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#### **Research Article**

## Type, severity and course of chronic mental disorders in general health care

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#### ABSTRACT

**Introduction:** The majority of patients with mental disorders is treated by general practitioners.

**Objectives:** Goal of the present study is to investigate the proportion, type, course, and impairment of general practice patients who are suffering from chronic mental disorders.

**Methods:** 1451 general practice patients, aged 18 to 60, were screened. 307 patients, who had indicated that they were suffering from chronic and disabling mental problems underwent a medical assessment with the standardized International Neuropsychiatric Interview, the Burvill Rating for somatic disorders, the SCL-90, Mini-ICF-APP for capacity limitations and the IMEP for participation restrictions.

**Results:** 29.7% of all general practice patients reported to suffer from mental problems with relevant impairment in their daily living. From the 307 patients 55.4% had additionally seen a psychiatrist or psychotherapist during the last year. 28.8% were at present on sick leave. Frequent limitations in capacity are seen for flexibility (57% all, or 5.2% very severe), decision making (57.9%, or 2.9%), endurance (55.3%, or 7.8%), assertiveness (53.4%, or 2.9%), contact to others (50.1%, or 1.6%), intimate relationships (52.8%, or 3.9%), and spontaneous activities (73.3%, or 3.9%).

Conclusions: Chronic and disabling mental disorders are frequent in primary health care. Cross-sectionally they look not very impressive, but in respect to negative illness consequences and restrictions in participation they are disabling. The data show that general practitioners are, to a large degree, therapists for mental disorders. As most cases are chronic and disabling general practitioners must work not so much in a curative but rather rehabilitation perspective.

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#### **Background**

The majority of patients with mental disorders is seen by general practitioners [1-8]. According to epidemiological surveys, depressed patients were in contact with primary care physicians 14.5 times during the last year but only 1.4 times with psychiatrists [6, 8]. The explanation is that general practitioners are often the first contact of respective patients, that the number of general practitioners is about ten times the number of psychiatrists, which makes them indispensable in the care for about 25% of persons with mental disorders in the general population, and that they are also well equipped to treat psychological disorders [2, 4, 9-20].

A characteristic of mental disorders is that in many cases they take a long-term course, be it recurrent affective disorders, psych organic disorders, or chronic personality disorders. Persisting mental disorders need different forms of help and guidance, special treatments, and also have different consequences for the lives of patients. There are many professionals who come to help. But, the general practitioners are especially apt to take care of such patients over the years. While there are many data on mental disorders and psychological aspects of somatic disorders in primary care, the problem of chronicity and capacity- and participation disorders has only found limited attention [21, 22]. Goal of the present study was to investigate in greater detail the type, course, and impairment of general practice patients who are suffering from chronic mental disorders.

#### Method

#### Physicians and patients

Forty primary care physicians participated in this study. They were running their practice on average 12.6 years and took care of 1115 patients per quarter of the year.

In a first step 2790 unselected patients in the waiting room were approached and 1902 agreed to fill in a self-report short questionnaire, 1451 aged 18 to 60. 569 were patients with "chronic, disabling, mental disorders" according to self-rating, i.e. they fulfilled the following criteria: (a) age between 18 and 60 years, (b) suffering at present from health problems which are not only somatic but also psychological in nature, (c) problems existed for more than six months, (d) having a score of "0" or "1" in at least one item, or a score of "2" in at least three items of the WHO-5 self-rating questionnaire, and (e) an average score of "4" or a score of "5" in at least one item on the self-rating questionnaire on illness-related participation disorders across different domains of daily life [22-24]. From these patients, 307 participated in an intensive assessment by a research physician. 70.4% of the participating patients were female. The average age was 43.2 years. 40.7% were living alone, 65.5% had a workplace and 28.8% were at present on sick leave.

