | Controls | Total |
|----------------|----------------------------------|----------|-------|
| <i>Males</i>   |                                  |          |       |
| Average/good   | 27                               | 37       | 64    |
| Poor/very poor | 28                               | 4        | 32    |
| Total          | 55                               | 41       | 96    |
|                | $\chi^2 = 16.1, \text{d.f.} = 1$ |          |       |
| <i>Females</i> |                                  |          |       |
| Average/good   | 30                               | 41       | 71    |
| Poor/very poor | 24                               | 4        | 28    |
| Total          | 54                               | 45       | 99    |
|                | $\chi^2 = 13.6, \text{d.f.} = 1$ |          |       |

#### Physical health of frequent attenders and controls

The study has provided an assessment of past physical health, along with a list of significant physical illnesses experienced by each frequent attender and control. These findings are summarized in Table 6.

Among male frequent attenders 51 per cent were assessed as having poor or very poor past physical health, compared with 10 per cent of controls. Among females, 44 per cent of frequent attenders were assessed as having poor or very poor past physical health, compared with nine per cent of controls.

Cardiovascular disease, most commonly ischaemic heart disease in men and hypertension in women, is the commonest category of physical illness encountered in male frequent attenders; 15 men (27 per cent of male frequent attenders) were reported as having suffered a cardiovascular disorder. Of the 28 male frequent attenders assessed as having poor or very poor past physical health, 13 had suffered a cardiovascular disorder. Among female frequent attenders, the proportion of individuals

who had suffered a cardiovascular disorder (14 per cent) was half that of the males.

As might be expected, urogenital disorders, particularly menstrual and other gynaecological disorders, were the most commonly encountered physical disorders in the female frequent attenders.

These are the common chronic or recurring physical conditions found in the population in general, and the distribution of physical illness in frequent attenders can be seen as a concentrate of chronic physical illness in the population as a whole.

### Social aspects

The marital status of frequent attenders and controls is shown in Table 7. If the two categories 'separated' and 'divorced' are pooled, the figures for 'marital breakdown', though not significantly different for frequent attenders and controls when males and females are considered separately, are significantly different when the sexes are combined (chi-square = 5.3, d.f. = 1,  $P < 0.05$ ). The average number of children of married cases and controls was similar for both sexes.

At interview each individual was asked about housing and was allotted to one of four categories: rented (private), rented (council), owner-occupier, and other. The high proportion in council housing reflects the pattern of housing for the area as a whole (Table 7). The differences between frequent attenders and controls are small and insignificant.

**Table 7.** Marital status and housing of frequent attenders and controls.

|                       | Males              |          | Females            |          |
|-----------------------|--------------------|----------|--------------------|----------|
|                       | Frequent attenders | Controls | Frequent attenders | Controls |
| <i>Marital status</i> |                    |          |                    |          |
| Single                | 7                  | 7        | 4                  | 3        |
| Married               | 40                 | 29       | 39                 | 39       |
| Widowed               | 1                  | 4        | 7                  | 3        |
| Divorced              | 7                  | 1        | 2                  | 0        |
| Separated             | 0                  | 0        | 2                  | 0        |
| <i>Housing</i>        |                    |          |                    |          |
| Rented (council)      | 40                 | 25       | 27                 | 23       |
| Rented (private)      | 1                  | 1        | 1                  | 1        |
| Owner-occupier        | 12                 | 14       | 24                 | 21       |
| Other                 | 2                  | 1        | 2                  | 0        |

### Discussion

The outstanding characteristic of frequent attenders at the surgery is the high prevalence of both physical and psychological chronic illness, which were found with a roughly equal prevalence of a little under 50 per cent. These findings are generally in accord with previous studies.<sup>1,2,4,8</sup>

The physical illness found in frequent attenders approximates to a concentrate of common chronic or recurrent illness. The psychological disorders comprised mainly the affective neuroses — anxiety states and depression — in individuals predisposed by personality. Important sex differences were evident with depression much more common in women and alcoholism more common in men. In the group of frequent surgery attenders poor physical and psychological health in the past were commonly found together, whereas in the controls such an association was never found.

In general the social characteristics of frequent attenders and controls were found to be similar, with the exception of marital breakdown which was much more common in frequent attenders of both sexes. Psychological disorders, especially alcoholism in men and depression in women, are common findings in separated and divorced frequent attenders.

It would be wrong to consider frequent surgery attenders as a homogenous group. Nevertheless, they constitute a special group in which is concentrated a wide range of common pathology — medical, psychological and social. In many individuals these pathologies appear to cluster in a complex relationship. Since these 10 per cent of patients generate over 30 per cent of surgery consultations, they are worthy of careful consideration in any study of the workload of general practice.

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## Language in schizophrenia

Experimental research into language in schizophrenia has been guided traditionally by two main assumptions: that language disturbance is widespread among schizophrenic patients and easy to detect and measure, and that schizophrenia is fundamentally a cognitive disorder in which language disturbance is part of an inability or failure to regulate one's thoughts. However, recent findings have challenged both assumptions. Two experiments are reported, the first based on monologues, the second on conversations, which were subjected to reconstruction and discourse analyses. Schizophrenic material is found to be harder to follow than normal, and is characterised by poor reference networks and inappropriate use of questions. While some of the results are specific to the schizophrenic group, others are found also in affective patients, but none is the product of formal thought disorder. The central problem lies less in cognition than in the social process of taking the role of the other.

Source: Rutter DR. Language in schizophrenia. The structure of monologue and conversations. *Br J Psychiatry* 1985; **146**: 399-404.