Analysis of referrals of mental health problems by general practitioners

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SUMMARY. The majority of people in the community who have a psychiatric disorder will consult their general practitioner. Referrals from general practice to specialist services are, however, relatively rare. The filter between primary care and specialist care has been characterized by Goldberg and Huxley as the least permeable of the filters separating psychiatrists and other specialists from the populations they serve. These referrals form the subject of this study in the Netherlands. Using a large database of doctor–patient contacts, the proportion of mental health disorders resulting in a referral and the characteristics of the patient and general practitioner that are involved in such a referral have been determined. In addition, the type of mental health institution or specialist to which referrals were directed and the characteristics influencing this choice were examined. Only 6% of patients presenting with a psychiatric disorder during surgery hours were referred to specialist care. Younger patients, male patients and patients with severe diagnoses had a greater probability of being referred. The percentage of patients referred was higher in urban areas than in rural areas. Doctors with a limited task perception regarding mental treatment tended to refer more often. Although the diagnosis did have some relationship with the institutions to which patients were referred (psychotic conditions to psychiatric services and social/material problems to social workers), the most prevalent diagnoses (neurotic conditions and relationship problems) seemed to be more or less randomly distributed over the various possibilities. Preferences appeared to be related to the existence of regular meetings between general practitioners and specialists and a positive evaluation by general practitioners of the institution concerned.

Keywords: referral to psychiatric services; referral patterns; referral rates; referral reason; psychiatric disorders.

Introduction

MOST mental health problems come to the attention of the general practitioner; the majority are recognized and treated by the general practitioner, but a small minority are referred by the general practitioner to specialized mental health workers, be they social workers, psychotherapists or psychiatrists. These facts were established 25 years ago by Shepherd and colleagues, and have been confirmed by a number of studies since then.[1-4] There are large variations between general practitioners in terms of referral rates to psychiatric services[5] and their preferences concerning the discipline or institution to which they refer patients.[6,7]

The chances of being referred are not equal for all patients. Patients with serious psychiatric complaints,[4,8] or with a diagnosis of psychosis[1,5,9,10] are referred relatively often, in contrast to patients with neurotic complaints. Men are more likely to be referred than women, and younger patients (especially those aged 25–35 years) are more likely to be referred than elderly patients.[2,11-13] The characteristics of the general practitioner also play a part in the chances of referral. Older general practitioners, those practising in urban areas and those working in single handed practices make more referrals to psychiatric services than younger doctors or those working in rural areas and in group practices.[2,3] Robertson reports fewer psychiatric referrals and a preference for psychological and social work referrals among doctors who show an interest in psychotherapy.[5] Creed and colleagues confirm these results: those general practitioners who write more detailed referral letters show a lower referral rate to psychiatric services and a higher referral rate to psychologists than those writing poorer letters.[7]

An important determinant in the mental health referral process could be the doctor–patient relationship. As Morgan pointed out, for only 40% of referred psychiatric patients did clinical indications only become a decisive factor in relation to the decision to refer: the ineffectiveness of previous treatment, often accompanied by a mutual loss of confidence, was often a general practitioner's stated reason for referral.[14] In an analysis of videotaped consultations in which there was a psychiatric referral, it was observed that it was not the type of complaint that determined whether a referral was proposed, but the feeling that all previous efforts had failed.[6,7] Robertson reports that about 35% of referrals are made because the patient is not responding to the general practitioner's treatment.[5]

Although a comprehensive picture of general practitioner referrals to mental health professionals appears to emerge from the literature, the picture is composed of fragmentary evidence. Most of the studies cited above are either outdated or based on relatively small samples. In most cases the studies are restricted to referrals to psychiatrists, while little information about the patterns of referrals from general practitioners to paramedical providers of mental health care exists. Wilkinson concludes in his review that the proportion of patients with mental health problems who are referred by general practitioners to psychiatrists and paramedical mental health workers is unknown.[15]

The aim of this study was, therefore, to provide a description of mental health referrals by Dutch general practitioners in order to answer the following questions: What proportion of mental health disorders result in a referral? What characteristics of the patient and general practitioner determine whether a mental health referral is made? To what type of mental health institution or specialist are referrals directed? What factors influence the type of institution or discipline to which the referral is made?

