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Frequent attendance in family practice and common mental disorders in an open access health care system.

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Abstract

Frequent attenders in family practice are known to have higher rates of mental disorder. However little is known about specific psychiatric disorders and whether this behavior extends to specialist services, in an open access fee-for-service health care system.

Methods: 1060 patients from 46 family practices completed the Patient Health Questionnaire and the Client Service Receipt Inventory. During the consultation, family practitioners blind to the questionnaire responses rated the severity of mental health and physical disorders. The 10% of patients with the highest number of six-month consultations in six age and sex stratified groups were defined as frequent attenders.

Results: After adjustment for sociodemographic variables, physical health and other psychiatric diagnoses, patients with a somatoform disorder were more likely to be frequent attenders, with a multi-adjusted odds ratio of 2.3 (95% CI: 1.3-3.8, p=0.002).

Conclusion: when adjusting for confounders, among the four psychiatric diagnoses investigated only somatoform disorders remain significantly associated with frequent attendance. Physical health and chronic disease were no longer associated with FA which does not support the hypothesis that in an open access fee-for-service system, patients will consult for a wider range of health problems. Greater investigation into unexplained somatic symptoms could help reduce the frequency of attendance in both primary and secondary care, as FA appears to be a general health-seeking drive than extends beyond family practice.

Key words: frequent attenders, family practice, psychiatric disorders, health service utilization

Introduction

Frequent attendance (FA) in primary care is of particular concern as it may reflect unmet patient needs [1], can lead to 'heartsink' in health care providers and places a significant burden on health resources [2,3]. The threshold for FA (number of visits or percentage with highest attendance rates) and the time range varies considerably between studies [2,4-7], leading to wide variations in rates, ranging from 2.7% of patients in a UK family practice [2] to 59.6% in Italy [8]. FA is higher in women [2,3,9] and in higher age groups [2,3], leading to a consensus definition of FA as the 10% age- and sex-stratified most frequent attenders (FAs) [4,7,10].

FAs tend to have more socio-economic problems such as lack of social support, social isolation, and unemployment [7]. They show more family dysfunction [11], and are more likely to be divorced or widowed [7,9]. They are clinically heterogeneous exhibiting higher rates of non disease-specific physical and chronic illness [7,11-13]. Higher rates of FA are found in association with mental illness [11,14-19], the likelihood of FA increasing with anxiety disorder by a factor of 1.14 in a multi-adjusted model [19]. FAs also have higher rates of depressive symptoms [15,16,20,21], as well as somatoform symptoms or disorders [20-23]. Comorbid somatic and psychiatric symptoms would be more frequent in FAs [24].

It is likely that the profile of FAs will vary from one health care system to another depending on the burden FA behavior places on resources. According to Anderson and Newman's model, access and use of health care services is a function of enabling factors such as the ease of access to and availability of other types of care, predisposing factors such as socio-demographic characteristics and beliefs and finally need, both perceived and evaluated [1].

FA has been studied mainly in gatekeeping primary care systems where FAs present a substantial burden on the clinical workload which may lead patients to withhold from visiting their FP [3,19]. There is a gap in the literature concerning fee-for-service health care systems.

Patients in such systems will have the choice of GP and between primary and secondary care, and will thereby self-select themselves for FP care rather than consulting the FP as a gateway to specialized services. It is thought that the FPs' attitude will make them less likely to withhold from consulting which will influence the type and diversity of symptoms for which they will consult.

In France, FPs are paid on a fee-for-service basis, directly by the patient. They work mainly alone with no ancillary staff. Up until 2005 they had no patient lists or gate-keeping role and patients were able to directly consult any FP or specialist as often as wanted with the same level of reimbursement by the state [25]. There were no checks or incentives from the national health system for FPs to reduce the frequency of attendance. This setting has allowed us to examine the association between frequent attendance behavior and specific common mental disorders in an open fee-for-service system, and to study whether FA is specific to family practice or whether it extends to other areas of health care which has seldom been explored before [12]. The main hypothesis is that FAs in the fee for service system will be consulting for a wider range of health conditions with a lesser prominence of mental illness than in more structured health care organizations.

