

Psychotropic Drug Prescribing in a Family Medicine Residency Program

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The records of 201 patients in a family medicine training clinic were examined for frequency of prescription of psychotropic drugs. It was found that 11.5 percent (23/201 patients) had received a psychotropic drug over an average clinic visit time of 2¹/₂ years. Patients were primarily female (2:1), with the socioeconomic status skewed towards the lower end, and with patient age ranging from 18 to 87 years. It was found that most psychotropic drugs were prescribed for short periods of time, with the prescriptions ranging from 1 month to 4¹/₂ years. That only 11.5 percent of patients received a psychotropic drug was lower than expected. The clinic's conceptualization of the role of psychotropic drugs, the different approach utilized in data collection, or characteristics of the "training" setting, may account for these phenomena.

The purpose of this study was to discover the proportion and characteristics of patients receiving psychotropic drugs in a family medicine residency training clinic. The clinic, which was begun in 1973, is part of a medical center complex but operates independently. At the present time, there are approximately 8,000 adult patients on active status who are served by 7 attending physicians and 24 residents. As the residents advance through their three-year training program they have increasing responsibilities in the clinic. Each family is assigned to a resident or attending physician, and, insofar as possible, each family member sees this particular resident or attending physician on each clinic visit. A psychiatrist, psychologist, or social worker is present in the clinic approximately half the working hours for behavioral science consultation and referral.

Methods

Specifying that the patient's initial visit be not less than one year before the time of the study, 200 family folders were pulled from the clinic files using a random selection procedure. This was accomplished by randomly assigning a number to each family folder, and then selecting the sample by use of a table of random numbers. Since the focus was on adult patients, 16 family folders were set aside because the only entries were of children's visits. This left 184 family folders with 245 adults who had made a clinic visit. Of these, 44 patients were eliminated because there was only a single visit, leaving a total of 201 adults who had made two or more clinic visits in the study period. While it was possible for these visits to have extended over a period of one to seven years, the average duration of contact was 2¹/₂ years. This 2¹/₂ years thus represents the time over which the average patient was "at risk" for receiving a psychotropic drug.

There were approximately twice as many females as males in the study. The average age was approximately 40 years with a range of 18 to 87 years. Though a large percentage (40 percent) of

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the patients were drawn from the lower income level, the sample included all income levels.

The 201 charts were then examined for evidence that a psychotropic drug had been prescribed in the family medicine clinic. The list of psychotropic drugs considered for inclusion was typically that found in psychiatric texts, subdivided into anti-anxiety, antidepressant, and neuroleptic categories.¹ Among the charts showing psychotropic drug prescriptions, the following exclusions were made: six patients in which diazepam was prescribed for an unequivocal episode of muscle spasm and four patients for whom a psychotropic drug was prescribed by another source, usually a psychiatric clinic.

Results

The survey revealed that 23 patients were prescribed psychotropic drugs by the clinic physicians from the study sample of 201 patients, a percentage of 11.5. These 23 patients received 31 psychotropic drug prescriptions which were distributed as follows: anti-anxiety drugs, 57 percent; antidepressant drugs, 32 percent, and neuroleptic drugs, 11 percent. In fact, all the anti-anxiety drugs were benzodiazepines (except for one prescription of phenobarbital). All the antidepressants were from the tricyclic group, and the neuroleptic drugs were primarily thioridazine. (It was not within the scope of the study to include drugs primarily used for sedation; however, it was noted that there were two patients who received flurazepam for insomnia.) In this sample, no differences were found in the prescribing trends of the residents and the attending physicians.

Some of the characteristics of the patients receiving psychotropic drugs were compared with the target population (Table 1). It is to be noted that the 23 patients receiving psychotropic drugs were similar in age, sex, marital status, and "risk time" to the 201 target patients. Particular attention is called to the fact that females were not disproportionately represented in the group receiving psychotropic drugs. Patients in their 20s were under-represented in the drug group; patients in their 40s and over 70 years were over-represented.

Duration of the psychotropic drugs varied with

the class of drug. The average length of a prescription of anti-anxiety drugs was six months. For this class of drugs the distribution of time of administration for the 18 patients varied from one month to one year. Of the eight patients receiving antidepressant drugs, six received medication for one to ten months, averaging 4¹/₂ months, and two patients received tricyclics for approximately four years. These two patients were seen regularly for six years. The tricyclics were prescribed in low dosages intermittently for four of the six years. Among the neuroleptics, three patients received them for two to eight months and two patients received them for approximately three years.