Method

Data were collected from April 1987 to April 1988 within the framework of the national survey of morbidity and interventions in general practice, conducted by the Netherlands Institute of Primary Health Care (NIVEL).[16] A total of 103 Dutch general practices (161 general practitioners) were selected for this study and details of all contacts with patients over a period of three months were recorded by the general practitioners. The three month recording periods were distributed over the whole year to exclude seasonal effects. Data collected included the reason for the patient's visit, the diagnosis, the treatment and whether or not

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Submitted: 6 January 1992; accepted: 4 May 1992.

the patient was referred. In addition, the 161 participating general practitioners completed an extensive questionnaire, which included questions about perception of tasks regarding mental health care, performance of tasks, opinions about the possible psychosocial nature of illness, and the mental health care services in their region (social work, ambulatory mental health care and psychiatric services).

The participating practices were a randomly selected non-proportionally stratified sample from the population of all Dutch general practices (4755 practices, 6288 general practitioners in 1988). The sample was stratified to include a balance of practices in all regions of the Netherlands, and of rural and urban practices. Group practices in the Netherlands often have an undivided practice list. As a result, colleagues of a selected general practitioner in such a practice were also asked to participate and this procedure resulted in an overrepresentation of general practitioners from group practices and health centres, of general practitioners aged less than 40 years and of women general practitioners. However, the practice population (335 000 patients) can be considered to be representative of the Dutch population.

Dependent variables

The diagnosis made by the general practitioner during normal surgery consultations was coded using the *International classification for primary care (ICPC).*[17] Those diagnoses coded within chapter 'P' (Psychological) or 'Z' (Social) are considered here. As there are about 50 difference symptoms and diagnoses within each chapter, these have been clustered in six larger groups:[16] neurotic disorders (for example, depression, anxiety, phobia, mental strain); psychotic disorders; other symptoms within *ICPC* chapter 'P' (for example, addiction); other diagnoses within *ICPC* chapter 'P' (for example, dementia); *ICPC* chapter 'Z', relationship problems; *ICPC* chapter 'Z', material and social problems (for example, housing). The diagnosis is a characteristic of the episode of illness which might cover only one visit to the general practitioner, but which might cover many visits. It is a characteristic of general practice, and of psychological problems presented in general practice in particular, that many diagnoses remain at symptom level.[18]

Referrals considered relevant to this study were referrals to hospital psychiatrists, psychiatric outpatient clinics, private psychiatrists, mental health hospitals, regional institutions for ambulatory mental health care, institutions for alcohol and drug problems, private psychologists and social workers. In the Dutch health care system, a referral from a general practitioner is mandatory in order for a patient to obtain specialist medical help. Regional institutions for ambulatory mental health care provide several forms of care (social psychiatric treatment, crisis intervention, psychotherapy and counselling). The professional staff includes specialized social workers, psychiatrists, social psychiatric nurses and psychotherapists. In formal terms, access to ambulatory mental health care should also be mediated by a general practitioner. In practice, however, only about 50% of all clients of ambulatory mental health care arrive via the general practitioner. Although social work is freely accessible, and private psychologists are, in most cases, beyond any kind of legislation, the general practitioner is the most important referring agency for these disciplines too. At the time of this study, the costs of private psychologists were not reimbursed by public health insurance companies; the other alternatives were covered in one way or another. As the first four referral possibilities listed above are dominated by psychiatrists, they have been considered together. Alcohol and drug institutions provide ambulatory care, so referrals to these institutions are considered together with those to institutions for ambulatory mental health care. This reduces the total number of categories of possible referrals to four: psychiatric referrals, referrals to ambulatory mental health care, referrals to private psychologists and referrals to social workers.

