

Physical Illness in Chronic Psychiatric Patients from a Community Psychiatric Unit The Implications for Daily Practice

A. HONIG, P. POP, E. S. TAN, H. PHILIPSEN and M. A. J. ROMME

The prevalence and significance of physical diseases, and health-care-seeking behaviour, were examined in a sample of 218 chronic psychiatric patients from an urban community psychiatric unit. Only 14% declined medical screening. Of the respondents, 53% had one or more probable or certain physical diseases warranting further medical attention. The majority of the diseases found were minor and typical of primary care problems. A severe (i.e. life-threatening) disease was present in 7% of respondents. Of the patients, 87% visited their GP at least once a year. The implications are that frequent consultation with primary care specialists and health-care-seeking behaviour should be noted, and included in any evaluation of the medical needs of chronic patients in community psychiatric care.

Half of all patients in psychiatric care suffer from one or more physical illnesses, a quarter of which are thought to have causal relationships with the presenting psychiatric disease. The referring agent or therapist involved is, in the majority of cases, unaware of the coexisting physical illness. This is the alarming conclusion of virtually all researchers in the field (Koranyi, 1979; Hall *et al.*, 1980; Hoffman & Koran, 1984; Ananth, 1984), and the data are not limited to acute and chronic psychiatric in-patients. Data for chronic psychiatric patients in community care, the focus of the present paper, are quite similar (Barnes *et al.*, 1983; Beresford *et al.*, 1985).

If the research data are accurate, the inference is that in daily community psychiatric practice, physical disease poses a formidable problem that is often denied. The implication then is that chronic psychiatric patients in community care are deprived of needed medical care and are prone to undetected and severe physical diseases.

Problems in interpreting previous research data in relation to ambulatory care are discussed and incorporated in the present study. The findings of an investigation into the presence of physical disease, patients' health-care-seeking behaviour, and previously undiagnosed disease in chronic psychiatric patients in community care are also reported. Finally, the clinical implications are discussed.

Physical disease and research

The problem of defining physical disease

Physical disease is a concept that is hard to define and often open to interpretation. To quote Dubos,

“The difficulty in defining is implicit in the very structure of the word itself” (Dubos, 1968). This statement refers not only to mental disease but also to medical disease (Clare, 1976). In research it is seldom that a definition of, or some criteria for, physical disease is given. In cases where the effort has been made, a considerably lower percentage of physical disease is reported – on average, 20% less (Eastwood & Trevelyan, 1972; Hoogduin *et al.*, 1985). ‘Diseases’ such as lipoma on the back, undescended testicle, hyperlipidaemia, atrophy of one kidney, hyperostosis frontalis interna etc. (Hall *et al.*, 1980; Maricle *et al.*, 1987) illustrate the problem of definition. Terms such as ‘sickness’, ‘ailment’, ‘condition’, ‘handicap’, and ‘abnormal finding on further examination’ are all used interchangeably and sometimes taken for disease.

In psychiatric patients the majority of diseases often go undiagnosed. The label ‘misdiagnosis’, however, may not be applicable at all. For example, a general practitioner (GP) could well be aware of a physical disorder but, knowing the course of the disorder, not diagnose a disease (e.g. a serological scar from a previous syphilitic infection), while another therapist, not knowing the previous history, might diagnose a luetic infection on a one-time positive serology. A therapist might also apply another definition of physical disease, or a patient might refuse any physical screening procedure while in community psychiatric care. In the available literature, these possibilities are not accounted for but are rather regarded as misdiagnosis. Unfortunately, not all clues can be fully interpreted following a once-only check-up. High blood pressure, for instance, with otherwise no abnormalities detected during the

examination, does not justify a diagnosis of uncomplicated hypertension. A follow-up is needed to confirm or exclude the suspected diagnosis. Whether further medical treatment is necessary very much depends on the diagnosis of the severity of the disease. However, only Eastwood & Trevelyan (1972) and Kreitman *et al* (1966) give a severity rating; an indication of certainty of diagnosis is never given.

Community psychiatry and medical care

Community psychiatric care for the chronic patient does not, in general, provide for an evaluation of physical health. Many community psychiatric centres do not include basic facilities and medical manpower for carrying out a routine physical check-up. This was also the case with the unit referred to in the present study. Community psychiatry often operates with multidisciplinary teams. Within the team, individual members tend to assume more responsibility for direct care and management of patients than do their hospital counterparts. The responsibilities of community psychiatric nurses, psychologists, and social workers within the team in the management of physical complaints and symptoms of their patients is not well defined (Davidson *et al*, 1988).

