Depression in Primary Care: Changes in Pattern of Patient Visits and Complaints During a Developing Depression

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The purpose of this study was to characterize changes in patient behavior associated with a developing depression. The records of 154 depressed patients from a solo family practice were examined for type and number of complaints, number of visits, and amount of hospitalization during two periods of time. In addition, 154 patients were used as controls and matched to the depressive patients by age, sex, and season of year seen. Two similar time periods were examined in the controls.

The depressed group in comparisons both with itself and with the control group showed, in the seven months prior to the diagnosis of depression, these changes: (1) increase in number of patient-initiated office and home visits; (2) increased incidence of hospitalization; and (3) increased number of presenting complaints of three types: ill-defined "functional" complaints; pain of undetermined etiology in a wide variety of sites: head, chest, abdomen, and extremities; and "nervous" complaints, mainly, increased tension and feelings of anxiety.

The study results indicate that increased number of office visits and "functional" somatic complaints or anxiety-tension feelings should suggest depression.

The mode of presentation of depression in primary care is important because of the high incidence of this condition and the serious consequences of overlooking its presence, eg, suicide.[1] Psychiatric criteria for a diagnosis of depression usually emphasize psychological symptoms, such as low mood, difficulty in concentrating, thoughts of death, or suicidal ideation. [2-4] Depressed patients may not present with such psychological complaints in primary care, however, and, as current literature indicates, they often present with somatic symptoms of depression such as headache, fatigue, weight loss, and anorexia.[5-8] When the initial presentation is somatic in nature, needlessly complicated diagnostic maneuvers and delayed detection and management of the underlying depressive illness may result. This study examines the presenting symptoms of depressed patients seen in one family practice. Attention is focused on changes in patient behavior just prior to the diagnosis of depression in an attempt to describe
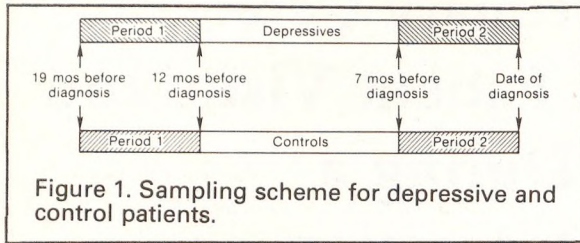
Figure 1. Sampling scheme for depressive and control patients.

clinically observable behavior associated with depression which might lead to earlier diagnosis and treatment.

Methodology

Description of Practice Setting

The patients in this study were from the practice of a solo family physician in a prosperous midwestern rural community of 900 people. This study covers the 24 years from 1948 to 1971 when the community, consisting mostly of farmers, farmer-dependent businessmen, and laborers, had little population change.

Selection of Sample

Approximately 4,000 records of patients active in the practice in 1971 were reviewed. Many of these patients had been followed for the entire 24 years of the practice. Each record was thoroughly reviewed for the presence of 25 different diagnoses or procedures. A disease index was prepared to permit retrieval and comparison of diagnoses, eg, depression.

Experimental Design

In order to determine symptoms frequently associated with or preceding depression and changes in patient-physician contact associated with the diagnosis of depression, two time periods were examined in the depressed patients: (1) a seven-month period before the date of the diagnosis of depression (Period 2); and (2) a seven-month period *starting 19 months prior* to the diagnosis of depression (Period 1), thus controlling for seasonal variation (Figure 1). Comparison of complaints and patient-physician contact during these two time periods was designed to show changes associated with depression, using the depressed patients as their own control. During the second period, 136 of the 154 depressed patients were registered in the practice and, thus, available for

analysis (18 patients were diagnosed as depressed on their initial visit); during the first period, 118 of the 154 were registered and used in the study.

Patients in the practice who never received a diagnosis of depression were used as controls. Their complaints and physician-patient contacts were analyzed during two similar seven-month time periods (Periods 1 and 2 described above, Figure 1). Controls were selected by matching for age, sex, and season of the year. Period 2 for this control group contained 154 individuals matched as described above. The control group for Period 1 contained 135 individuals who were registered in the practice at that earlier time and so were available for the study.