A referral ratio was calculated for each general practitioner. The referral ratio is the number of referrals made by the general practitioner to any mental health specialist, divided by the number of episodes of illness that the general practitioner has given a diagnosis from chapters 'P' or 'Z' of the *ICPC.* A referral ratio was calculated only for those general practitioners who had made at least 100 such diagnoses over the three month period (127 of the 161 participating doctors). The referral ratio is expressed as the number of referrals per 100 diagnoses.

The preference for the four referral categories was calculated for each of the general practitioners who had made at least five referrals to a mental health specialist (83 doctors). For example, preference for psychiatry was taken as the number of psychiatric referrals divided by the total number of referrals to a mental health specialist, expressed as a percentage.

Independent variables

The type of practice (single handed, two partner practice, group practice, or health centre) and location (degree of urbanization) were assessed.

In the questionnaire completed by participating general practitioners the questions on perception of tasks consisted of a number of items expressing psychosocial activities, such as treatment of agoraphobia, counselling on sexual problems and discussing a work related problem. For each item the general practitioner rated the activity on a five point scale from 'Definitely a general practitioner's task' (five) to 'Definitely not a general practitioner's task' (one). In order to determine the performance of tasks the same items were rated again on a five point scale from 'I always carry out this activity' (five) to 'I never carry out this activity' (one). The questions for the perception of the possible psychosocial nature of illness listed a number of complaints and diagnoses, to be rated on a five point scale from 'Not influenced by psychosocial factors' (one) to 'Very much influenced by psychosocial factors'(five). As a second indication of general practitioners' bias regarding the psychosocial nature of illness they were simply asked to estimate the proportion of all problems presented to them that were not entirely physical in nature.

Affiliation with certain institutions or contact with specialists, and the evaluation of them, might influence the choice general practitioners make once they have decided to make a referral. Therefore, the general practitioners were asked about their regular appointments (regular meetings at fixed times) with social workers, ambulatory mental health care workers, psychiatrists and private psychologists. The four categories of specialist referral were also evaluated in respect of a number of aspects (adequacy of help, waiting lists, negative experiences in the past, geographical accessibility, appropriate only for certain patients, for example only those who are sufficiently articulate). The general practitioners were asked to rate each aspect of each specialist category on a 10 point scale from very negative (one) to very positive (10).

Analysis

The relationship between general practitioners' characteristics and the referral ratio or the four preference scores has been analysed using analysis of variance, as the predictors are discrete variables and the criterion variables are continuous. The distribution of referrals over age, sex and diagnostic categories has been analysed by means of hierarchical log linear analysis. Chi square has been used to test the goodness of fit.

Results

The mean age of the 127 participating general practitioners for whom referral ratios could be calculated was 42 years (range 33 to 63 years). Most of the general practitioners worked in rural (36.2%) and suburban (39.4%) areas, more or less according to the distribution of the population.[16] Only 18.9% worked in urban areas and 5.5% in large cities. Of the 127 general practitioners 36.2% were single handed, 30.7% worked in a two partner practice, 20.5% in a group practice and 12.6% in a multidisciplinary health centre.

The mean scores for perception and performance of tasks show that the general practitioners had a slightly positively biased task perception and task performance (Table 1). Both scales were normally distributed. The perception and performance of tasks appeared to be strongly intercorrelated (product-moment correlation coefficient $r = 0.73$; $P<0.001$). The scale for the perception of the possible psychosocial nature of the listed complaints was again normally distributed around the mean score of 3.1. The estimate of the proportion of presented symptoms that were not entirely physical was normally distributed with a mean of 45%. The latter is related to perception of tasks ($r = 0.32$; $P<0.001$).

