Depression in Family Practice: Some Effects on Spouses and Children

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Medical complaints and office visits of spouses and children of depressed patients were examined and compared to a matched comparison group of spouses and children of nondepressed patients. Both spouses and children of depressed patients showed increased numbers of visits and complaints which returned to control levels one year after the depression was diagnosed and treated. Infection, pain, functional, and anxiety complaints showed significant increases in spouses over controls. Definite diagnoses, infections, pain, and anxiety complaints were significantly increased in children compared to controls. In both spouses and children these complaints returned to control levels by the third period of the study, one year after the depression had been diagnosed (and treatment for depression started). The pain, functional, and anxiety complaints of spouses and children were very similar qualitatively to those of the depressed patients. The results demonstrate the validity of the family as a unit of medical care.

The discipline of family practice emphasizes a holistic approach to patients and their problems. An important and often neglected part of practice is the effect of serious illnesses on other family members. Depression is one such serious illness with repercussions extending to every member of the family. Despite the seriousness of this condition and its high frequency in primary care, there has been little documentation of the effects of a depressed individual on other family members in the household.

One recent study from New Haven¹ has shown the far-reaching effects on family members of having a depressed mother. This study showed that relationships with the spouse were likely to be affected long after severe depressive symptoms had subsided. There was also evidence that children in the household were affected by the mother's illness.

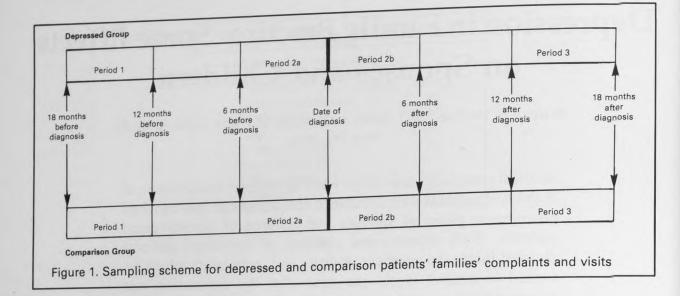
A family practice is an ideal place to study some of the consequences of depression. It is the purpose of this study to show how spouses' and children's visits to the family physician and their complaints changed over the course of depression in one parent.

Method

All individuals who had been treated for depression over 24 years of a private physician's family practice in a predominantly rural population were selected for study (N=154). Depressions included exogenous and endogenous types and were of sufficient length and severity to require

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antidepressant medication. Previous analyses of these data had shown that the frequency of visits and the number and quality of complaints changed over the course of patients' depressive episodes.2 This was shown by examining a number of different time periods related to the diagnosis of depression. Frequency of office visits, pain complaints, functional disorders, and anxiety complaints increased in depressed patients prior to the diagnosis of depression. In an unpublished study by the authors (Depression in primary care: Long-term prognosis and somatic complaints, The Journal of Family Practice, in press), frequency of these same indicators of depression decreased following antidepressant treatment to the level shown by a comparison group of age and sex matched nondepressed patients.

In order to determine whether or not there were analogous changes in spouses and children, similar sampling over time was used. There were four 6-month time periods (Figure 1):

Period 1—Starting 18 months before the diagnosis of depression was made

Period 2a—Starting 6 months before the diagnosis of depression was made

Period 2b—Starting when the diagnosis of depression was made

Period 3—Starting 12 months after the diagnosis of depression was made

During each time period the number and type of complaints, number of patient initiated office visits, and number of hospitalizations for each household member of the depressed patient's family were recorded.

Patients never diagnosed as depressed were selected as controls from the same practice population by matching with individuals of the same age and sex as the depressed patients. Time was further controlled by selecting the control patients who were in the practice during the time the depressed patient was being treated. For this study family members of the controls were studied as a comparison group during the same four time periods.