Determination of Complaints and Physician-Patient Contact

Individual patient records of depressive patients and controls were examined to determine the number and nature of complaints made during Periods 1 and 2. For purposes of this analysis, the authors examined the records of depressive individuals for only the *first* episode of depression in the practice. These records were also used to determine number of office visits during the two time periods, the number and length of hospitalizations, and the condition(s) treated during the hospitalizations. In addition, the records of depressive patients were examined in order to characterize the course of their depression, including treatment and number of additional episodes.

Results

Characteristics of Depressive Patients

Of the 154 individuals with depression, 104 were female and 50 were male (a ratio of 2:1). The age distribution at time of diagnosis is shown in Table 1; the patients range in age from 17 to 86 years, with a median in the early sixth decade and an average of 50.2 years. The frequencies of symptoms of depression present at the time that the diagnosis of depression was first made are shown in Table 2. Total frequencies of complaints elicited by the physician in the depressed group at that time appear in columns 3 and 4; the patients' presenting complaints appear in the first two columns. The characteristics of the depressed patients are consistent with the picture of depression usually cited in the literature: sex ratio gen-

Table 1. Age Distribution of Depressive Patients at Time of Diagnosis							
	Age in Years						
	11-20	21-30	31-40	41-50	51-60	61-70	71-80
Number of Patients	6	14	22	26	39	29	18

Total 154

Average Age 50.2 Years

erally shows more females than males;[9] the age distribution reflects the usual onset of depression in middle life;[10] the depressive symptoms are those which have been incorporated recently into diagnostic criteria, such as those of Feighner et al[2] and Spitzer et al.[4]

The patients were followed in the practice for an average of six years after the initial diagnosis of depression. The time range of follow-up was 1 to 24 years, with a median of 7$\frac{1}{2}$ years. During the follow-up period, the 154 patients had 227 discrete affective episodes: 100 had one episode, 41 had two episodes, 9 had three, and 4 had four or more episodes. Median episode length was four months, and only 13 percent of episodes lasted 24 months or longer. There were only two manic episodes; the remaining 225 episodes were depressive. Of the 227 depressive episodes, 198 were treated with tricyclic antidepressants and the remaining episodes with other modalities such as monoamine-oxidase inhibitors, electroconvulsive therapy, or psychotherapy.

Changes in Patient-Physician Contacts

Patient-Initiated Home and Office Visits

Table 3 shows the distribution of the number of patient-initiated visits for depressed and control patients during both time periods. Depressed patients showed an increased number of visits during the seven-month period just prior to diagnosis of depression (Period 2). During this second period, 120 of 136, or 88 percent, initiated at least one office visit compared to 91 of 154, or 59 percent, in the corresponding period of the control group (χ^2 difference = 29.51; df = 1; P<.001). The depressed group when compared to itself two years before (Period 1) also shows an increase in the number of visits. During the first period, 57 percent initiated a visit compared to 88 percent in the second period. Differences in physician's office or home contact further shows in the total

number of visits for each period (Table 3) and the average number of visits per patient, both of which increased for the depressed group only in the seven months immediately prior to the diagnosis of depression (Period 2). Examination of the frequency distribution of office visits in Table 3 shows a trend for individuals in the depressed group to have initiated *multiple* office visits in the second period compared with the first period, 19 months previously (Table 3, line 2 compared to line 1), which was significant at the five percent level (χ^2 = 11.99; df = 5; .05>P>.025); but, the same contrast with the control group (Table 3, line 4) was not significant. Some idea of this trend can be seen in the finding that 22/136 (16 percent) of depressed patients initiated six or more office visits in the seven months prior to the depressive diagnosis compared to 5/118 (four percent) in the same group two years previously, and to 9/154 (six percent) in the control group for the corresponding time period.

