Psychiatric Disorders Among the Patients of General Practitioners and Internists

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ABOUT 10 to 60 percent of the people receiving care from a general practitioner or internist during a year have a significant emotional or psychiatric problem—as perceived by the physician. But how perceptive is the average family physician in detecting mental illness, and what factors influence his perceptiveness? If the family physician is to function as a resource for early detection of mental illness, how must his training be altered? And how would the caseload for all the psychiatric services in a community be affected if the family physician referred all patients in whom he perceived a significant psychiatric problem to a psychiatric service? If we look toward the family physician for psychiatric care, we must know the kind of care he offers and how he must be educated to serve more effectively (*1–16*).

Monroe County, N.Y. (including metropolitan Rochester), population 630,000 in 1964, afforded a unique opportunity for a study to obtain at least a partial answer to many of these questions. A centralized case register of all psychiatric services has been maintained there since January 1960. Almost all psychiatric services, inpatient and outpatient, public and private, have been reported to the register since it was started. Thus an unduplicated count of cases and descriptions of diagnosed mental illness among the residents of Monroe County are available (*17*).

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Study Procedures

Of the 314 internists and general practitioners in Monroe County in 1964, 233 were considered eligible for the study. Some physicians were excluded because their practice was limited by semiretirement, marked specialization, or illness. Thirty-five percent (81) of the physicians were invited to participate, and 72 percent of these entered the study. The 58 participating physicians (29 internists and 29 general practitioners) represented 25 percent of the eligible physicians. Each physician was asked to report all patients seen during a 1-month period. The study covered 9 months: February through October 1964; 53 percent of the patients were seen during February and March. Each physician reported a patient once, but patients who saw several participating physicians during the study period may have been counted more than once. Because of the factors of seasonal variation and differences in use of service by patients, a full year of reporting by participating physicians would have been preferable.

This study was not conducted as a casefinding project. We did not ask the physicians to probe

for psychiatric conditions, but to carry on their medical practice in the usual way. Because of the nature of the study, emotional and mental illnesses were explained without specific criteria. We did not attempt to corroborate the diagnoses.

Results

The 29 internists reported an average of 176 patients per month, and the 29 general practitioners each reported an average of 304 patients per month. Of the 14,117 patients seen during this study period, 2,003 (14.2 percent) were diagnosed by their physician as having a mental or emotional disorder—hereafter designated as a psychiatric problem. Both groups showed similar rates of psychiatric problems among their patients: The rate among Negro patients was 2.7 percent, or substantially less than the 14.8 percent among white patients, but few Negro patients were reported; therefore, this report presents findings for white patients only. Pediatric patients under 15 years of age were not included in the study because there were so few psychiatric problem cases in this group. Our report will concentrate on 11,144 white patients, 15 years old or older, of whom 1,879 (16.9 percent) had psychiatric problems. Totals in the tables are slightly lower owing to missing information about the specific attributes being analyzed.

Psychiatric problem rates are presented by age and sex in table 1. The rates rise with age, reaching a peak in the 35- to 54-year age group for men and women. Women had higher rates than men: 20.9 percent for women, 11.1 percent for men. Equal rates of psychiatric service for men and women were reported to the psychi-

Table 1. Psychiatric problem rates (1-month period) among patients of family physicians, Monroe County, N.Y., by age and sex

Age	Male			Female		
	Total	Psychiatric problems	Rate	Total	Psychiatric problems	Rate
15–99	4, 522	501	11. 1	6, 583	1, 374	20. 9
15–24	670	44	6. 6	876	113	12. 9
25–34	548	62	11. 3	800	175	21. 9
35–44	745	104	14. 0	1, 057	267	25. 3
45–54	858	133	15. 5	1, 208	293	24. 3
55–64	802	90	11. 2	1, 066	225	21. 1
65–99	899	68	7. 6	1, 576	301	19. 1

Table 2. Psychiatric problem rates (1-month period) among patients of family physicians, Monroe County, N.Y., by sex and number of visits in previous 12 months