As distinct from in-patient psychiatry, there is, in community psychiatry, a certain overlap with other directly accessible health care services, such as general practice. Clear responsibility for monitoring the physical health of chronic psychiatric patients cannot be shouldered by any ambulatory service and is, in general, left to the better judgement of the patients themselves. Whether chronic psychiatric patients in community care actually use the ambulatory medical resources available to them has not been determined. Adequate utilisation of available resources can, however, be important for their physical well-being.

Chronic psychiatry patients in the community

Stigmatising remarks that are often made regarding chronic psychiatric patients are seldom systematically investigated and are sometimes given as an excuse for deciding against physical screening. Reasons mentioned in the literature include: deteriorated cognitive function, psychological regression, and affective deterioration (Ramsay *et al*, 1982a; Ramsay & Engelsman, 1983); prolonged psychiatric history (Ramsay *et al*, 1982b); and the adverse impression that chronic psychiatric patients tend to make on others, such as 'malodorous', 'dirty', 'may not cooperate' (Kampmeier, 1977; Hoffmann & Koran,

1984), and 'unattractive and poor' (Adler, 1972). In a recent study (Maricle *et al*, 1987), 43 out of 100 chronic psychiatric patients in community care did indeed decline a medical screening. The above presumptions need to be investigated further so that services can be adapted to patients' traits and handicaps.

Method

In view of the above-mentioned problem of definition traits inherent in community psychiatry, and possible traits in patients, a research project was set up to measure the prevalence both of well-defined physical disease and of functional illness. For research purposes, physical disease was defined as manifestations for which a patient needed medical treatment and/or further medical investigation. Each physical disease was rated according to severity, certainty of diagnosis, and duration of disease. A physical disease which was regarded as being liable to threaten or shorten life was placed in the category 'severe' and all the others were placed in the category 'not severe'. Similar classifications have been used by Eastwood & Trevelyan (1972) and Kreitman *et al* (1966). Given these definitions, the patient, community psychiatric unit (CPU) therapist, GP, and screening specialist in internal medicine were asked for their opinions on the presence of the disease. The use made of medical and mental health care was also measured.

The screening specialist in internal medicine rated all patients on a five-point scale for communicativeness during the interview, memory regarding medical and psychiatric history, physical hygiene, and co-operation during the screening procedures. The data were then compared with those for a matched sample of patients, newly admitted to the internal medicine out-patient clinic of an urban teaching hospital serving the same population.

All patients ($n=218$) who, at the time of the study, had been receiving treatment for at least one year in an urban community mental health service CPU for chronic psychiatric patients in Maastricht, the Netherlands, were asked to participate in the study. After giving informed consent, each participating patient received an evaluation including an examination by the specialist in internal medicine. The evaluation consisted of a brief, oral general medical history, focusing on past and current symptoms, plus a standardised physical examination as proposed by Summers *et al* (1981). Laboratory studies, including a 20-item automated chemistry panel (SMA-20), a complete blood count (CBC) with differential, an erythrocyte sedimentation rate, a serological test for syphilis (TPHA), thyroid stimulating hormone level (TSH), serum-free thyroxine, urine analysis, and an electrocardiogram (ECG) were obtained for each patient. In addition, the CPU therapist was asked to supply both a medical diagnosis and a diagnosis according to DSM-III (American Psychiatric Association, 1980), grouped in nine main categories, for all patients.

Results

Demographics

Of the 218 patients, 156 (72%) participated in the evaluation; in the other cases, the patient or the therapist or both actively or passively declined the medical evaluation over the 12-month study period. The average age of the participants was 45.5 years (range = 23–62 years; mode = 42 years). The group consisted of 56 men (36%) and 100 women (64%). The majority of men (43%) were unmarried; 41% were married. Of the women 45% were married; 30% were divorced. Most participants were currently living with their family or partner (44%); 30% lived alone. Only 8% were currently employed.

Psychiatric diagnosis, morbidity and treatment

A psychotic disorder was diagnosed in 48 patients, and an affective disorder in 50. Anxiety disorders were exhibited in 24 patients and personality disorders in 53. Substance abuse disorders were found in 7 patients, organic mental disorders in 4, and 12 had some other DSM-III diagnosis. In six patients no certain diagnosis could be agreed upon. There were 33 patients with borderline intellectual functioning (IQ = 74–84).