Hospitalization

Patient-physician contact due to different rates of hospitalization changed dramatically in the depressed group compared to the control group, and is shown in Table 4. The number of individuals in the depressed group who were hospitalized during Period 2 was 19/136 (14 percent) contrasted with 5/154 (3 percent) in the corresponding period in the control group (Table 4, column 7). This difference is significant (χ^2 = 9.56; df = 1; .01>P>.001). The 14 percent hospitalization rate in the depressive patients (Table 4, line 2) in Period 2 is also significantly different from the three percent of depressive patients hospitalized in Period 1 (Table 4, line 1). Also of note is the contrasting lack of change in hospitalization rate in the control group between the two time periods. The numbers are too small to detect difference in the *length of time* spent in the hospital, but the depressed group appears to have spent somewhat longer periods.

Table 2. Depressive Symptoms at Time of Diagnosis in Depressed Sample N=154				
Symptom	Symptom as Chief Complaint		Total Frequency in Sample	
	#	%	#	%
Low mood	35	23	117	76
Sleep disturbance	51	33	111	72
Fatigue	48	31	105	68
Agitation or anxiousness	6	4	47	31
Low ambition			44	29
Physical complaints			40	26
Social withdrawal	14	9	12	7.7
Suicidal ideation			9	5.8

Some of the difference in hospitalization rate is attributable to a sizable number of patients from the depressive group who were hospitalized for medical conditions which ordinarily would be treated on an outpatient basis. In the depressed group, 10/19 (53 percent) of the hospitalizations fell into this category, in cases in which the true need for hospitalization was questionable (Period 2); in contrast, in the remaining three periods (two in the control group and one in the depressed group) only one tenth (ten percent) would ordinarily be treated on an outpatient basis. Although the difference is not statistically significant, it supports the notion that changes in admission criteria could have played a role in the higher rate of hospitalizations for the depressive patients in the period immediately preceding their depressive diagnoses.

Changes in Number and Quality of Complaints During Patient Contacts

In order to determine qualitative changes in registered complaints, each complaint was classified within the following six categories:

1. *Procedures and specific diagnoses.* This included any office procedure, eg, suture removal, and treatment for any (specific) medical condition, eg, essential hypertension, peptic ulcer, herpes zoster, menopause (except No. 2 below).

2. *Infections.* This included treatment for definite infection, eg, upper respiratory tract infection, otitis media, bronchitis, upper urinary tract infection.

3. *Ill-defined functional complaints.* This included symptoms for which no definite diagnosis (as in numbers 1 or 2 above) could be made, such as complaints of gaseousness, fatigue, dizziness, constipation, diarrhea.

4. *Pain.* This included all complaints involving pain of undetermined etiology, eg, headache, backache, neck pain, abdominal pain, dysmenorrhea.

5. *Anxiety.* This included complaints of increased tension, inability to relax, nervousness, and sleep disturbance. (Most patients who had increased nervousness or tension described their feelings as one of worrying more and being tense about little things that previously gave them no distress, eg, the farmer who previously took adverse weather in his stride but now ruminates constantly about the weather.) This category does *not* include classical anxiety attacks characterized by the syndrome of palpitations, dyspnea, hyperventilation, fear.

6. *Social problems.* This refers to complaints of marital or family problems alluded to by patient, eg, pending divorce, behavior problem with child, school problems.

These findings are shown in Table 5. Three categories of complaints stand out in the depressed group. Functional complaints, pain, and anxiety show a highly significant increase in the seven months before the depressive diagnosis was made (Period 2), when compared to the other three seven-month periods. Although there is a trend for similar differences between the groups in the infections, procedures and specific diagnoses, and social problems categories, these contrasts do not reach the five percent level of significance.