Methods

The study was carried between October 2003 and April 2004, in a sample of FPs practicing in two urban and one semi-rural psychiatric catchment area, in and around the city of Montpellier. The urban study area covers a population of 140.000 inhabitants with 249 FPs and the semi-rural area a population of 80.000 with 73 FPs. In order to be representative of French family practice, the sample included both randomly selected FPs with a 'classic' practice-style and some FPs delivering alternative therapies (mainly acupuncture and homeopathy) who represent approximately 8% of French FPs [26]. FPs practicing in the study

area were allocated a random number, listed accordingly, and contacted by telephone. The acceptance rate among the randomly selected FPs was 32.8%. Because of the specificities of their practice (limited or no waiting area, or waiting time, few spaced-out consultations, many patients not in inclusion criteria), we drew a parallel list of GPs with an alternative practice style, who were contacted separately and selected for convenience purposes. In all, 46 FPs participated, 41 (27 urban, 14 semi-rural) with a classic' practice-style and 5 (4 urban, 1 semi-rural) with an alternative practice-style [27,28].

For each FP, a research assistant invited all eligible consecutive patients entering the waiting room to complete self-administered questionnaires until 25 patients per FP had participated. Exclusion criteria were being younger than 18 years, not living in the study area and not consulting for one's self. The patient response rate was 89.8%.

Instruments

During the consultation, FPs completed a short questionnaire with, for physical illness and psychiatric symptoms, an estimation of severity on a 5-point scale with a clear indication that ratings of three and above (mild, moderate or severe) were considered as cases of physical or psychiatric disorder, respectively. For cases, FPs were asked to write down their diagnoses; somatic diagnoses were later classified into chronic disease or not by a FP researcher, based on ICD-10 classification criteria [29].

Patients completed the following self-administered questionnaires: a brief socio-demographic and health questionnaire, the Patient Health Questionnaire (PHQ) [30], the Brief Disability Questionnaire (BDQ) [31], an adapted version of the Client Service Receipt Inventory [32], with an open question on the reason for the visit. By applying DSM-IV-based diagnostic algorithms, the PHQ provides provisional diagnoses of anxiety, mood and somatoform disorders, meeting DSM IV criteria (major depression, panic disorder, other anxiety

disorders), or subthreshold (other depressive disorders, somatoform disorders) [30]. For somatoform disorders, patients meeting caseness criteria which had been rated by the FP as moderately or severely physically ill were re-classified as non-cases. This was the only proxy available for ruling out 'an adequate biological explanation' for the symptoms as required for the diagnosis.

The PHQ was translated into French following rigorous translation guidelines (translation/back-translation). It has not yet been validated in French family practice. For the CSRI, a rigorous translation was not considered necessary as it had to be adapted to fit the organization of the French health care system.

Study variables

Dependent variable: FA was defined as the top 10% of survey-day patients with the highest number of self-reported visits to a family practice surgery (survey-day visit included) over the past six months in each of six sex and age stratified groups [7,10].

Independent variables:

Following Anderson and Newman's framework [1] patient variables were grouped into: predisposing factors, perceived need and evaluated need (see Table 1). Predisposing factors included socio-demographic variables. Perceived need included patient-declared physical health problem, treatment for physical health problem, being bothered by personal or social problems and the reason for the visit. Evaluated need was assessed using both patient information and FP evaluation: patient-rated disability, patient report of anxiolytic or antidepressant treatment, PHQ psychiatric diagnoses, and FP-rated presenting symptoms (classified as psychological yes/no), physical and mental health.

Service utilization: Over this period, patients also indicated whether they had always visited the same FP or not. Doctor-shoppers (defined as visiting two or more different FPs) indicated

how many different FPs they had visited and the reason for seeing a different FP (practical or because of dissatisfaction with some aspect of previous care).

Analysis

The analysis was carried out on 1060 patients with complete data for the main study variables and 1044 patients for the final model, which represents 91% of the total sample (n=1151). Percentages are given for categorical variables and medians (range) for skewed continuous or score variables. For the descriptive analysis, we used Wilcoxon two-sample T-test and Kruskal-Wallis test for testing differences between skewed distributions.

In order to take into account the two-stage sampling process, marginal generalized estimating equations were used to test associations (GENMOD SAS procedure, option repeated) in the univariate and multivariate analyses. Variables associated with FA in the univariate analysis with p-values <0.10 were considered for entry as adjustment variables in the multivariate model. Odds ratios (OR) with their 95% confidence intervals (CI) are given. Statistical analyses were performed using SAS version 9.1 (SAS Institute, Cary, NC, USA).