The average duration of the treatment to date was 4 years (range = 1–31 years). The number of lifetime psychiatric admissions to hospital, as documented in the medical record or specifically identified by the patient, was 1.7; the range was 0–33. The number of admissions to a medical ward during the research year was 15. Patients admitted to a psychiatric ward once or more during the research year numbered 16. Patients currently being treated with psychotropic medication numbered 89 (57%); 32 (20.5%) patients received some type of antipsychotic medication, 22 an antidepressant, 14 a lithium preparation, and 46 received anxiolytic medication on a regular basis.

Frequency of visits to a CPU therapist and GP

In the year preceding the medical examination, the CPU therapists reported an average of 18 visits by their male patients (range = 3–39; median = 3) and 25 by their female patients (range = 3–204; median = 4). GPs were contacted, on average, 4.5 times yearly by the male patients and 6.6 times yearly by the female patients. Of the male patients 16%, and of the female patients 13%, did not attend the GP surgery at all during the research year. Nationwide, the frequency of visits to their GP for males is 2.9 and for females 4.1 per year (Swinkels, 1988).

Previous medical history

A medical condition that was known to be present prior to the study and was being treated either by their GP or a medical specialist was reported by 43 patients (28%). According to the CPU therapist, 51 patients (33%) were known to have a physical disease. In 49 patients (31%) the GP diagnosed a physical disease. Table I delineates the range of conditions.

Use of prescribed medication for non-psychiatric purposes was reported by 32 patients (20.5%); 24 (15%) used prescribed medication for both medical and psychiatric purposes. For 65 patients (42%) only psychotropic medication was prescribed.

Current CPU treatment

The mean length of current treatment was 4 years (range = 1–31 years). Treatment lasted 3–4 years for 58 patients (37%) and 5–6 years for 35 patients (22%). Of the participants, 43% were being treated at the time by a medically trained therapist (i.e. consultant psychiatrist, registrar in psychiatry, or community psychiatric nurse), signifying that over half of the population was not seeing a medically trained therapist on a regular basis.

Physical complaints

At least one physical complaint was described by 137 patients (88%) on a self-report questionnaire which the patients completed before their medical examination. According to the CPU therapist, 130 patients (83%) described one or more physical complaints at the time of the examination. The GP noted one or more physical complaints in 120 (77%) of the patients during their last visit in the research year. When questioned by the specialist in internal medicine, 137 patients (83%) described one or more physical complaints. The number increased to 149 patients (96%) during history-taking (Table II).

Physical examination and laboratory findings

The findings during physical examination provided new information on over half the patients (Table III). On 27 occasions, physical examination resulted in a diagnosis of physical disease. In four cases, suspicion of physical disease during history-taking was rejected following physical examination. The figures indicate the clinical medical importance of routine physical examination.

Abnormalities that showed up in laboratory tests and were judged by the specialist in internal medicine as aspecific and not warranting further evaluation were present in 108 patients (69%). From laboratory tests a diagnosis was established on 28 occasions. As a result of information from laboratory tests on one patient, a previous diagnosis of suspected disease was rejected.

Physical disease

Physical disease of some kind was reported by 43 patients; according to the CPU therapist and GP, the number of patients with one or more physical diseases was 51 (33%) and 49 (31%), respectively (Table II). Physical diseases were diagnosed by the examination, and a fixed set of laboratory studies on each patient. The specialist in internal medicine diagnosed physical disease in 82 patients (53%); on all diagnoses, complete agreement was reached by the specialist and the CPU psychiatrist managing the

TABLE I
Frequency of physical diseases using the International Classification of Primary Care (Wood & Lambert, 1987)

Physical disease therapist	Patient	CPU internal medicine	GP	Specialist in
General and unspecific	2	3	2	10
Infectious diseases	1	0	0	1
Multiple trauma	0	1	0	1
Adverse effect of medical agent, proper use	0	1	1	8
Other	1	1	1	0
Blood, blood-forming organs, lymphatics, spleen	1	1	1	0
Digestive system diseases	5	7	6	15
Eye and ear diseases	1	2	5	2
Circulatory system diseases	12	17	17	32
Uncomplicated hypertension	6	7	8	15
Hypertension with secondary complications	1	0	2	2
Other	5	10	7	15
Musculoskeletal diseases	11	5	9	13
Osteoarthritis of spine	4	0	2	0
Back pain with radiating symptoms	1	1	1	5
Rheumatoid arthritis and allied conditions	3	2	1	0
Other	3	2	6	8
Neurological diseases	5	6	3	6
Migraine	3	3	0	0
Other	2	3	3	6
Respiratory diseases	7	5	8	7
Chronic bronchitis/bronchiectasis	6	5	7	7
Other	1	0	1	0
Skin diseases	1	6	6	3
Endocrine, metabolic and nutritional diseases	8	8	9	15
Morbid obesity	0	1	2	3
Diabetes mellitus	4	2	3	6
Hyperthyroidism	2	1	1	1
Other	2	4	3	5
Urinary system diseases	4	5	3	6
Syphilis male/female	0	1	2	2
Other diseases	1	0	1	1