Four patients, within the 23, received some psychotropic medication for most of their "at risk" time. The following is an illustration: female, aged 40 years, separated, two children, receiving financial aid. Diagnoses: obesity, hypertension, poor family situation, neurotic depression. This patient had a total time in clinic of four years during which time her psychotropic drug prescriptions followed this sequence: diazepam 1 month, thioridazine 2 months, no psychotropics 2 months, diazepam 5 months, no psychotropics 2 months, diazepam 5 months, no psychotropics 2 months, amitriptyline 12 months, no psychotropics 2 months, diazepam 5 months, no psychotropics 10 months.

In summary, it was found that 11.5 percent of adult patients, typically seen for a period of 2¹/₂ years in this clinic, received psychotropic drugs from physicians in the clinic. Anti-anxiety drugs were the most frequently prescribed. Only four patients received a psychotropic drug for more than one year. In this particular setting, in which the patient population was 2:1 females, those receiving psychotropic drugs were likewise 2:1 female.

Discussion

Previous studies²⁻⁵ have shown that psychotropic drugs constitute about 15 percent of all prescriptions in family practice. But studies reporting the proportion of patients receiving psychotropic drugs are as yet relatively uncommon. Hesbacher et al,⁶ studying seven general practice groups in

		Total Sample (N=201) Percent	Receiving Psychotropic Drugs (N=23) Percent
Sex	Male	32	30
	Female	68	70
Marital Status	Married	65	70
	Single, Widowed, Divorced	35	39
Age (years)	18-20	3.4	4.3
	21-30	30.3*	13.0
	31-40	35.8	30.4
	41-50	10.9	21.7*
	51-60	9.4	13.0
	61-70	5.9	8.7
	over 70	4.0	8.6*
Average Time in Clinic		2 years, 4 months	2 years, 11 months
*Differences of 2:1 or better between total sample and drug group for that category			

Pennsylvania in 1970, found that 24.5 percent of the patients were prescribed one or more psychotropic drugs over a one-year period. From England, Raynes³ found that psychotropic drugs were prescribed in 12.1 percent of single visits. (The conditions of this study were rather special in that it was prospective and one third of the physician/patient contacts were audio recorded.) It should be noted that these studies and the present one vary considerably, particularly in the time at which patients were "at risk." In the examples above, the risk period was one year (Hesbacker) and a single visit (Raynes), whereas the average risk period in this study was 2½ years. Viewed in this perspective the proportion of patients in this study receiving psychotropic drugs is less than that which has been previously reported.

It was also discovered that the figure, 11.5 percent, was less than most of the physician participants estimated. After the study was completed, nine residents and two attending physicians were asked to estimate the percentage of psychotropic

receiving patients at the clinic. The most typical response was 25 percent, or approximately twice the actual usage.

One comment which was heard repeatedly from practitioners with whom the study was discussed was that the usage was "less than in actual family practice." It was noted by these respondents, several of whom had come to the teaching setting from community practice, that a number of factors would logically contribute to more psychotropic drug use in the actual family practice setting. Among these are: less time available to spend with each patient, less availability of psychiatric consultation, less peer review, and increased pressure from patients who are seen repeatedly over many years. It would be interesting to have additional information, especially from the United States, to see whether or not this assumption is true. These results would also follow the clinic philosophy of viewing psychotropic drugs, in most cases, as a temporary measure to reduce the primary symptoms to allow for time to strengthen the patient's

coping strategies. Another interesting speculation is whether or not the prescribing and use of psychotropic drugs, particularly anti-anxiety drugs, may have decreased in recent years following publicity about the problems of continued use.

The unexpected finding that females were not over-represented in the drug receiving group, as has been previously reported,^{3-5,7} may reflect prescribing caution derived from the findings of previous studies. The findings of this study are consistent, however, with others^{3-5,7} that anti-anxiety drugs are the most frequently prescribed psychotropic drugs.

By and large, the authors conclude that the use of psychotropic medications in this setting was appropriate. This judgment is based on the assumption that the use of psychotropic drugs, especially anti-anxiety drugs, should be intermittent and should be carefully monitored. Reflecting this view, neither the proportion of patients receiving psychotropic drugs nor the duration of administration for most patients was excessive. It is to be

noted again that this study was conducted in a teaching setting. Additional information from both teaching and practice settings would be of interest.

References

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