Sex and age	No previous visits			One or more previous visits		
	Total	Psychiatric problems	Rate	Total	Psychiatric problems	Rate
Male	1, 015	69	6. 8	3, 419	421	12. 3
15–24	218	12	5. 5	442	31	7. 0
25–44	387	28	7. 2	872	134	15. 4
45–64	306	25	8. 2	1, 324	194	14. 7
65 and over	104	4	3. 8	781	62	7. 9
Female	1, 119	167	14. 9	5, 373	1, 190	22. 1
15–24	265	27	10. 2	599	84	14. 0
25–44	370	65	17. 6	1, 464	373	25. 5
45–64	315	55	17. 5	1, 923	454	23. 6
65 and over	169	20	11. 8	1, 387	279	20. 1

Table 3. Psychiatric problem rates (1-month period) among patients of family physicians, Monroe County, N.Y., by sex and length of time physician has provided care

Period of care	Male			Female		
	Total	Psychiatric problems	Rate	Total	Psychiatric problems	Rate
Less than 6 months	1, 025	88	8. 6	1, 265	254	20. 1
6–12 months	341	51	15. 0	557	154	27. 6
1–5 years	1, 528	172	11. 3	2, 274	457	20. 1
5–10 years	822	88	10. 7	1, 251	256	20. 5
10 years or more	736	98	13. 3	1, 139	230	20. 2

Table 4. Psychiatric problem rates (1-month period) among patients of family physicians, Monroe County, N.Y., by chief complaint and sex

Chief or presenting complaint	Male			Female		
	All patients	Psychiatric problems	Rate	All patients	Psychiatric problems	Rate
Primarily emotional symptoms, advice, or counseling	177	154	87. 0	561	508	90. 6
Primarily physical symptoms	2, 813	250	8. 9	4, 059	619	15. 3
Preventive or diagnostic procedures	1, 212	80	6. 6	1, 695	207	12. 2
Accident or injury	312	16	5. 1	251	36	14. 3
Combination of above, or other	8	1	12. 5	17	4	23. 5

atric case register, but the differential may be explained by the large number of men who were reported to the register from the lower socioeconomic groups and who entered the psychiatric services through legal channels (courts) or emergency divisions. In contrast, private psychiatrists in 1964 treated more women than men (652 to 491) as new patients—more in line with the practice of family physicians. Our analysis by marital status showed higher rates for separated and divorced women than for married women; the men in these categories had rates similar to those for men in the single and married categories. In contrast, the rates for cases reported to the register were considerably higher for separated and divorced than for married men.

Psychiatric problem rates of the patients, by sex and visits to physicians in the previous 12 months, are presented in table 2. As may be expected, the patients with one or more visits during the previous year had higher rates than the patients with no visits during the previous 12 months. With one exception, the length of time under care did not alter these findings.

The group of patients under care for 6 to 12 months had the highest psychiatric problem rates (table 3). Low rates for patients, especially men, known to the physicians for a period of less than 6 months, and higher rates for patients with multiple visits during the previous year indicate that (*a*) the physicians are better able to detect emotional illness with a developing relationship, (*b*) repeated visits by the patient raise the suspicion of emotional factors in a physician's mind, and (*c*) persons with a purely physical disorder tend to be terminated earlier from care, leaving a greater proportion of patients with emotional disorders under care.

Psychiatric problem rates, by chief complaint and sex, are presented in table 4. Women have higher rates than men. Thirty-five percent of all psychiatric problem patients had emotional symptoms (662 of 1,875). In 15 percent the psychiatric problem was detected during a regular preventive visit or diagnostic procedure (287 of 1,875). Since 62 percent of all patients initially presented primarily physical symptoms, the high psychiatric problem rate of 13 percent for that category indicates that this group

should receive particular attention to effect earlier detection of psychiatric problems.

When medical diagnostic categories were correlated with psychiatric problems (table 5), the highest rates were among the patients with ailments of the digestive system and symptoms of senility or ill-defined conditions. Women with ailments of the genitourinary system, nervous system and sense organs, and circulatory system also had high psychiatric problem rates. The high rate of psychiatric problems for patients with digestive system disorders could result from a true association between the disorders of this system and emotional problems or could stem from the popular belief about a relationship, thus affecting the perceptiveness of the physician.

To this point, the paper has presented 1-month data about all patients seen by the family physicians who entered our study, with the psychiatric problem rates for these patients. The remainder of this paper will deal only with those patients designated by the physicians to have a psychiatric problem.