A previous paper has detailed how depressed patients' complaints were broken down into five categories for analysis.² These categories were used to analyze complaints made by family members for this paper and were:

- 1. Definite diagnosis or office procedures
- 2. Infections
- 3. Pain complaints not associated with a definite diagnosis or infection
- 4. Functional complaints not associated with a definite diagnosis or infection
 - 5. Anxiety complaints

For statistical analysis mainly chi-square analyses of contingency tables were used to test for

	Relatives of Depressed Patients Spouses Children							
	Male	Female	Total	Male	Female	Tota		
Number	78	39	117	59	51	110		
Median Age	50	50	50	10	10	10		
			s of Com	parison	Patients			
	Male	Female	Total	Male	Female	Total		
Number	Male 76	Spouses Female	Total	Male 71	Children Female	-		

49

10

8

50

significant differences between variables of depressed patients' families and comparison families.

Median Age

Three different groups of family members in depressed patients' families and comparison families were recognized:

- 1. Children under 18
- 2. Spouses
- 3. Nonspouse adults

The last group was not analyzed due to paucity of number (18). For similar reasons anxiety complaints in children were not analyzed. In every comparison results were broken down by age and sex, and since these breakdowns did not show significant differences results will be presented for each entire group without such breakdowns.

Results

Table 1 shows the number and median age of the groups of spouses and children who are used in the following analyses. The preponderance of male spouses merely reflects the fact that about two thirds of the depressed patients were female. The difference between the total number of spouses (117) and the total number of depressed patients (154) is due mostly to depressed patients who were divorced and widowed. Despite the fact that spouses and children were not matched for age, the median ages of comparable groups are very similar; numbers of individuals in comparable subgroups are also very similar.

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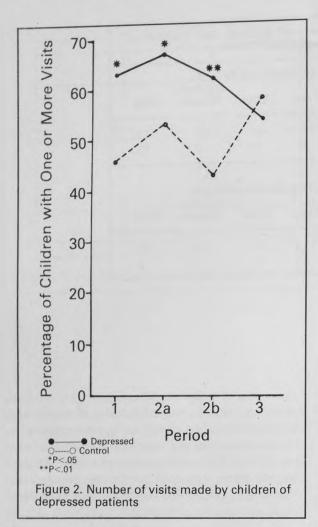
Visits to Physician's Office

Figure 2 shows the number of visits made by children of depressed and comparison patients for the four different time periods of the study. During periods 1, 2a, and 2b the incidence of children who made one or more visits was higher in the children of depressed patients than in the children of comparison patients. The period starting a year following the diagnosis of depression showed no significant difference between the two groups.

Figure 3 shows similar findings for the spouses. All periods except 2b showed significant differences, with the spouses of depressed patients having a higher incidence of one or more visits to the family physician than comparison spouses.

Hospitalization

There was no significant increase in number of hospitalizations of depressed patients' spouses



70-Percentage of Spouses with One or More Visits 60 50 40 30 20 10 0 2a 2b 3 Period Depressed -O Control *P< 05 Figure 3. Number of visits made by spouses of

depressed patients

and children over comparison spouses and children. The actual number of hospitalizations was very small.

Number and Quality of Complaints

Results with Children

Figure 4 shows the percent of depressed patients' children vs comparison children with one or more complaints broken down by category of complaint. Significance levels are indicated on these graphs for each within-period comparison. Five of the eight significant differences in the children's complaints were associated with periods 2a

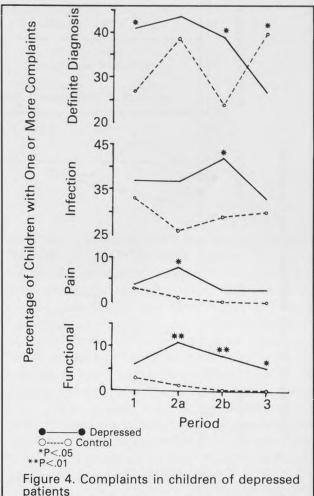
and 2b when the depression of the parent was developing (2a) or had just been diagnosed (2b). The trend for increasing functional pain complaints in the children of depressed patients from period 1 to period 2a was not significant, but the decrease was significant from period 2a to 3, one year after the depressive diagnosis in the parent.