research (A. Honig). Table IV delineates the 67 newly diagnosed physical diseases.

The specialist in internal medicine diagnosed, in all, 112 physical diseases. Circulatory diseases were most frequently found, followed by endocrine and metabolic diseases (Table I). For 53 (47%) of the diseases, an approximate duration could be given. Nine diseases (17%) lasted less

than 1 year, 10 (18.9%) lasted between 1 and 3 years, and 34 (64.1%) lasted longer than 3 years. Applying the earlier definition of severity, the specialist in internal medicine rated 13 physical diseases in 11 patients (7%) as severe and 87 as not severe. For eight diseases, no definite conclusion could be given of the severity. A rating of certainty present was given for 56 diseases (50%). Thirteen diseases were

TABLE II
Physical complaints and diseases

	Patient	CPU therapist	GP	Specialist in internal medicine
Physical complaint (one or more per patient)	88% n = 137	83% n = 130	77% n = 120	83% n = 129
Physical disease (one or more per patient)	28% n = 43	33% n = 51	31% n = 49	53% n = 82
Severe physical disease (one or more per patient)		6% n = 9	4% n = 6	7% n = 11

TABLE III
Physical examination (PE) findings

Finding	Number
Elevated blood pressure	14
Weight 10% high limit	20
Low limit	4
Any PE abnormal finding (excluding neurological)	56
Any neurological finding	8
No confirmation of abnormality as suspected following history-taking	4
No abnormal finding	73

rated as being both severe and certainly present; seven of these were circulatory diseases, three were endocrine and three were other diseases. Of the 67 newly diagnosed physical diseases, only three were rated as severe; in five cases, no indication of severity could be given. Of the newly diagnosed diseases, 25 were rated as being certainly present.

Agreement on the presence of a physical disease

In 55 patients (35%), all four participants agreed on the absence of one or more defined physical diseases. In the

TABLE IV
Newly diagnosed physical diseases

Disease	Number of cases
Adverse effect of medical agent, proper use	6
Infectious disease	1
Hiates (diaph.) hernia	3
Cirrhosis/other liver disease	4
Other disease, digestive system	4
Diseases of the eye	1
Chronic ischaemic heart disease	3
Chronic bronchitis	1
Atopic dermatitis	1
Uncomplicated hypertension	2
Other diseases, circulatory system	3
Morbid obesity	2
Diabetes mellitus	3
Other endocrinological, metabolic and nutritional diseases	3
Back pain with radiating symptoms	3
Traumatic arthritis/arthropathy	2
Other disease, musculoskeletal system	4
Disease of neurological system	4
Elevated blood pressure	4
Cystitis/other urinary infections	4
Infections, non-venereal	4
Uterovaginal prolapse	1
Other disease, urinary system	4

TABLE V
Agreement on the presence of one or more diseases per patient

Specialist in internal medicine	Disease		Total number
	No disease	Total number	
GP ¹			
Disease	40	82	82
No disease	9	74	74
Total number	49	107	156
CPU ¹			
Disease	41	82	82
No disease	10	74	74
Total number	51	105	156
Patient ²			
Disease	36	82	82
No disease	7	74	74
Total number	43	113	156

1. $\kappa = 0.35$.

2. $\kappa = 0.33$.

other patients (65%), at least one of the participants described one or more physical diseases. The factual agreement on the presence or absence of one or more defined physical diseases per patient between the specialist in internal medicine and the CPU therapist, GP, and patient was moderate (Table V), with Cohen's kappa not exceeding 0.35. On the presence or absence of one or more severe, certainly present physical diseases, as diagnosed by the specialist in internal medicine, agreement with the GP and CPU therapist was even less (Table VI). For clinical reasons, no ratings of severity were asked of the patient himself.

Of the 13 severe and certainly present physical diseases, diagnosed by the specialist in internal medicine, nine (70%) were known to both the GP and CPU, although they were not always rated as being severe and certainly present.