#### Instruments

Diagnoses of mental disorders were based on the standardized Mini International Neuropsychiatric Interview, MINI, which covers most diagnostic categories of two DSM-IV [25]. The chronic and acute somatic status was assessed with the Burvill rating, which allows a rating (no, mild, moderate, severe) of acute or chronic health problems in major body systems (cardiovascular, metabolic, pulmonary, nervous, urogenital, gastro-enterological, blood, eye-ear-nose, musculoscelettal) [26]. The subjective degree of suffering from psychosomatic symptoms was assessed with the Symptom-Checklist-90-Revision, SCL-90-R, which ask to rate the presence and severity of ninety different symptoms [27]. The status of capacity was rated with the Mini-ICF-APP, an observer-rating covering 13 dimensions of capacities which can be impaired in patients with mental disorders [28]. Illness-dependent participation disorders were rated by the physician with the IMEP observer rating in respect to ten domains of life (activities of daily living, activities in the family, leisure activities, work etc.) [29].

The study protocol was reviewed for the fulfillment of ethical, data security, and legal requirements by the internal scientific review board of the Federal German Pension Agency.

#### Results

The results from the screening suggest that 46.5% of patients between the age of 18 and 60 are suffering from some mental problem. 38.3% say that their problems exist longer than six months, 26.9% that the complaints are persisting and 29.7% that they feel impaired in their daily living, so that one quarter to one third of general practice patients are suffering from chronic, disabling, mental disorders.

Referring to the 307 patients (70.4% female, age 43.2 years, 40.7% living alone, 65.5% working and 28.8% at present on sick leave) who have been assessed by a research physician, 77.2% were seeing this particular physician longer than one year, 91.5% had seen the physician more than once and 54.7% at least once in three months. Forty-seven per cent of the patients said they were coming in because of somatic problems only, 11.7 because of mental problems and 40.4% because of both.

34.9% had already seen a psychiatrist (66.4% more than once, 46.7% longer than a year), 36.5% a psychotherapist (46.4% more than ten contacts in the last year, 47.9% longer than a year), or in total 55.4% had seen one or both types of specialists. In total, 92.5% of the patients had seen another physician additional to the GP, preferably gynecologists (39.6%), orthopedics (35.5%), ear-nose-throat (16%), or ophthalmologist (14.3%). 12.1% had been in a psychiatric hospital during the last five years and 9.1% in an inpatient psychiatric/psychosomatic rehabilitation unit.

Figure 1 gives an overview of the diagnostic spectrum according to the standardized Neuropsychiatric Interview for life time and present disorders. Almost every second patient fulfills the criteria for acute major depression, followed by anxiety disorders and adjustment disorders. Psychotic disorders are a minority with up to four per cent. The GSI of the SCL-90 is on average 0.925 (SD 0.566), the mean 0.777 and the maximum 2.944.

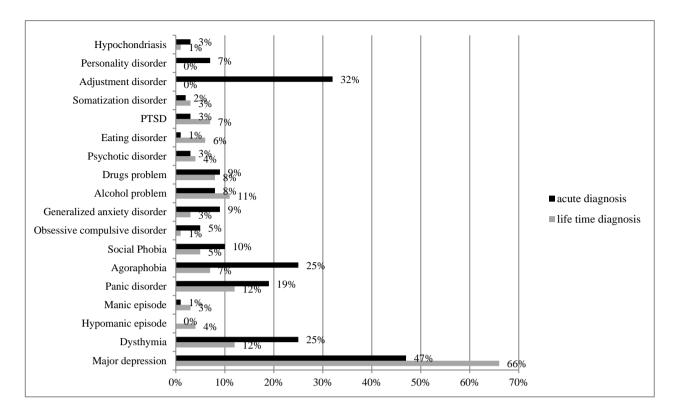


Figure 1: Life time and present diagnoses according to the standardized International Neuropsychiatric Interview MINI (% from N=307)

Table 1 gives an overview on the results of the Mini-ICF-APP rating for capacity limitations. Frequent limitations in capacity are seen for flexibility (57% all, or 5.2% very severe), decision making (57.9%, or 2.9%), endurance (55.3%, or 7.8%), assertiveness (53.4%, or 2.9%),

contact to others (50.1%, or 1.6%), intimate relationships (52.8%, or 3.9%), and spontaneous activities (73.3%, or 3.9%). There are only few cases with limitations in self-care (3.9% or 0.3%).