Of the 127 general practitioners 59.8% reported regular contact with social workers, whereas only 20.5% had regular appointments with ambulatory mental health care workers, 4.7% with psychiatrists and 5.5% with psychologists. The mean evaluation of ambulatory health care is clearly lower than for the other three disciplines (Table 1), a picture that also emerges on the several subscales that comprise the overall score.

Table 1. Attitudes of the participating general practitioners.

	Mean	(SD)	Range
Score on five point scale			
Task perception ($n = 126$)	2.7	(0.6)	1.3–4.1
Task performance ($n = 125$)	2.8	(0.6)	1.4–4.2
Perception of possible psychosocial nature ($n = 127$)	3.1	(0.6)	1.7–4.9
% of symptoms rated as not entirely physical (n = *127*)	*45*	*(21)*	*1–99*
Score on 10 point scale[a] *evaluating:*			
Social work ($n = 102$)	6.9	(1.4)	1.0–9.4
Ambulatory mental health care ($n = 104$)	5.5	(1.3)	1.8–8.2
Psychiatric services ($n = 35$)	6.6	(1.2)	3.6–8.8
Psychologist ($n = 54$)	6.9	(1.2)	4.0–9.4

n = number of respondents. SD = standard deviation. [a]Mean of mean score for each GP.

Proportion of episodes of illness referred

A total of 19 286 episodes of illness with a psychological or social diagnosis were recorded. A total of 1106 referrals were recorded during surgery hours (surgery visits and home visits taken together) and included in the analysis. Overall, there were 1310 referrals to mental health care and social work. Considering only referrals made during surgery hours, 5.7% of episodes of illness were referred.

Referrals, by patient characteristics

Table 2 shows the proportion of referrals in the six diagnostic groups, by the age and sex of the patient. Statistical analysis revealed that the referral rates were not independently distributed over diagnostic category, age and sex ($\chi^2 = 628$, 39 degrees of freedom, $P<0.001$) — age and diagnosis, age and sex, and sex and diagnosis interact. Psychotic disorders and other psychological diagnoses were the most likely diagnoses to be referred. No differences could be found in this respect between the various type of psychosis — schizophrenia, affective psychosis, puerperal psychosis and organic psychosis. However, the numbers in these categories were small. Neurotic disorders, such as depression, anxiety and stress disorders, were much more common and only 5.5% were referred.

The distribution of referrals by age and sex (Table 2) reveals that men were more likely to be referred than women and that younger people (less than 40 years of age) were more likely to be referred than older patients. It should be noted that a diagnosis of mental disorder was most common in women aged 40 years or more (40.7% of all mental illness diagnoses) and least common in men under 40 years of age (14.2% of all diagnoses).

Referral ratio, by general practitioner characteristics

Table 3 summarizes a number of analyses of variance, with the referral ratio as the dependent variable. The referral ratio increased with the degree of urbanization. The figures for cities, in particular, are considerably higher than those for the countryside. The referral ratio of doctors in health centres was higher than for doctors who work in single handed, two partner or group practices. Doctors who did not consider psychosocial treatment as their task referred slightly more patients than doctors who did consider this to be their task.

Table 2. Prevalence of mental health disorders and rates of referral age and sex.

	% of episodes referred (total no. of episodes in group)				
		Female patients aged:		Male patients aged:	
Symptoms/diagnoses	Total	40+ years	<40 years	40+ years	<40 years
Psychological problems					
Neurotic disorders	*5.5* (9256)	*3.7* (3675)	*7.5* (2464)	*5.1* (1800)	*7.4* (1317)
Psychotic disorders	*16.4* (365)	*11.4* (149)	*15.3* (72)	*16.3* (92)	*32.7* (52)
Other symptoms	*3.9* (4711)	*1.4* (1895)	*5.5* (1116)	*2.7* (971)	*9.6* (729)
Other diagnoses	*12.0* (676)	*9.7* (309)	*17.1* (123)	*8.4* (167)	*22.1* (77)
Social disorders					
Relationship problems	*7.3* (2653)	*3.5* (1272)	*13.2* (645)	*6.4* (488)	*12.9* (248)
Social/material problems	*4.7* (1607)	*3.9* (535)	*7.3* (395)	*2.2* (359)	*5.7* (318)

Table 3. Referral ratio, by general practitioner characteristics.