Results

Description of the FP and patient sample

Median FP age was 45 years (range: 32-59) and similar for both sexes. Of the FPs, 56% were male; 60% had been practicing 10 years or more and 80% declared having trained in mental health in the past 3 years. Two-thirds practiced alone.

Of the 1060 patients, 61.8% were female. Median age was 42 (range: 18-93); 49.4% were married and 33.5% single; 33.5% had a high (post-school) educational level. 40.1% were working, 10.6% unemployed, 14.3% students and 35% retired. Overall, 11.3% for a

somatoform disorder, 7.5% for subthreshold depression, 8.7% major depression, 16.1% panic disorder and 7.7% other anxiety disorder.

The median number of visits to a FP during the past 6 months (survey-day visit included) was 3 (range: 1-65). Women made significantly more visits than men (Wilcoxon two-sample T-test: p=0.037) and the number of visits increased with age (Kruskal-Wallis test: p=0.004). The distribution of FAs among the 46 study FPs is given in Figure 1.

-insert Figure 1 here-

To be classified as a FA (top 10% consultation frequency), the number of visits required by sex and age group was as follows: for men, 7 visits or more for the under 30s, 8 visits or more for the 30 to 49 year olds and 6 visits or more for the over 50s. For women, these figures are of 10, 10 and 7 for the three age groups respectively.

Factors associated with FA: univariate analysis

FAs had significantly higher rates of chronic disease (p<0.042) and of patient-declared physical illness (p<0.0001) (Table 1). FP ratings of psychiatric disorder were twice as high among FAs (p<0.0001). The proportion of patients with a psychiatric disorder, whatever the diagnosis, was significantly higher among FAs.

Of the FAs, 40.9% were doctor-shoppers. FAs always visiting the same FP were more often rural (p=0.03), with a lower level of education (p=0.016), less personal and social problems (p=0.04), higher levels of disability (p=0.009) and less visits to mental health professional (p=0.006) than doctor-shopping FAs. There were no significant differences regarding physical and mental health (results not shown).

-insert Table 1 here-

Action undertaken and FP characteristics according to FA

FA behavior was not associated with medication prescription (all types), additional somatic exploration, referral to a specialist or support and advice. However, follow-up appointments were significantly more frequent among FAs (19% versus 12.1%, p=0.044) and survey-day prescription of psychotropic medication was higher (21% versus 13.1%, p=0.0003).

Factors associated with FA: multivariate analysis

When entering all four psychiatric diagnostic categories simultaneously into a unadjusted model, the strongest association with FA was for somatoform disorders (OR=2.3 (95% CI: 1.46-3.60, p=0.0003), followed by anxiety disorders excluding panic (OR=2.02 (95% CI: 1.13-3.61, p=0.02); depressive disorders and panic disorder becoming non-significant (not shown).

Table 2 shows the association between the psychiatric diagnostic categories, health care utilization variables and FA, further adjusted for confounders. With regard to psychiatric diagnoses, only somatoform disorders remained significantly associated with FA (OR=2.27 (95% CI: 1.34-3.85, p=0.002). Among the health care utilization variables, only specialist consultations and doctor-shopping remained significantly associated with FA. Patients seeing 1, or 2 or more specialists were respectively 2.1 (95% CI: 1.15-3.83) and 3.08 (95% CI: 1.98-4.80) (p<0.0001) times more likely to be FAs, compared to those seeing no specialists over the past 6 months.

-insert Table 2 here-

Discussion

Association between psychiatric disorders and FA in family practice

Previous studies have shown in multi-adjusted analyses that psychiatric disorders have a significant influence on FA in family practice [15,19]. Our results are in keeping with the

latter with patients with a a somatoform disorder being more than twice as likely as others to be FAs. However, our findings do not support the hypothesis that FAs will present for a wider range of health problems, chronic disease status and physical illness failing to reach significance in the final model.

With regard to the type of psychiatric disorder, only somatoform disorders remained significantly associated with FA behavior after adjusting for depression, panic and anxiety disorders as well as other confounders in the final model. Few studies have examined the association between FA behavior and a range of psychiatric disorders. Sheehan et al. (2003) found an association between somatization and FA in older primary care attenders, controlling for depression and physical illness, neither of which remained significant [20]. The lack of association with depression could be explained by the increased ability of FPs to detect this disorder [31,33] and therefore treat patients in primary care or refer them for specialist care. However, Gili et al. (2011) found that after adjusting for other ICD-10 psychiatric disorders, somatoform as well as depressive disorders remained associated with frequent attendance [21]. Another explanation for our finding could be the direct access to mental health care professionals in the open access fee-for-service system. This however requires that patients recognize and acknowledge their symptoms, overcome the stigma sometimes attached to visiting a mental health professional and self-refer themselves for specialist care. This is more likely for anxiety and depressive symptoms than for somatoform symptoms which patients tend not view as being linked to a psychiatric condition. There is a tradition of psychotherapy in France which possibly makes it more culturally and socially acceptable for people to consult a mental health professional than elsewhere, which gives weight to this explanation.