Table 3. Patient-Initiated Office Plus Home Visits: Total and Average Number of Visits for Depressed and Control Groups During the Two Time Periods

Diagnostic Groups	Number of Office Visits							Total Number Patients	Total Number Visits	Mean Number Visits/Patient
	None	1	2	3	4	5	6+			
Depressed										
Period 1	51	17	20	15	8	2	5	118	179	1.51
Period 2	16	37	.24	13	13	11	22	136	404	2.97
Control										
Period 1	52	26	22	9	11	10	5	135	231	1.71
Period 2	63	32	19	12	10	9	9	154	264	1.71

Changes in Complaints in the Control Group

In the control group no category showed a difference between the two time periods. Furthermore, the control group was similar in all respects to the depressed group, 19 months prior to the depressive diagnosis (Period 1).

Age and Sex as Factors in Complaints

The data in Table 5 were reviewed according to age, by separating those 40 years and under from those 41 years or older, and by sex. In the age analysis, pain and anxiety complaints increased equally in the older (41 years and over) and younger (40 years and under) members of the depressed group prior to their depressive diagnosis. One age difference was found: in the depressed group, functional complaints increased for *older* individuals only; younger individuals did not show any change in this symptom category.

No differences according to sex were found: both males and females showed increased complaints in the functional, pain, and anxiety areas in the seven months prior to diagnosis of depression. However, more females had functional complaints than males during both periods in the depressed and control groups.

Further Qualitative Differences in Type of Complaint

In addition to the obvious quantitative changes shown by the depressed group in the functional, pain, and anxiety categories described above, further differences were found.

Changes in (Specific) Diagnosis Category

Although the specific diagnosis category showed no significant differences in overall number of individuals with this type of complaint, an analysis by quality of diagnosis showed that significantly more women of menopausal age (≥ 41 years) in the depressed group had menopausal complaints (hot flashes, with menorrhagia, metorrhagia, or amenorrhea) during the second period (13/69 or 19 percent as compared with 3/71 or 4 percent for the corresponding period in the control group; $\chi^2 = 6.00$; df = 1; .025>P>.01). This difference due to menopause accounts for the overall nonsignificant increase during Period 2 shown by the entire depressed group.

Changes in Infection Category

The conditions in this category were infections of viral or bacterial etiology, with respiratory tract infections most prevalent. Both control and depressed groups showed similar incidences and types of infections.

Table 4. Hospitalization in Depressed and Control Groups During Two Time Periods							
Diagnostic Group	Time (Days) Spent in Hospital						**% of Patients Hospitalized**
	None	**1-5**	**6-10**	**11-15**	**20+**	**Total**	
Depressed							
1st 7 months	115	1	2	0	0	118	3
2nd 7 months	117	7	6	4	2	136	14
Control							
1st 7 months	133	2	0	0	0	135	1
2nd 7 months	150	2	2	1	0	154	3

Changes in Functional Complaints

Functional complaints included several which are known to be symptoms of depression: fatigue, anorexia and/or weight loss, and constipation. Additional functional complaints were referable to the central nervous system (dizziness, light-headedness, tics, blurred vision, fainting), the genitourinary system (mainly irregular or excessive menstrual flow), the cardiorespiratory system (palpitations, cough), and the gastrointestinal system (diarrhea, indigestion, nausea). Changes in the subgroups of functional complaints are shown in Table 6. Significant changes appear for three groups of symptoms: those referable to the central nervous system; a subgroup of the gastrointestinal symptoms of nausea, etc; and the nonspecific general symptom of fatigue.

In the depressed group, of the functional complaints considered characteristic of depression, only fatigue increased significantly; anorexia and constipation showed small but insignificant increases (Table 6).

Changes in Pain Complaints

Table 7 shows the number of individuals reporting "functional" pain at various sites during the seven-month period prior to depression. With the exception of back pain, *all* sites (headache, neck pain, chest pain, abdominal pain, and extremity pain) show significant increases in the depressed group.