Independent variable	Referral ratio	F
Age (years)		1.98
41+ (*n* = 67)	5.30	
⩽ 40 (*n* = 60)	6.31	
Practice area		4.46**
Rural (*n* = 46)	4.73	
Suburban (*n* = 50)	5.75	
Urban (*n* = 24)	6.35	
Large city (*n* = 7)	10.21	
Type of practice		4.34**
Single handed (*n* = 46)	4.79	
Two partner (*n* = 39)	5.99	
Group practice (*n* = 26)	5.23	
Health centre (*n* = 16)	8.70	
Task perception[a]		2.78
Low score (*n* = 61)	6.34	
High score (*n* = 65)	5.17	
Task performance[a]		2.31
Low score (*n* = 67)	6.22	
High score (*n* = 58)	5.15	
Perception of psychosocial nature[a]		0.53
Low score (*n* = 67)	5.99	
High score (*n* = 60)	5.46	
Estimate of % of symptoms not entirely physical		0.01
Low (0–40%) (*n* = 63)	5.77	
High (41–99%) (*n* = 64)	5.71	

n = number of general practitioners in group. ** *P*<0.01. [a] High and low scores are divided by the median score.

Preference for kind of mental health institution/specialist

Table 4 shows the destination of those patients who were referred according to the diagnosis. Referrals with different diagnoses were not equally distributed over the four referral possibilities (χ^2 = 334; 20 df, *P*<0.001). The predominance of neurotic disorders and psychological symptomatology in general practice, which is also reflected in the absolute referral figures, results in a majority of this kind of disorder in the caseload of each of the referral options — more than half of all the referrals to each discipline have these diagnoses. When general practitioners referred a patient with a psychotic disorder, in most cases psychiatric services were preferred (Table 4). The majority of social and material problems were referred to a social worker. In the case of relationship problems, general practitioners seemed to use two major options: ambulatory mental health care or social work; in the case of neurotic disorders and psychological symptomatology three options were chosen: a psychiatrist, ambulatory mental health care and, somewhat less often, a social worker.

Table 5 shows the age–sex distribution for the four referral options. Again, the distribution contradicts the assumption of independence of age, sex and option for referral (χ^2 = 246, 13 df, *P*<0.001). Controlling for diagnosis does not alter this situation. Older patients were referred to psychiatric services more often than younger patients. Younger men were overrepresented within ambulatory mental health care and a relatively large proportion of the younger women were referred to social workers.

Table 6 shows the preferences of the general practitioners for referral, by their characteristics. Regular appointments with a specialty resulted in an increased share in referrals in the case of social workers, psychologists and ambulatory mental health care. A positive evaluation had a critical effect on referrals to social workers and ambulatory mental health care. In the case of psychiatric services and psychologists, however, data were available from a minority of respondents only. The practice area did not have an effect on any of the preferences, and type of practice shows only one clear effect: doctors in health centres preferred to refer to social workers (who are part of the health centre).

Table 4. Destination of patients who were referred, by diagnosis.

	% of referrals					
	Psychological problems				Social problems	
	Neurotic disorders (*n* = 510)	Psychotic disorders (*n* = 60)	Other symptoms (*n* = 186)	Other diagnoses (*n* = 81)	Relationship problems (*n* = 194)	Social/material problems (*n* = 75)
Psychiatric services	*37.6*	*68.3*	*38.7*	*42.0*	*9.3*	*16.0*
Ambulatory mental health care	*29.4*	*30.0*	*40.9*	*30.9*	*39.2*	*20.0*
Psychologist	*10.6*	*1.7*	*7.0*	*9.9*	*7.2*	*8.0*
Social work	*22.4*	*0.0*	*13.4*	*17.3*	*44.3*	*56.0*

n = total number of referrals.