Table 1: Limitations in capacities according to the Mini-ICF-APP observer rating (N=307)

Mini-ICF Observer rating N = 307		(0) no impairment		(1) mild impariment		(2) moderate impariment		(3) substantial impairment		(4) complete impairment
1. Adherence to regulations	70.7%		16.6%		11.7%		1.0%		0.0%	
2. Planning and structuring of tasks	55.4%		25.7%		17.6%		1.3%		0.0%	
3. Flexibility	43.0%		21.2%		30.6%		5.2%		0.0%	
4. Professional competency	83.1%		10.1%		5.5%		1.3%		0.0%	
5. Decision making	42.0%		26.4%		28.3%		2.9%		0.3%	
6. Endurance	44.6%		19.5%		28.0%		7.8%		0.0%	
7. Assertiveness	46.6%		28.0%		22.5%		2.9%		0.0%	
8. Contact to others	49.8%		26.7%		21.8%		1.6%		0.0%	
9. Group integration	59.9%		21.8%		16.0%		2.3%		0.0%	
10. Intimate relationships	47.2%		26.4%		22.5%		3.9%		0.0%	
11. Spontaneous activities	26.7%		31.3%		38.1%		3.9%		0.0%	
12. Self care	96.1%		2.6%		1.0%		0.3%		0.0%	
13. Mobility	69.1%		16.0%		9.4%		5.2%		0.3%	

Table 2 shows the degree of restrictions in participation, i.e. disability, according to the IMEP in the judgment of the physician across different areas in life. The average score of the IMEP is 3.57 (1.61, range 0.4-8.0). 56.6% are severely restricted in their ability to work, 52.4% in the ability to cope with stressors in life, 43.3% in spontaneous and recreational activities, 33.2% in social activities, 32.9 in daily duties, 30.3 in close

relations, 34.1% in their sexual life, 16.6% in outside the home activities of daily living, 16.6% in activities at home, and 8.5% in basal activities of daily living. This corresponds to the fact that only 37.0% of patients were employed fulltime, 20.3% part time, 16.1% were out of work, 9.5% in early retirement, and 21.5% were officially acknowledged as being disabled.

Table 2: Participation disorders according to the IMEP physician rating (N=307)

Dimensions of participation disorders according to IMEP observer rating $N=307$	(0) no participation disorder	(1-2) sometimes problems without relevance for allday life activities	(3-4) sometimes problems with relevance for allday life activities	(5-6) regular problems with significant impairment in allday life	(7-8) activity only possible with support of others	(9-10) no activity possible, complete impairment
Activities of daily living (washing, eating etc.)	71.3%	6.2%	14.0%	8.5%	0.0%	0.0%
Activities at home (housework, gardening etc.)	48.2%	5.2%	30.0%	15.0%	1.6%	0.0%
Outside the home activities (shopping, driving around						
etc.)	38.8%	7.8%	36.8%	14.3%	2.3%	0.0%
Daily duties (cleaning up, care of others etc.)	21.8%	7.2%	38.1%	29.0%	3.9%	0.0%
Recreational activities (sports, leisure time etc.)	13.7%	4.2%	38.8%	35.8%	7.5%	0.0%
Social activities (meeting friends, theater etc.)	15.6%	8.5%	42.7%	26.4%	6.8%	0.0%
Close relations (partner, family etc.)	24.8%	7.8%	37.1%	22.5%	7.5%	0.3%
Sexual life (quantity and quality)	27.4%	13.4%	25.1%	16.9%	7.8%	9.4%
Coping with stress (extraordinary problems)	2.6%	3.9%	41.0%	28.0%	24.4%	0.0%
Work and professional activities	4.2%	7.8%	31.3%	28.3%	22.1%	6.2%

Table 3 shows the results of the Burvill rating, i.e. the rate and severity of acute and chronic somatic comorbidity across body systems. Most frequent are disorders of the musculo-skeletal system in 71.7% of

patients, or 58.3% with moderate to severe illnesses. Followed by ear/nose/throat, eyes, ears, gastrointestinal disorders, and pulmonary disorders.