Changes in Anxiety Complaints

Table 8 reports the number of control and depressed individuals by type of anxiety complaint. These complaints are of two qualitative kinds: general tension or anxious feelings, and difficulty in sleeping. Significantly more depressed individuals reported sleep disturbance, but the most marked difference occurred with the number of individuals reporting tension or anxious feelings (Table 8).

Discussion

In this study the comparison of two time periods in both the control and depressed groups (Figure 1) revealed dramatic changes in patient behavior in the depressed group. These changes were noted in the seven-month period just prior to the diagnosis of depression and, because of the study design, it is logical to conclude that the increases in patient-initiated visits and certain types of symptoms and complaints during this period were a manifestation of the depression. Factors of age, sex, and seasonal variation in complaints and visits were controlled by the selection of a comparison group matched for these variables. One of the major concerns in a retrospective study of this type is the validity of the diagnosis of depression. Because individual patients did not receive a structured interview for depressive symptoms at the time of diagnosis, it is not possible to apply current criteria for psychiatric illness.[2] Considering the symptoms recorded as present at diagnosis (Table 2), three or more depressive symptoms were present with 78 percent, and with 38 percent, four or more symptoms (weight loss, low mood, fatigue, sleep disturbance, suicidal ideation). When the diagnosis was based on fewer than three symptoms, low mood was almost invariably present. Thus, the recorded symptoms appear to be

Table 5. Number of Individuals by Type of Complaint in Depressed and Control Groups During Two Time Periods

Diagnostic Group	Number in Group	Procedures and Diagnoses	Type of Complaint				
			Infections	Functional	Pain	Anxiety	Social Problems
Depressed							
Period 1	118	54 (46%)	23 (19%)	28 (24%)	18 (15%)	9 (8%)	0 (—)
Period 2	136	73 (62%)	43 (32%)	58 (43%)*	51 (38%)*	36 (26%)*	6 (4%)
Control							
Period 1	135	61 (45%)	32 (24%)	26 (19%)	12 (9%)	5 (4%)	0 (—)
Period 2	154	75 (49%)	33 (21%)	26 (17%)	14 (9%)	6 (4%)	1 (1%)

* Significantly different from corresponding period in controls at the 0.1% level. Significantly different from period 1, one year previous to depressive diagnosis in same patient group at 0.1% level.

part of the depressive syndrome as described by Feighner et al[2] and Spitzer et al.[4] Further clinical evidence that these are depressive patients appears in the first section (Results), and consists of the following: (1) the remitting nature of the condition with length of episode similar to that usually described for an affective episode; (2) the episodic nature of the condition evidenced by the number of individuals who had multiple episodes; and (3) the age of onset and sex ratio of this sample which is similar to that described in the literature[7,9,10] for depressive patients.

The complaints in the depressed group reflect to a certain degree those usually thought characteristic of depression: fatigue, sleep disturbance, anorexia, weight loss, and constipation. However, in the depressed group, only fatigue and sleep disturbance were significantly different from the control group, but other somatic symptoms showed more marked changes. These were symptoms of pain in a wide variety of sites, such as, head, neck, chest, abdomen, and extremities; gastrointestinal upsets, such as indigestion, nausea, or diarrhea; and symptoms referable to the central nervous system, such as dizziness, lightheadedness, or fainting. All of these symptoms have a common "functional" basis in that the examining physician was unable at the time to make a definite diagnosis or identify a specific physical condition

or infective agent to account for the symptom, eg, hypertension responsible for dizziness. Some of these somatic symptoms have been found to be associated with depression in previous studies. Cassidy et al[10] described increased incidence in depressed patients (compared to medically ill controls) of symptoms such as blurred vision, tinnitus, urinary frequency, paresthesia, spells such as anxiety attacks, dizziness, and chest pain. Swanson et al[11] describe a high incidence of depression in individuals who suffer persistent nausea without organic cause. Hill et al,[12] in a study of individuals seen for persistent "non-organic" abdominal pain, reported a high incidence of depression, and improvement in both the pain and the depression following the administration of antidepressant drugs. Studies of depression in primary care have suggested that presenting complaints are often those of somatic symptoms.[6,8,13] A study of nonpsychiatrist physicians' concepts of depression by Cassano et al[5] found that physicians in general practice, in contrast to psychiatrists, viewed depression as having more anxiety (psychic and somatic), more gastrointestinal symptoms, and more general somatic symptoms. This view of the appearance or mode of presentation of depression in primary care is supported by additional reports from primary care practices, which indicate a high incidence of somatic presenting com-