Table 5. Destination of patients who were referred, by their age and sex.

	% of referrals			
	Female patients aged (years)		Male patients aged (years)	
	40+ (*n* = 274)	<40 (*n* = 392)	40+ (*n* = 186)	<40 (*n* = 252)
Psychiatric services	*38.3*	*28.6*	*45.2*	*26.6*
Ambulatory mental health care	*28.1*	*30.6*	*30.1*	*42.1*
Psychologist	*7.7*	*9.7*	*6.5*	*9.9*
Social work	*25.9*	*31.1*	*18.3*	*21.4*

n = total number of referrals.

Discussion

Of all the episodes of mental illness presented during surgery hours in this study, 5.7% resulted in a referral. Whitehouse similarly reported that of all consultations with psychosocial problems 4.8% of patients are referred to a consultant, men 1.9 times as frequently as women.[19] The figure of 5.7% determined here is also not dissimilar to the 6.6% reported by Wilkin and Smith for all types of referral.[20] The mean referral rate in the Dutch national morbidity survey (mean number of referrals per 100 episodes of illness) is 10.9 (Verhaak P, unpublished results).

In this study 33 per 10 000 of the population at risk were referred to a mental health specialist or social worker in a three month period. When all referrals, including those outside normal surgery hours, are considered this increases to 39 per 10 000 of the population at risk. These figures are compatible with those obtained by Shepherd and colleagues[1] and Kessel.[21] They are, however, much lower than Italian figures. Tansella[22] reported that 22% of patients identified as having conspicuous psychiatric morbidity by general practitioners were referred to a specialist, while Arreghini and colleagues presented a one day prevalence figure for general practitioner referral to specialist psychiatric services of 7.3%, which is equivalent to 17.6 per 10 000 of the population at risk being referred in one day.[23]

The age and sex distribution of the referred patients in this study showed the same characteristics as reported in other studies.[11-13] Although psychiatric morbidity was less frequently identified among younger men, this group was most frequently referred. It might be that this group of patients is overrepresented in the 'hidden psychiatric category', and that as a result the illness of the identified sample is on average more severe. Younger men were more commonly referred to ambulatory mental health care, while elderly patients were more commonly referred to psychiatric services. As the former favours a multidisciplinary approach while the latter constrict themselves to a medial framework, this difference might reflect a difference in general practitioners' perception of the 'treatability' of older and younger patients.

Psychotic disorders and other 'classical' psychiatric diagnoses were referred most frequently. However, although the likelihood of being referred is higher for these serious mental disorders, the majority of patients with these conditions remain under the care of the general practitioner. In a longitudinal study, 391 patients with psychological complaints were monitored during one year.[24] Of the patients 13% were referred to a mental health specialist during that year. The likelihood of referral was higher if the patient experienced more problems, had a higher score on the general health questionnaire, or was aged between 25 and 44 years. Patients referred presented with more psychosocial complaints over the study year than non-referred patients. These results indicate that referral is related to the burden a patient feels and the severity of his or her situation.

The referral ratio in this study is also clearly influenced by the geographical area: large cities induce more referrals than rural areas. A common finding has again been replicated.[2] General practitioners working in health centres also tended to refer more of their patients. This seems to be a result of their preference for their social worker colleagues in the health centre. The results suggest that general practitioners with an interest in psychological treatment (expressed by their task perception) do more treatment themselves and hence refer fewer of their patients. The age of the general practitioner and other personal characteristics did not have an effect on the referral ratio. This finding is similar to that of Wilkin and Smith who also did not find significant relationships between doctor characteristics and referral rates.[18] It is possible that relationships at the level of the general practitioner are obscured by the differences in the case mix of the individual general practitioners. Although general practitioners recording fewer than 100 episodes of mental illness were excluded from the analysis, such differences may have played a part.

