

Medically unexplained symptoms in frequent attenders of secondary health care: retrospective cohort study

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Abstract

Objective To estimate the prevalence of medically unexplained symptoms in patients who most frequently attend outpatient services.

Design Retrospective cohort study over three years with review of case notes.

Setting Secondary care services in the South Thames (West) NHS region.

Participants Outpatient attenders with new appointments in 1993.

Main outcome measures Number of outpatient appointments, and number of consultation episodes for medically unexplained conditions.

Results Medical records of 361 of 400 sampled frequent attenders were examined, and 971 consultation episodes were recorded. Ninety seven (27%) had one or more consultation episodes in which the condition was medically unexplained; 208 (21%) of the 971 consultation episodes were medically unexplained. Abdominal pain, chest pain, headache, and back pain were commonly found to be medically unexplained.

Conclusions Medically unexplained symptoms present in most hospital specialties and account for a considerable proportion of consultations by frequent attenders in secondary care.

Introduction

A small proportion of patients attending outpatient clinics in secondary care attend frequently and are responsible for a high proportion of healthcare costs.^{1 2} Early studies showed that many such patients consult for physical symptoms which, after extensive investigation, remain medically unexplained.³ These symptoms occur commonly in all medical settings, yet they remain poorly understood and are often persistent and disabling.⁴ There have been few studies of frequent attenders in secondary care. Previous work has been limited to single specialties and teaching hospitals⁵ or has focused on inpatient admissions.⁶

We examined the outpatient consultations of frequent attenders in all the general hospitals across one regional health authority and included both medical and surgical specialties. We estimated the prevalence of medically unexplained symptoms in those patients who most frequently attend outpatient services.

Methods

South Thames (West) NHS region has recorded outpatient hospital activity in computerised form since 1991 and has a complete dataset for each acute sector provider since 1992. The system gives patients a unique identifier and records details of sex, age, and each outpatient referral (including the specialty and dates of subsequent appointments). To identify frequent attenders we defined a population in which potential subjects were all patients in the region aged 18-65 years who had a new appointment to secondary medical or surgical care in 1993 (index appointments). Index appointments were categorised according to specialty. We excluded specialties for specific conditions, such as obstetrics (but not gynaecology) and oncology, from the sample because referred patients were unlikely to be presenting with medically unexplained symptoms. Psychiatry was also excluded as in this case medically unexplained symptoms would be the reason for referral.

We followed patients with index appointments over a three year period to assess their overall service use within the region by counting all outpatient appointments. The population was stratified by two age groups (18-45 years and 46-65 years) to account for the expected increased rates of consultation in the older age group. Frequent attenders were then defined as the top 5% of outpatient users in each age group.

We contacted all NHS trusts in the region and requested permission to examine the case notes of the identified frequent attenders. From the patients of those trusts that agreed to participate, we used a computer program to select randomly 200 from the total in each age group (24 489 aged 18-45 years; 36 743 aged 46-65 years) for inclusion in the study. The study was approved by the local research ethics committee.

A consultation episode was defined as all appointments after referral and was completed after discharge, death, or referral elsewhere. The case notes were examined by a medically qualified investigator (SR) and information was obtained on the number of referrals for each patient and subsequent appointments. We recorded details of the reason(s) for referral and identified investigations and treatment received at each appointment. Finally, for each consultation episode the diagnosis was noted (if given) and it was determined whether the episode was medically unexplained, mixed (evidence of both physical and psychological disorder),

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Table 1 Characteristics of 361 frequent attenders by age group. Figures are number (percentage) of patients

	18-45 years (n=189)	46-65 years (n=172)
Sex:		
Men	52 (28)	77 (45)
Women	137 (73)	95 (55)
Employment:		
Manual	30 (16)	39 (23)
Non-manual	81 (43)	37 (22)
Housewife	50 (27)	31 (18)
Retired/unemployed	28 (15)	65 (38)
Marital status:		
Single	59 (31)	22 (13)
Married/cohabiting	115 (61)	122 (71)
Separated/divorced	12 (6)	11 (6)
Widowed	3 (2)	17 (10)
Ethnic group:		
White	154 (82)	143 (83)
Non-white	35 (19)	29 (17)

or factitious. Criteria for a medically unexplained episode were that the patient presented with physical symptoms, the patient received investigations for these symptoms, and the investigations and clinical examination revealed no abnormality or only abnormalities that were thought to be trivial or incidental.