Table 6. Functional Complaints in Depressed and Control Groups in Seven-Month Period Prior to Depressive Diagnosis (Period 2)			
Organ System	Type of Complaint	Control N=154	Depressed N=136
Gastro-intestinal	Anorexia and/or weight loss	0 (—)	5 (4%)
	Constipation	2 (1%)	5 (4%)
	GI upset, diarrhea, indigestion, or nausea	8 (5%)	25 (18%)*
Central Nervous	Dizziness, lightheadedness, tics, shaky spells, blurred vision, fainting	6 (4%)	22 (16%)*
Genito-urinary	Problems with irregular menstruation	5 (3%)	1 (1%)
Cardio-respiratory	Palpitations, cough	2 (1%)	4 (3%)
General	Fatigue, tiredness, no ambition	6 (4%)	22 (16%)*
* Contrast with controls significant at 0.1% level.			

plaints in depressive individuals. For example, Watts[7] reports that 27 percent of his depressive patients *presented* with pain as a complaint. In the same study, 272 out of 590 (46 percent) patients presented with ill-defined functional complaints at the time of depressive diagnosis.[7] The incidence of pain and of ill-defined functional complaints reported by Watts is very similar to that reported in this study. In the Cassidy study cited above, 31 percent of the manic-depressive patients had chief complaints that were primarily medical. The changes in complaints in the present study certainly confirm this "somatic" view of depression; in the seven months prior to the diagnosis of depression, 80/134, or 60 percent, of the depressive sample had one or more somatic complaints which can be termed functional, such as gastrointestinal upset, fatigue, heartburn, fainting, pain at various bodily sites (but not including in this analysis complaints of tension, nervousness, or inability to relax). In contrast, the control group during the analogous period showed only 36/154, or 23 percent, with one or more similar somatic complaints.

There was a further important difference; there were significantly more individuals with *multiple* "functional" somatic complaints in the depressed group: 56/134, or 42 percent, had two or more complaints compared to only 12/156, or eight percent, in controls. In the depressed group, 30/134 (22 percent) had three or more such complaints compared to 2/154 (one percent) in the control group. Thus, the picture of depression depicted here by patients' complaints is one of multiple somatic "functional" symptoms, occurring over a period of time (in this case a seven-month period). Furthermore, in most cases the pattern of physical complaints did not fit a syndrome suggestive of a medical condition, eg, hypothyroidism.

One symptom not discussed above deserves special consideration: subjective complaints of nervousness, tension, anxiety, agitation, or inability to relax. This symptom showed a low level in all control periods (Table 5, lines 1, 3, and 4), yet was very prominent in the depressed group during Period 2 (Table 5, line 2; see also Table 8, line 2). Although pain and functional complaints

Table 7. Pain Complaints in Depressed and Control Groups in Seven-Month Period Prior to Depressive Diagnosis (Period 2)

Site of Pain	Type of Complaint	Control N=154	Depressed N=136
Head	Headache,ear pain	6 (4%)	18 (13%)*
Neck	Sore neck, stiff neck	0 (—)	7 (5%)*
Chest	Chest pain, sore breast, heartburn	1 (1%)	9 (7%)*
Abdomen	Belly pain, stomachache	3 (2%)	15 (11%)*
Extremity	Shoulder pain, leg hyperesthesia, arm pain	1 (1%)	10 (7%)*
Back	Low back pain	4 (2%)	8 (6%)