Psychiatric Problem Patients

The length of time patients were bothered by psychiatric problems and the duration of care provided by the physicians are correlated in table 6. Although there is a positive association between the proportion of patients designated as having a psychiatric problem and the length of time the reporting physician provided medical care, the time alone cannot account for the concentration of patients with psychiatric problems for 5 years or more. More than one-fourth of the patients under a physician's care for less than 5 years were bothered by a psychiatric problem for more than 5 years. Age also is a factor. The proportion of patients bothered by a psychiatric problem for less than

Table 5. Psychiatric problem rates (1-month period) among patients of family physicians, Monroe County, N.Y., by medical diagnosis and sex

Medical diagnosis	Male			Female		
	Total	Psychiatric problems	Rate	Total	Psychiatric problems	Rate
Nervous system and sense organs	172	15	8.7	221	37	16.7
Circulatory system	880	76	8.6	1,106	181	16.4
Respiratory system	540	28	5.2	673	53	7.9
Digestive system	340	45	13.2	373	87	23.3
Genitourinary system	116	11	9.5	402	94	23.4
Skin and cellular tissue	166	8	4.8	129	7	5.4
Bones and organs of movement	252	12	4.8	455	53	11.6
Senility and ill-defined condition	109	17	15.6	193	45	23.3
Endocrine, metabolic, and nutritional disease	557	38	6.8	1,106	127	11.5
Physical examination or no diagnosis	452	19	4.2	514	31	6.0
All other, with medical diagnosis	533	34	6.4	605	76	12.6

Table 6. Length of time patients have been bothered by psychiatric problem and duration of care provided by family physicians, Monroe County, N.Y.

Period of psychiatric problem	Duration of care					
	Less than 1 year		1–5 years		5 years or more	
	Number	Percent	Number	Percent	Number	Percent
Total	544	100.0	625	100.0	666	100.0
1 year	203	37.3	181	29.0	130	19.5
1–5 years	192	35.3	266	42.5	211	31.7
5 years or more	149	27.4	178	28.5	325	48.8

Table 7. Type of previous care of patients for psychiatric condition, by sex, Monroe County, N.Y.

Type of previous care	Total		Male		Female	
	Number	Percent [1]	Number	Percent [1]	Number	Percent [1]
Private psychiatrist	225	57. 0	66	57. 9	159	56. 6
Mental health clinic	54	13. 7	20	17. 5	34	12. 1
Public mental hospital	53	13. 4	18	15. 8	35	12. 5
Private mental hospital	16	4. 1	5	4. 4	11	3. 9
Psychiatric unit of general hospital	68	17. 2	18	15. 8	50	17. 8
Marital counseling or family guidance	65	16. 5	15	13. 2	50	17. 8
Other	36	9. 1	10	8. 8	26	9. 3

[1] Based on 395 patients who received care; multiple-care services could have been received.

Table 8. Psychiatric diagnoses, family physicians and psychiatrists

Psychiatric diagnoses	Primary psychiatric problem reported by physicians [1]		Private practice from psychiatric register, 1964 [2]	
	Number	Percent	Number	Percent
Primary psychiatric disorders	1, 196	100. 0	1, 035	100. 0
Psychotic disorders	100	8. 4	276	26. 7
Psychoneurotic disorders	751	62. 8	422	40. 8
Personality disorders	199	16. 6	213	20. 5
Brain syndrome	89	7. 4	56	5. 4
Other	57	4. 8	68	6. 6

[1] Reported by 25 percent sample of physicians, 1-month period, February–October 1964.

[2] Patients seen for the first time in private psychiatric practice during February–October 1964.

1 year decreases with age, while the proportion bothered for 5 years or more increases with age.

Physicians reported that three-fourths of the patients 15 to 64 years old were aware of their psychiatric condition, but only 56 percent of those 65 and over recognized their condition. The tendency of older patients to be less accepting of psychiatric conditions and more often to deny such illness has been noted elsewhere (*18*). About 17.5 percent of the patients with psychiatric problems had recovered from a previous psychiatric condition, and 21 percent of these patients had previously received or were receiving specific care. The length of time a patient had a problem appears to be related to whether or not he had received specific care. Only 11 percent of the patients bothered less than 1 year had received care for their condition as compared with 32 percent who had been bothered for 5 years or more. Patients under the care of a reporting physician for 1 year or longer were more likely to have had previous psychiatric service (24 percent) than those under care for less than 1 year (17 percent). These data suggest that patients with emotional disorders remain under the physician's care longer than those with purely physical disorders, and may indicate the need of earlier referral for psychiatric care.