With regard to somatoform disorder, FA over the 6-month recall period in our study may reflect time-to-diagnosis for more complex clinical pictures including unrecognized physical

health problems or hidden psychiatric symptoms not yet picked up on by the FP, thus reflecting transient rather than persistent FA [5]. However, the association between somatoform disorders and FA is in keeping with a large body of evidence from elsewhere [20-22]. In fact it has recently been suggested that a redrawing of the diagnostic criteria for the category somatoform disorders is needed, focusing on its main attributes: somatic symptoms, excess concern with symptoms and illness and abnormal health care utilization [34]. Contrary to results found elsewhere for chronic disease and medical problems [7,12,13], FP-rated physical health, personal and social problems, disability and chronic disease were not associated with FA when adjusting for confounders. This does not support the hypothesis that FAs would show a greater variety of health conditions in the fee-for-service system. This could be because patients in France at the time of the study were able to consult any FP at will. We previously found on data from the same study that patients with a common mental disorder (depression, anxiety, panic or somatoform disorder) who had doctor-shopped over the previous six months were more likely to have their psychiatric disorder detected on the survey day, but only if they had changed FP because of dissatisfaction with previously received care [28]. The lack of association between chronic disease status, physical health and FA would therefore reflect appropriate management of these conditions in general practice, with patients being able to choose the FP which suits them best. As FPs worked mainly alone with no ancillary staff, it could also reflect the role of independently working nurses making home-visits on prescription for the more severe cases of chronic disorder. FP home-visits were not included in the definition of FA which may also contribute to the lack of association.

Association between FA in family practice and use of other health care services

Few studies report on the association between FA in primary care and other areas of care [12,17,23]. Our findings indicate as elsewhere that FA behavior is not restricted to family

practice as this behavior extends into secondary care and contact with both medical and paramedical services, suggesting unmet need at both the primary and secondary care level. The higher use of secondary care services could be the consequence of referral on the behalf of the FP. This however appears unlikely in our study given that FAs were no more likely to be referred to specialists than non-FAs. In the final model, only consulting a specialist physician remained significantly associated with FA. This fits with the finding that somatoform disorders only, which patients will not necessarily view as being related to a psychiatric condition, remain associated with FA.

Nearly half of FAs in the current study were doctor-shoppers, which in itself could account for their FA status, and a quarter doctor-shopped because of dissatisfaction with previous care. The profile of FAs differed somewhat according to whether they were doctor-shoppers or not, doctor-shopping FAs having more social and personal problems and seeking psychological help whilst non-doctor-shopping FAs being more often rural, with lower levels of education and higher levels of disability. Although the clinical heterogeneity of FAs is largely documented, this suggests the type of FA (“pure FAs”, doctor-shopping FAs further broken down by reason for doctor-shopping) should also be considered when applicable in further studies.

Strengths and limits

The study limitations are described in detail elsewhere [27,28]. The main limitation is the low (33%) but common FP participation rate [35] which may have led to the selection of FPs particularly interested in mental health issues. Self-reported service use was recorded over the past six months in order to minimize recall bias, as it was not possible to collect data from patient files (patients being able to visit any FP at the time of the study). Although the 6-

month time frame may have overestimated FA by classifying as FA patients with acute health problems, this was considered the best compromise for obtaining self-report information. Concerning the definition of FAs, we followed the recommendations of Smits et al (2009) who compared different classification methods [5]. However, we were unable to take into account patients not consulting at all over the recall period, which will have reduced the threshold of the number of visits necessary for being considered a FA. The recruitment of consecutive patients rather than a random sample may also have overestimated the FA rate [36]. Caution is required in the interpretation of our findings as mental illness influencing service use requires that the patient had the condition at the beginning of the 6-month period. Yet we have no data on previous visits, on whether they were initiated by the patient or the FP, or on whether the FP had detected a psychiatric disorder. Finally, we were not able to rule out a biological explanation of illness as requested in DSM-IV for somatoform disorders. We used physical illness status as a proxy, which will no doubt have led to some misclassifications.