A symptom was designated as definitely medically unexplained if there was evidence of a thorough investigation of the symptoms, with negative results, and either psychosocial reasons were suggested for the presentation or a diagnosis was made that implied a medically unexplained syndrome (for example, fibromyalgia, irritable bowel syndrome, etc). We used an intermediate category, probably medically unexplained, when there was an absence of evidence that a defined organic disease caused the symptom but uncertainty was expressed about the diagnosis or investigations were inconclusive. We evaluated this method in a pilot study involving both liaison psychiatrists and physicians and found it to have good interrater reliability (κ 0.76-0.88).⁷ It has also been used with similar reliability in a study of hospital admissions.⁸ For the purposes of analysis we regarded those episodes categorised as definitely or probably unexplained as medically unexplained. The prevalence of medically unexplained consultation episodes was calculated according to referral complaint and specialty.

Results

Of the 12 NHS trusts we contacted in the region, only one refused examination of its medical records. A total of 361 (90%) sets of case notes were traced and obtained for examination: 189 (95%) for patients aged 18-45 years and 172 (86%) for patients aged 46-65. Of the remaining 39 sets, six were unavailable because of ongoing litigation or complaint, nine of the patients were dead, and 24 were recorded as missing. In total 971 consultation episodes were recorded. The median number of referrals (consultation episodes) over the three year period was 2 (range 1-8) and the overall median number of appointments was 18 (range 13-45).

Table 1 shows the demographic characteristics of the frequent attenders. Of the 361 patients, 97 (27%) had

one or more medically unexplained episodes. Of the 971 consultation episodes, 164 (17%) were "definitely" medically unexplained, 44 (5%) were "probably" medically unexplained, 30 (3%) were mixed episodes, and 1 (0.1%) was recorded as a factitious disorder.

Table 2 shows the referral complaints divided into 30 categories and the number of consultation episodes stratified by age and the percentage that were medically unexplained. For those frequent attenders with gastrointestinal complaints, patients in 73% of the consultation episodes for abdominal pain or a change in bowel habit had medically unexplained symptoms. For over a quarter of the consultation episodes for pelvic pain there was no medical explanation, and when patients aged over 45 were excluded this figure rose to 35%. Medically unexplained symptoms were common among all of the neurological complaints, accounting for 63% of headache referrals and 27% of referrals for seizures. This was also the case for musculoskeletal problems and in particular back pain, with 69% of referrals remaining unexplained.

Table 2 Prevalence of medically unexplained episodes in frequent attenders categorised by referral complaint (stratified by age). Figures are number of medically unexplained symptoms/number of referrals

Referral complaint	18-45 years	46-65 years
Gastrointestinal complaints:		
Abdominal pain/change in bowel habit	25/30	14/23
Others	1/21	0/26
Gynaecological complaints:		
Pelvic pain	7/20	0/6
Others	3/50	1/12
Neurological complaints:		
Seizures	2/7	1/4
Headache	13/18	4/9
Others	2/4	1/10
Musculoskeletal complaints:		
Back pain	14/19	15/23
Joint pain	4/21	6/39
Fatigue	6/11	2/8
Others	4/23	6/29
Breast complaints:		
Breast lump	0/10	0/24
Mastalgia	4/4	0/1
Urinary complaints:		
Incontinence	2/5	5/20
Others	0/5	0/5
Endocrine complaints:		
Diabetes	0/9	0/28
Others	0/34	0/27
Respiratory complaints:		
Shortness of breath	1/8	1/6
Others	1/11	1/11
Cardiovascular complaints:		
Chest pain	25/31	15/52
Others	1/13	0/18
Ear/nose/throat complaints:		
Rhinitis	1/5	0/2
Sinusitis	1/9	0/1
Others	5/30	6/26
Dental complaints		
	1/11	0/3
Skin complaints:		
Eczema	0/4	0/4
Psoriasis	0/11	0/2
Others	0/30	0/23
Blood disorders		
	0/10	0/9
Eye complaints		
	3/20	4/36

Table 3 Prevalence of medically unexplained episodes in frequent attenders categorised by specialty.* Figures are number of medically unexplained symptoms/number of referrals

Specialty	No
General surgery	19/115
Gynaecology	19/110
Ear, nose, throat	24/88
Ophthalmology	9/77
General medicine	8/76
Rheumatology	22/67
Dermatology	1/62
Gastroenterology	32/59
Orthopaedics	15/50
Neurology	20/40
Chest medicine	6/39
Cardiology	13/38

*Data shown for 12 specialties receiving most referrals.