The type of service that patients previously received for their psychiatric problem is presented in table 7. The use of private psychiatric care is clearly predominant. The major referral pattern is from private general medical care to private psychiatric care.

The physicians were asked whether the psychiatric problem of a patient represented a primary psychiatric disorder or a transient adjustment reaction to a medical or nonmedical problem. They reported that two of three patients had a primary psychiatric disorder. Almost 80 percent of the patients with a primary

psychiatric problem received a diagnosis of psychoneurotic disorder or personality disorder (table 8).

Only 8 percent of the patients were diagnosed by physicians as psychotic as compared with 27 percent reported as psychotic in private psychiatric practice. Since it is our impression that many patients are referred to private psychiatric care by other medical practitioners, apparently some sorting-out of psychotic patients is done in the referral process. We have been speaking of rates or percentages; in actual numbers, the nonpsychiatric physicians see more psychotic patients than psychiatrists see in private practice. Allowing for duplication of service between physicians and by any one physician, we roughly estimate that in 1964 there were 7,250 patients with a primary psychiatric disorder beginning a new episode of service with general medical physicians, and that 600 of these patients were considered to be psychotic. This estimate compares with 4,930 patients beginning a new episode of psychiatric care with any psychiatric service in 1964, 1,150 of whom were diagnosed as psychotic.

Discussion

In this study we have concerned ourselves with the practice of general practitioners and internists in a metropolitan area, and we have viewed their perception of the psychiatric problems of their patients. We have limited our study to the adult white population seen by these physicians. It is apparent that a large proportion of the population contacts a family physician during the course of a year, and that these physicians act as major caretakers in the community. Because we sampled only 1 month of each physician's practice, we cannot give a precise estimate of the total population seen by the physicians during the course of a year. But allowing for as high as 33 percent duplication between physicians and by any one physician during the course of a year, we would estimate that 68,000 different patients, or 17 percent of the adult white population, are seen annually by these physicians. As in private psychiatric practice, the family physician sees more women than men; in contrast to psychiatric practice he tends to see more people 55 years old and older.

Approximately 17 percent of all the patients seen by their family physician were judged by him to have a mental or emotional disorder. Although the rates for psychiatric disorders varied widely between the patients of physicians, both the general practitioners and internists, on the average, tended to diagnose such disorders with the same frequency.

The family physician may be a source of early detection of mental illness and a referral source for psychiatric practice, or he may be a source of psychiatric manpower. As might be expected, most patients seen during the study interval were patients who had been under the care of a physician for a year or more (33 percent continuously under care for 5 years or more). The high rates among patients with multiple visits, receiving care from the physician for a period of less than 1 year, indicate that these physicians do provide care for patients with acute problems, psychiatric as well as other. For this group, the physician can most effectively serve as a source of case detection.

Of the estimated number of persons seen in 1 year, the physicians thought that 11,500 of the adult white population would have psychiatric disorders, and that approximately 6,900 would have moderate to severe impairment from these disorders. During 1964, about 4,900 patients began a new episode of psychiatric care with one of the psychiatric services of the county. Thus if family physicians acted as a source of early case detection and referred to a psychiatric service all new patients that they judged had a significant psychiatric disorder with moderate to severe impairment, the total psychiatric caseload would be doubled.

As we have stated, only 35 percent of the patients judged to have a psychiatric problem reported this problem to the physician as a primary complaint. Thus if family physicians acted as a source of case detection, they would have to pay particular attention to patients with physical symptoms as well as patients visiting them for diagnostic reasons. There is evidence that many patients do not contact the family physician for long periods when they are bothered by psychiatric problems. Approximately 25 percent of the patients with diagnosed emotional disorders were bothered more than 5 years before they consulted their physician.

Summary

A countywide study of general practitioners and internists was designed to determine the extent to which these physicians diagnose and treat emotional disorders. Twenty-five percent of the eligible physicians participated. Each physician reported once on all patients he saw during a 1-month period. Although rates of psychiatric disorders varied greatly among physicians, the general practitioners and internists, as a group, tended to diagnose such disorders with the same frequency.