Despite these limits, the study included a large sample of FP attenders, with a high participation rate, assessed by internationally accepted measures. This is one of the first studies to examine the association between the main psychiatric disorders encountered in primary care and FA behavior in an open access fee-for-service system and thus fills a gap on the knowledge of FA behavior. The open access health care system in place at the time of the study meant we were able to examine FA behavior in both primary and secondary care.

Conclusion

These findings from a cross-sectional study of a large sample of French FP attenders show that even when patients have direct access to specialist services, FA in family practice remains strongly associated with common mental disorders. Among the specific diagnostic

categories, somatoform disorders only predispose to higher rates of care-seeking, which might be reduced if unexplained somatic symptoms were better detected and managed. Along with improved care coordination, this could help reduce multiple visits to different health care providers. In France, the 2005 FP-registration scheme is likely to have changed the pattern of frequent attendance, with more centralized care and referral to secondary care, direct access being discouraged by lower reimbursement rates. With the exception of Bellon et al.'s trial which showed the success of a comprehensive FP intervention scheme with FAs to reduce this behavior [37], interventions to reduce the consultation patterns of FAs have so far shown limited results [38].

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Conflicts of interest: none

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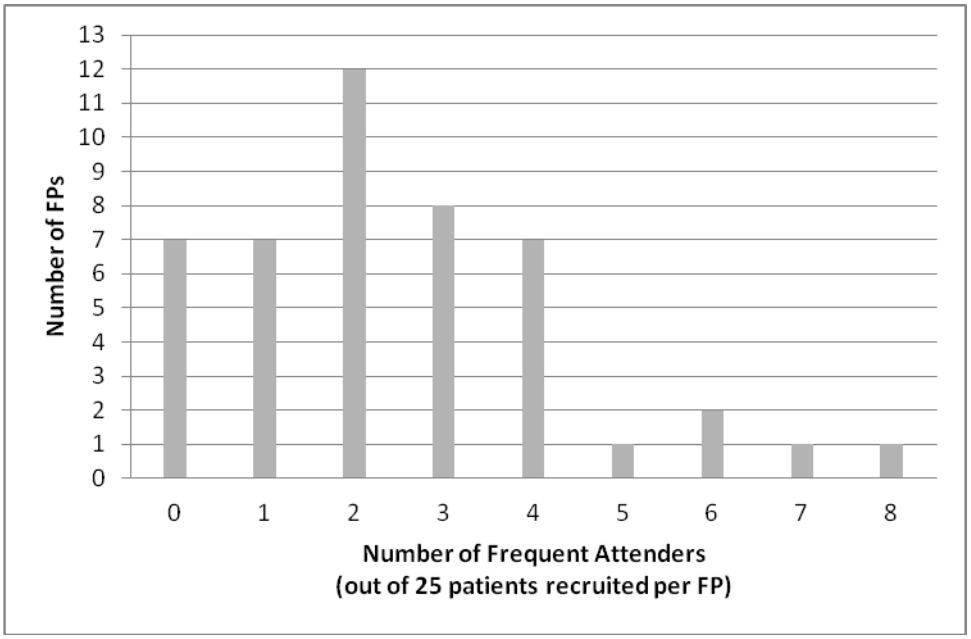

Figure 1. Distribution of FPs according to their number of frequent attenders.

Table 1. Socio-demographic and health characteristics of Frequent Attenders (N=1060)

		Not a FA (945)		FA (115)		
Variables		n	%	n	%	p
Study area	Urban	622	65.82	88	76.52	0.033
Predisposing factors:						
Marital status	Married	78	50.58	46	40.00	
	Single	316	33.44	39	33.91	
	D/S/W*	151	15.98	30	26.09	0.06
Education	Low	252	26.67	42	36.52	
	Medium	365	38.62	46	40.00	
	High	328	34.71	27	23.48	0.004
Occupation	Employed	394	41.69	32	27.83	
	Unemployed	91	9.63	21	18.26	
	Student	143	15.13	8	6.96	
	Retired	317	33.54	54	46.96	<.0001
Perceived need (patient-rated):						
Physical health problem	Yes	439	46.46	76	66.09	<.0001
TT for physical health problem	Yes	316	33.44	68	59.13	<.0001
Bothered social or personal problems	Not at all	531	56.19	56	48.70	
	A little	327	34.60	38	33.04	
	A lot	87	9.21	21	18.26	0.04
Reason for visit: psychological	Yes	58	6.14	17	14.78	0.002
Evaluated need						
Disability (BDQ)	None/Mild	630	66.67	56	48.70	
	Moderate	233	24.66	32	27.83	
	Severe	82	8.68	27	23.48	<.0001
Physical health (FP-rated)	Mild (non-case)	372	39.37	38	33.04	
	Moderate	348	36.83	42	36.52	
	Severe	225	23.81	35	30.43	0.232