Examination of definite diagnoses for both groups of children during period 1 and period 2b showed that physical examinations, immunizations, and injuries were by far the most frequent diagnoses made, and no qualitative differences were evident between the depressed patients' children and the comparison children. Infections during period 2b showed a preponderance of respiratory tract infections such as tonsillitis, bronchitis, sinusitis, and upper respiratory tract infections. Again, no qualitative differences were evident between the two age groups. In period 2a only one comparison child complained of pain so that a qualitative comparison of pain complaints was not possible. Similarly, so few children had functional complaints that qualitative differences were not evident. Sixty-three percent of the functional complaints in children of depressed patients during periods showing a significant difference involved the gastrointestinal tract: nausea, vomiting, diarrhea, and colic were the chief complaints in this category. Thirty-one percent of the functional complaints in the children of depressed patients during these periods involved the central nervous system: fatigue and dizziness were the most common.

Results with Spouses

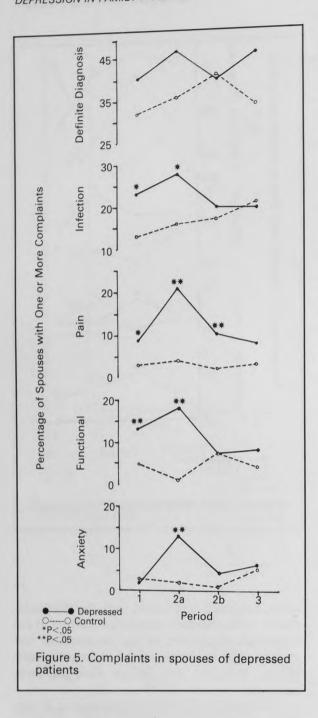
Figure 5 shows the percent of depressed patients' spouses vs comparison spouses with one or more complaints. Significance levels are indicated on these graphs for each within-period comparison. As with the children, the majority of the spouse complaints were associated with periods 2a and 2b: five of the eight significant differences occurred in these periods. In contrast to the children, three of the five complaint categories were significant in period 1 in the spouses (only one of the four categories was significant in the children). The pattern of the somatic complaints (pain, functional, and anxiety complaints) in spouses of depressed patients showed a significant increase from period 1 to period 2a and a significant decrease from period 2a to period 3 (one year after diagnosis of depression). In contrast to this pattern, the changes for definite diagnosis and infection in spouses of depressed patients were not significant from period 1 to period 2a or from period 2a to period 3. Similarly, the comparison spouses showed no significant differences from one period to another in definite diagnoses or infection complaints.

As with the children, no qualitative differences were found between the complaints in the two groups of spouses in any of the five categories (definite diagnoses, infections, pain complaints, functional complaints, and anxiety complaints) within any period. Thirty-nine percent of the functional complaints of the spouses of depressed patients in all periods showing significant difference involved the gastrointestinal tract: irritable



colon, flatulence, and nausea were the chief complaints in this category. Forty-eight percent of the functional complaints in the spouses of depressives involved the central nervous system: fatigue, dizziness, and tinnitus were the most common.

Although Figures 4 and 5 indicate that in any period the number of individuals with pain, functional, or anxiety complaints varies from 10 to 20 percent for adults and 5 to 12 percent for children, the total number of individuals with at least one such complaint is large when summed over all four comparison periods. Table 2 shows the results of an analysis in which the number of different relatives of depressed patients and comparison patients with one or more pain, functional, or anxiety complaints was totaled for all four time



periods. With this type of analysis both spouses and children of depressed patients show highly significant increases in such complaints.