Table 3: Rate and severity of acute and chronic somatic disorders according to the Burvill rating (N=307)

D. W.D.	Acute illness	S			Chronic illness				
Burvill Rating: Severity of illness in different body systems according to physician's rating N = 307	No illness	Mild illness	Moderate illness	Severe illness	No illness	Mild illness	Moderate illness	Severe illness	
Nervous system (neurologic)	96.4%	0.7%	2.6%	0.3%	50.5%	11.4%	31.3%	6.8%	
Cardiovascular system	99.3%	0.0%	0.7%	0.0%	68.1%	5.9%	25.7%	0.3%	
Metabolism	99.7%	0.0%	0.0%	0.3%	66.8%	6.8%	24.4%	2.0%	
Respiration organs	95.1%	1.6%	3.3%	0.0%	57.7%	12.7%	28.0%	1.6%	
Uro-genital system	98.0%	0.3%	1.3%	0.3%	78.8%	7.5%	13.0%	0.7%	
Gastro-intestinal system	96.4%	1.0%	2.6%	0.0%	51.5%	21.2%	26.7%	0.7%	
Haematologic system	98.0%	1.0%	1.0%	0.0%	92.5%	3.6%	3.9%	0.0%	
Eye and ear	99.0%	0.3%	0.3%	0.3%	47.2%	35.2%	16.0%	1.6%	
Musculoskeletal system	97.4%	0.7%	2.0%	0.0%	28.3%	13.4%	50.2%	8.1%	
Others	98.0%	0.7%	1.0%	0.3%	87.0%	6.2%	5.5%	1.3%	

#### Discussion

According to the intake screening, about one third of the primary care patients were suffering from chronic and disabling mental disorders. This is an enormous share and also work load for the general practitioner. This shows that general practitioners must be competent in caring for patients with mental disorders in general and those with chronic mental disorders in particular.

The data show that general practitioners hold contact to these patients for long times which puts them in the position to take over this responsibility. General practitioners are also in the role of case managers as the patients were treated to a high degree in parallel by specialists.

The spectrum of diagnoses is markedly different from psychiatric institutions, but very close to the prevalence and spectrum of mental disorders as shown in epidemiological studies. This shows, that general practitioners are truly taking care of the general population. They are the first step of help by a medical professional for almost everybody [30-32]. The spectrum of the disorders shows that they have to know more, but only pharmacotherapy. Affective disorders, anxiety disorders, adjustment disorders, medication and drug abuse need good skills in patient guidance, counseling, and psychotherapy [31-34].

This is even more true if one takes into account the social consequences of these disorders. They are evidently disabling. They impair participation not only in respect to work but also in daily activities, spontaneous and leisure activities, or social and family contacts. The SCL-90 with an average GSI of 0.925 shows moderate scores of cross-sectional severities. But the resulting impairment is still most relevant. This is typical for chronic mental and somatic illnesses. On first sight they may look like mild disorders, but their consequences are grave, leading to impairment across all areas of life, which makes them severe disorders.

In summary, the data show that general practitioners are, to a large degree, therapists for mental disorders. As most cases are chronic and disabling general practitioners must work not so much in a curative but rather rehabilitation perspective. The importance of mental health problems and participation-oriented treatment in primary care becomes more and more recognized [33, 34].

The present study has several limitations. It is a cross sectional observational study. The recruitment process may have led to a selection of motivated of physicians and patients. Only patients have been recruited who were coming in the practice, so that they may be not representative for all patients and may over-represent the sicker patients. Still, the recruitment strategy is established in primary care research, and socio-demographic characteristics are comparable to other studies, the selection bias seems to be limited [35].

Strenghts of the study are that a comprehensive structured medical assessment has been done in each patient who complained about mental disorders. The results of this study add information to existing data on patients with mental disorders in primary care and this especially those with long term or chronic illnesses. The sample of 1902 patients are in terms of major socio-demographic characteristics representative for

German primary care patients [36]. The study does not only report data on the prevalence and spectrum of diagnoses but also on disability, functional capacity and impairment i.e. on illness-dependent-participation.

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#### **Conflicts of Interest:**

No conflicts of interest declared

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