Chronic illness (FP-rated)	Yes	268	28.36	43	37.39	0.042
Psychiatric disorder (FP-rated)	Yes	236	24.97	61	53.04	<.0001
Presenting symptoms: psychological (FP)	Yes	214	22.65	49	42.98	<.0001
Anxiol/antidepressant treatment (patient)	Yes	129	13.65	36	31.30	<.0001
Psychiatric disorders (PHQ):						
Somatoform disorder	Yes	89	9.42	29	25.22	<.0001
Depressive disorder	No	809	85.61	80	69.57	
	Minor	67	7.09	12	10.43	
	Major	69	7.30	23	20.00	<.0001
Panic disorder	Yes	61	6.46	21	18.26	<.0001
Other anxiety disorder	Yes	43	4.55	19	16.52	<.0001
Service utilization:						
Doctor-shopping	No	697	73.76	68	59.13	
	Yes, practical	172	18.20	23	20.00	
	Yes, dissatisfied	76	8.04	24	20.87	<.0001
Consulted specialist physician	0	489	51.75	26	22.61	
	1	178	18.84	22	19.13	
	2+	278	29.42	67	58.26	<.0001
Consulted a mental health professional**	Yes	80	8.61	30	26.09	<.0001
Visited paramedical staff***	Yes	191	20.21	43	37.39	<.0001
Visited social worker	Yes	28	2.96	15	13.04	<.0001
Survey-day FP is usual FP	Yes	746	79.03	102	88.70	0.013

*D/S/W: divorced, separated or widowed
**psychiatrist, psychologist or psychotherapist (N=1044)
***physiotherapist, osteopath, nurse..

Table 2. Frequent attendance according to psychiatric diagnosis and service utilization: multivariate analysis (N=1044)

	Variable (reference category)		OR	(95% CI)		p
Predisposing factors:	Education (low)	Medium	0.87	(0.54;	1.40)	
		High	0.39	(0.24;	0.65)	0.0002
Evaluated need:	PHQ psychiatric diagnoses:					
	Somatoform disorder (no)	Yes	2.27	(1.34;	3.85)	0.002
	Depressive disorder (no)	Minor	1.02	(0.55;	1.92)	
		Major	0.89	(0.34;	2.33)	0.96
	Panic disorder (no)	Yes	1.25	(0.65;	2.40)	0.42
	Other anxiety disorder (no)	Yes	1.71	(0.77;	3.81)	0.19
	Physical health problem (FP-rated) (no)	Yes	1.00	(0.56;	1.77)	0.99
	Chronic illness (FP-rated) (no)	Yes	1.08	(0.63;	1.85)	0.78
Perceived need:	Physical health problem (patient-rated) (no)	Yes	1.33	(0.85;	2.08)	0.21
Service utilization:	Doctor-shopping (no)	Yes, practical	1.65	(0.93;	2.93	
		Yes, dissatisfied	2.11	(1.19;	3.76)	0.004
	Consulted specialist physician (no)	Once	2.10	(1.15;	3.83)	
		2 or more times	3.08	(1.98;	4.80)	<.0001
	Consulted mental health professional* (no)	Yes	1.48	(0.73;	3.02)	0.28
	Visited paramedical staff** (no)	Yes	1.61	(0.98;	2.65)	0.06
	Visited social worker (no)	Yes	2.54	(0.97;	6.68)	0.06

Further adjusted for:
living area (rural/urban)
Predisposing factors: marital status (married/single/divorced, separated or widowed), employment status (no/yes),
Evaluated need: bothered by social/personal problems (not at all/a little/a lot), disability (none/mild-moderate/severe), patient declared antidepressant or anxiolytic treatment (past 6 months),

* psychiatrist psychologist or psychotherapist
** physiotherapist, osteopath, nurse, etc.