* Different from control at 5% level of significance.

show almost equal changes (Table 5, line 2), the latter have a higher background (control) level in contrast to anxiety, so complaints of tension or anxiety are more dramatic and conspicuous when they occur. This suggests that tension or anxiety as a presenting symptom might make a good clue in detecting depression. Certainly, anxious feelings are a prominent part of depression seen in primary care.[7,8,14,15] In this study, far more individuals complained of tension than of depression in the seven-month period prior to the depressive diagnosis; indeed, there were almost no complaints of depressed or low mood until the office visit when depression was diagnosed, and then 35/154, or 23 percent, of the depressed group finally mentioned low mood (Table 2) as a chief complaint. Anxiety seems to be an important part of the depressive syndrome as evidenced by the following findings. Depressed individuals with complaints of nervousness, anxiety, or tension almost always reported one or more functional or pain complaints (as recorded in Table 5, columns 4 and 5), so that the correlation of anxiety with functional and pain complaints was highly significant: 29/34 (85 percent) of depressed individuals with anxiety had somatic or pain complaints, whereas only 51/100 (51 percent) of the remaining

depressed patients without anxiety had somatic complaints. The picture of depression developed here suggests that much of what is treated in family practice as anxiety-tension states could well be basically depression, and indicates that depression should be an important differential diagnostic consideration in patients with complaints of anxiety or tension.

The other notable change in patient behavior associated with depression was the remarkable increase in patient-initiated office visits detailed in Table 3. This type of change in office attendance with depression has not been previously documented to our knowledge, but is understandable from the point of view of the patient who becomes increasingly tense and preoccupied, worried about somatic symptoms, and makes repeated visits to the physician to report new symptoms and to seek relief. In general, larger numbers of complaints are associated with the larger number of visits. It is difficult to determine the reason for increased hospitalization. As mentioned earlier, a large number of hospitalizations in the depressed group were for conditions which ordinarily could have been treated on an outpatient basis. Many of the hospitalized individuals were undoubtedly depressed at the time, and this

Table 8. Anxiety During Period 2 For Control and Depressed Groups

Type of Complaint	Control N=154	Depressed N=136
Sleep disturbance	1 (1%)	9 (7%)*
Anxiety, tension, nervousness, agitation	5 (3%)	34 (25%)**

* Significant at the 5% level.
** Significant at the 0.1% level.

by themselves do not form a recognizable organic syndrome, eg, Sheehan syndrome. These are especially characteristic of depression in older females.

3. Psychological complaints relating to mood changes, such as tension, inability to relax, and/or worrying about inconsequential things.

These recommendations are contingent upon discovering similar changes in depressive individuals in other representative primary care practices. Findings of increased somatic complaints appear to be verified by many other studies of patients with depression.

could have made the patient more ill and, thus, increased the pressure on the physician to hospitalize. Another possibility is that the medical condition leading to hospitalization precipitated a depression. Unfortunately, the authors are unable to assess these explanations for the increased hospitalization with the present data.

The picture of depression depicted in this study of a solo family practice is understandable from the point of view of the patients. They must present their physician, the health care gatekeeper, a suitable ticket for admission to the health care system. Physical complaints are generally an acceptable way to obtain the care and concern of the physician, and usually result in admission to the health care system. Unfortunately, physical complaints usually lead to x-ray and laboratory examinations, or the patient with persistent somatic complaints may be referred to an appropriate organ-system specialist for a detailed workup. In all this diagnostic activity, depression can easily be overlooked. However, the authors suggest that patients who present with the following behaviors should have depression considered as part of the differential diagnosis:

1. Increase in frequency of patient-initiated physician contacts with a variety of new complaints as indicated under numbers 2 or 3 below.

2. Increased number of "functional" physical symptoms such as pain, fatigue, dizziness, for which an organic etiology is not evident and which

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