The report period produced 11,144 white patients 15 years old or older of whom 17 percent had a psychiatric problem. More than one of every three patients with psychiatric problems came primarily for that reason, yet 60 percent were considered to have moderate or severe impairment. The psychiatric problem rate among women was nearly double that for men. For both sexes the rates reached a peak in the 35- to 54-year age group. Generally, the older patients were less likely to be aware of their psychiatric condition than those in the younger group. Thirty-five percent of the patients with psychiatric problems had been afflicted by the problem for 5 years or longer. The longer a patient had his psychiatric problem the more likely he was to have had some specific psychiatric care, probably from a private psychiatrist. The usual referral pattern is from private general medical care to private psychiatric care.

Based on rather rough estimates of how many unduplicated patients general practitioners and internists practicing in this area would see over a year period, we calculated that 3 percent of the adult white population (11,500 people) would have psychiatric disorders. If these family physicians acted as a source of early case detection and referred the 6,900 new patients judged to have moderate to severe impairment due to their psychiatric disorders, the actual psychiatric caseload could be doubled.

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Program Notes

Not Enough Good Swimmers

Drownings other than those resulting from boating accidents were responsible for 3,900 deaths in the United States in 1965, according to data of the National Center for Health Statistics, Public Health Service. Drownings were the leading type of fatal public accidents not involving motor vehicles among males in 1965, accounting for one-fourth of the total accidents of this type.

Most of the drownings (other than those occurring in water transport) took place in rivers, lakes, creeks and bodies of water not specifically designated for recreation and sports. Nevertheless, about a tenth occurred at beaches, vacation resorts, and similar supervised places. Water transportation accidents—involving small boats—caused about 1,200 drownings among males and about 100 among females.

These statistics lend strong support to the American National Red Cross assertion that half the people in the United States do not swim well enough to cope with emergencies in the water.—*Statistical Bulletin* (Metropolitan Life Insurance Co.), March 1968.

Central Cancer Registry in Colorado

A central cancer registry has recently been established in Colorado. The registry, using computerized services, makes it possible for every participating hospital and physician in Colorado to receive data twice a year on the 9,000 cancer patients in the State. The registry also provides monthly followup service to each participating physician on his own patients.

Some 20 hospitals, containing some 60 percent of the hospital beds in the State, are presently tooling up their staffs for participation in the project.

The project is a joint effort of the Colorado division of the American Cancer Society, Colorado Medical Society, Colorado chapter of the American College of Surgeons, the Colorado-Wyoming Regional Medical Program, and the Colorado Department of Health. A $6,000 grant from the Colorado division, American Cancer Society, set the plans for the registry in motion.

Fish Protein Concentrate Factory

Governor John A. Volpe of Massachusetts officially opened the first commercial fish protein concentrate factory in the United States with the announcement of a contract from the Agency for International Development for more than a thousand tons of the product. The concentrate, purchased from Alpine Marine Protein Industries in New Bedford, Mass., will be distributed chiefly through voluntary agencies authorized to use AID food. First deliveries are expected early in 1969. Each batch will be inspected for safety by the State Bureau of Commercial Fisheries.

A protein supplement like the fish protein concentrate is needed in many countries because the cereal grains which constitute the people's main diet lack essential protein. The problem of giving the world's people enough calories, however, will still remain.—*This Week in Public Health* (Massachusetts Department of Public Health), June 3, 1968.

Dental Care for Mentally Retarded

The division of dental health of the Montana State Department of Health is conducting a series of monthly seminars on "Dental Care for the Mentally Retarded." Dentists participating in a seminar are moved through each phase of dental care from routine examination to X-ray, from filling to extraction.

Upon completion of the first seminar, held in May 1968, Dr. A. Jack Terrill, director of the division, presented certificates of achievement to four dentists. Five courses have now been completed, and 20 dentists have received certificates. The series is to continue over a 2-year period.

Dental "patients" for the clinical sessions are taken from the population of the Boulder River Training School, a State institution for the mentally retarded. Thus, needed care is provided along with the demonstrations. The staff of the school presents general background information on mental retardation at the seminars. The dentists attending the seminars have found that, the contrary to their expectations, the mentally retarded patients are more at ease and cooperative than many of the patients in their general practice.

Items for this page: Health departments, health agencies, and others are invited to share their program successes with others by contributing items for brief mention on this page. Flag them for "Program Notes" and address as indicated in masthead.