Discussion

The changes in complaints over time, especially of the spouses of depressed patients, are similar to the kinds of changes previously reported in the depressed patients themselves.2 In the previous study the depressed patients were found to have a significant increase from period 1 to period 2a in somatic complaints (pain, functional, and anxiety complaints). With further passage of time from period 2a to period 3 (one year later) the depressed patients showed a return of these same complaints to the levels demonstrated by age and sex matched controls.3 In contrast, infections and definite diagnoses did not show these changes. In the present study, the pattern of changes in somatic complaints (pain, functional, and anxiety complaints) showed an increase just prior to the diagnosis of depression followed by a return by period 3 to the levels shown by the controls. Children did not seem to manifest as clear a pattern over the different periods as did the spouses, due in part perhaps to the small numbers of complaints which made for increased variability. The number of their complaints was again too small to test for possible differences between complaints of adolescents and those of younger children.

Other studies of changes in depressed patients' families have shown disturbed patterns of communication between spouses, 4-7 and poor marital adjustment in many areas of marriage. 8 That these varied disruptions manifest in increased physician visits, anxiety complaints, and varied somatic complaints should surprise no one with a psychosomatic orientation.

Patients' illnesses have been correlated with an increase in somatic symptoms in their spouses, and the increase in showing symptoms has related to increased tension in the marital role. The mechanism of this correlation in family behavior with depression in a parent is not clear from these data.

Presence of somatic complaints (pain, functional, and anxiety complaints) was correlated in the spouses of the depressed patients with the presence of similar complaints in the depressed patients themselves in periods 1 and 2a. While there was a relationship between changes in spouses' complaints and the time course of the depression in their mates, there was no such correlation in the individual pairs in any of the periods. That is, depressed patients with somatic complaints were no more likely to have spouses with somatic complaints. This would seem to indicate that changes in complaints in spouses were not simple imitation of similar complaints in the depressed patients. If the increase in number of

Table 2. Incidence of Individuals with At Least One Pain, Functional, or Anxiety Complaint During All Study Periods

Relatives of Depressed Patients			Relatives of Comparison Patients		
Percentage with Complaints		Total Number	Percentage with Complaints	Total Number	
Spouses	49	117	23	120	
Children	30	110	6	123	

somatic complaints in the depressed patients is regarded as a manifestation of increased nervousness associated with the depression, then the similar changes in number of spouses' complaints can be considered as evidence of increased nervousness or tension, and thus, the spouse complaints may reflect underlying tension in family interaction. If this is the case, the results can be interpreted as evidence of this tension going back for a considerable period of time prior to the diagnosis of depression. For example, in period 1 there are significant increases compared to controls in number of visits in children and spouses of depressed patients and in pain and functional somatic complaints in spouses of depressed patients. This suggests some condition existing as long as one year prior to the date of diagnosis. While there are not sufficient data to indicate the nature of this condition, it can be speculated that the possibilities include some common factor leading to depression in one family member and nervousness and tension in another, or perhaps nervousness and tension in one family member precipitating depression in another. The data suggest that depressed patients and their family members do not just generally have increased complaints over controls. This is evidenced by the frequency of their period 3 complaints which is similar to that of controls, a finding that is not compatible with an overall increase of complaints in the depressed patients' family members.

These results, if confirmed in other family practices, have important epidemiologic and practical implications. Some of the epidemologic features have already been alluded to. On the more practical level, the results demonstrate family-wide behavior changes in medical care seeking be-

havior which correlate with depression in a patient. The data presented in Table 2 show that pain, functional, and anxiety complaints occurred in a clinically significant proportion of relatives of depressed patients in this family practice. Such functional complaints should suggest to the alert physician the possibility of significant depressive illness in another family member. Similarly, depression in one patient should predict increased somatic symptomatology in other family members. These results need to be confirmed by further studies of a number of family practices, but they nevertheless demonstrate the essential validity of the importance of the "family" in family practice as a unit of medical care.⁹

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