It is noteworthy that the area where general practitioners practise had little effect on their preference for where to refer. One

Table 6. Preferences of general practitioners for the four types of specialties, by general practitioner characteristics.

	Social work			Ambulatory mental health care			Psychiatric services			Psychologist		
Independent variable	No. of GPs	Preference ratio (%)	*F* ratio	No. of GPs	Preference ratio (%)	*F* ratio	No. of GPs	Preference ratio (%)	*F* ratio	No. of GPs	Preference ratio (%)	*F* ratio
Regular appointments with specialty			15.60***			4.16*			1.19			8.88**
Yes	48	*31.1*		14	*43.6*		3	*21.5*		5	*23.8*	
No	35	*15.1*		69	*31.6*		80	*34.5*		78	*6.8*	
Evaluation of specialty (mean score)			10.27***			4.61*			0.11			3.45
⩾6	54	*29.4*		28	*29.4*		16	*44.4*		28	*15.6*	
<6	15	*12.4*		43	*39.4*		7	*41.4*		8	*3.6*	
Practice area			0.36			0.14			1.29			2.58
Rural	24	*22.1*		24	*34.6*		24	*39.5*		24	*2.8*	
Suburban	36	*25.1*		36	*33.6*		36	*29.5*		36	*11.8*	
Urban	18	*26.1*		18	*31.6*		18	*36.5*		18	*5.8*	
Large city	5	*18.1*		5	*29.6*		5	*39.5*		5	*12.8*	
Type of practice			5.73***			1.78			2.31			1.96
Single handed	30	*15.1*		30	*39.6*		30	*35.5*		30	*9.8*	
Two partner	22	*24.1*		20	*33.6*		22	*35.5*		22	*5.8*	
Group practice	18	*29.1*		18	*27.6*		18	*40.5*		18	*2.8*	
Health centre	13	*38.1*		13	*28.6*		13	*20.5*		13	*12.8*	

***$P<0.001$; **$P<0.01$; *$P<0.05$.

would expect a preference for social work with its geographically intricate structure in rural areas, and for psychiatric services in urban areas. Private psychologists claim to fill in the geographical gaps of mental health services and would be expected to predominate in rural areas. These effects did not occur.

The discriminatory power of diagnostic categories was limited to the extremes: most of the psychotic disorders and other clearly psychiatric diagnoses were referred to the psychiatric services, whereas social/material problems were referred to social workers. As the likelihood of referral lessened, the distinction between referral possibilities disappeared. The most common psychological disorders, that is neurotic disorders and other psychological symptoms, were more or less equally distributed between psychiatric services, ambulatory mental health care and social workers. An important result was the overall positive evaluation of social work and the relatively negative evaluation of ambulatory mental health care, which seems to influence referral preferences. As a consequence, the less specialized social workers appear to constitute a reasonable alternative in the case of less pronounced mental health problems that quantitatively play a major role in the epidemiology of mental health problems in primary care.

Earlier it was suggested that the doctor–patient relationship might influence the referral decision; referral might be induced by the burden a general practitioner feels. The data presented here throw no further light on this. Much still needs to be explained and the doctor–patient relationship might shed some light on these matters. Further study is directed at a comparison between consultations with patients suffering from neurotic depression who were referred to a mental health specialist or social worker and consultations with patients having the same diagnosis, who were not referred.

This study has shown that most psychological and social problems are treated by general practitioners and diagnostic labels and clinical features are of only secondary importance in the decision to refer. Thus, one should not be too 'prescriptive' when defining the types of problems general practitioners should not deal with. This is contrary to somatic medicine where, for example, is it quite clear that a patient with a suspected heart attack should be referred to a cardiologist. The relationship is less straightforward with psychological diagnoses which may be complicated by social phenomena such as the doctor–patient relationship, the support offered by the community and the characteristics and interests of the general practitioner.

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