Table 3 shows the prevalence of medically unexplained symptoms in frequent attenders among specialty outpatient clinics. Medically unexplained symptoms occurred commonly in all of the specialties shown with the exception of dermatology. Gastroenterology and neurology had a particularly high rate, with at least 50% of referrals remaining medically unexplained.

Discussion

In this study of medically unexplained symptoms we found that such symptoms are common in patients who frequently attend several secondary care specialties. Most previous studies on this issue have focused on primary care settings. By looking at secondary medical care, we have used a population that has been extensively investigated, thus affording a greater degree of confidence in the patients' diagnoses. By including different hospitals and a range of specialties we were able to capture a comprehensive record of healthcare usage, which is important as these symptoms often involve more than one bodily system and patients may be attending different clinics. The principal methodological limitation was the retrospective use of medical records for data collection. However, the most important information for the purpose of this study—details of investigations and final diagnosis—are generally well documented in hospital case notes. A further limitation is that although the reliability of this method of recognising medically unexplained symptoms has been shown,⁷ there has been no evaluation of its validity. With the exception of one hospital trust there was a good representation of the health region studied, and the 90% collection rate for records is comparable with that in previous studies.^{9 10}

We have shown that medically unexplained symptoms account for a substantial proportion of the secondary care usage by frequent attenders. This is the case for most hospital specialties. Complaints that often remain medically unexplained in primary care and in new patients attending clinics—abdominal pain, headache, and low back pain—are also likely to remain medically unexplained in frequent attenders. Van Hemert et al estimated that over half of all patients with new appointments in secondary medical care received a doubtful, or no, medical diagnosis.¹¹ Hamilton et al reported rates of medically unexplained

What is already known on this topic

Frequent attenders in all medical settings account for a disproportionate amount of healthcare resources

In primary care, frequent attenders commonly present with symptoms that remain medically unexplained

What this study adds

Medically unexplained symptoms are also common among frequent attenders in secondary care and present in most specialties

Symptoms that are particularly likely to remain unexplained in this group include gastrointestinal complaints, back pain, and headache

symptoms of 53%, 42%, and 32% in gastroenterology, neurology, and cardiology respectively⁹; and this finding was confirmed by Nimmuan et al, who looked at seven specialist clinics in one hospital in which 51% of new patients were diagnosed as having medically unexplained symptoms.¹⁰ Our figure of 21% of all consultation episodes in this particular sample shows that while some patients with unexplained symptoms are discharged from secondary care after their assessment, many continue to attend, are often referred on to another specialty, and become frequent attenders in secondary care.

Medically unexplained symptoms are associated with high rates of disability.^{12–14} Patients report poorer levels of physical and social functioning than those who receive a medical diagnosis and spend between 1.3 and 4.9 days in bed each month compared with patients with major medical problems, who average one day or less.^{12 15} Despite their increased use of healthcare resources, the management of patients with unexplained symptoms is perceived as unsatisfactory from the perspective of both the patient and the physician.¹⁶ Also, they may undergo extensive investigation and medical treatment, which may not only be inappropriate but also hazardous.¹⁷ There is evidence that iatrogenic factors such as inappropriate information, overinvestigation, and overtreatment are common in the management of patients with medically unexplained symptoms,^{18 19} and avoidance of these factors forms the mainstay of most advice on their management.²⁰ In primary care medically unexplained symptoms and their management have been considered a priority.^{21–23} We have shown that medically unexplained symptoms account for a considerable proportion of presentations in frequent attenders in secondary care and conclude that these patients should be considered a focus for attention.

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