Functional illness

Physical complaints for which no organic abnormal functioning could be detected were rated as aspecific; of the three main physical complaints, one or more aspecific physical complaints were present in 136 patients (87%). The specialist in internal medicine diagnosed 114 patients (73%) as having one or more functional illnesses, ranging from irritable bowel syndrome to tension headache. By comparison, in only 47 patients (20%) were physical complaints present for which an organic cause could be detected.

TABLE VI
Agreement on the presence of one or more severe and certain diseases per patient

<i>Specialist in internal medicine</i>	<i>S + C disease</i>	<i>No S + C disease</i>	<i>Total number</i>
<i>GP¹</i>			
S + C disease	3	8	11
No S + C disease	3	142	145
Total number	6	150	156
<i>GPU²</i>			
S + C disease	3	8	11
No S + C disease	6	139	145
Total number	9	147	156

1. $\kappa = 0.29$.

2. $\kappa = 0.22$.

Non-respondents

Patients not participating in the project numbered 62 (28%). Of the whole research population, only 30 patients (14%) declined medical evaluation. For half the group of non-respondents, the CPU therapist advised against evaluation for one reason or another. In 13 cases, there was either no contact with the patient or the patient could not be traced (no fixed residence). The CPU therapist collected the same demographic and diagnostic data from both the respondents and the non-respondents. There were no statistical differences in demographic data. For diagnosis according to the DSM-III, personality disorder, substance abuse, and psycho-organic disorders were over-represented in the non-respondent group. The CPU therapist noted considerably fewer physical complaints in the non-respondent group: 52% compared with 82% in the respondent group. The number of physical diseases was equal in both groups.

Patients' behaviour

In the present study only 31 patients (14%) refused to cooperate in the project. The ratings on a five-point scale by the specialist in internal medicine on communicativeness, ability to recall medical and psychiatric history, physical hygiene, degree and quality of activity, co-operation and global impression were compared with those of 60 matched, new patients attending an internal medicine out-patient clinic. The ratings for all these items shows no significant differences.

Discussion

Somatic complaints and symptoms were almost invariably present in this sample of chronic psychiatric patients in community care. Almost three-quarters of the patients were diagnosed as having a functional disorder; nearly half the patients were medically ill, but hardly any severe physical diseases were found.

The bulk of the physical diseases that were detected could easily be dealt with by the GP.

Although a longer-term follow-up is still in progress, it seems that medical treatment of the diagnosed diseases does not change the chronic psychiatric problems dramatically. Certainly no mimics (i.e. organic conditions erroneously taken for psychiatric diseases) were found. Our data confirm Maricle *et al's* findings (1987) in a similar setting with a smaller and diagnostically less diverse sample of chronic community psychiatric patients than ours. It seems safe to say that, at least in our local health care system, no medical attention is withheld from our sample of chronic psychiatric patients in community care. More specifically, our group of chronic psychiatric patients in community care is, in general, very capable of making use of available ambulatory health care services. During a physical screening procedure, they do not significantly differ in behaviour from a non-psychiatric ambulatory population, and they are, in the majority of cases, prepared to co-operate in a 2-hour physical screening procedure. There is little agreement on the part of all participants regarding the physical health of this population of patients. This does not, as such, signify a high percentage of misdiagnosing, but could be interpreted as a trait inherent in the interaction between the patient and the specific health care therapist (GP, CPU therapist, or specialist in internal medicine).

Somewhat alarming, however, was the high percentage of newly diagnosed diseases induced by psychotropic medication. More than half the patients (57%) used some prescribed psychotropic medication. Fourteen of these patients were taking lithium carbonate at the time of the study. Of these 14 patients, 6 were diagnosed by the specialist in internal

medicine as suffering adverse effects of this medication. Five of these patients were possibly mildly hypothyroid. This was, in all five cases, unknown to the prescribing CPU therapist. Evaluation of laboratory thyroid functioning is, very likely, hampered by the absence of direct access to laboratory facilities in Dutch community psychiatric units.

Perhaps the most important finding to come out of this study is the need for close co-operation between the GP and the CPU therapist. In the first place, there is a need to identify those patients who do not make adequate use of health care services and who are thereby potentially at risk. Secondly, when working together, the GP and CPU therapist can more adequately screen and diagnose severe physical diseases – 70% of the diseases that the specialist in internal medicine rates as being severe and certainly present. The co-operation with the GP could well be carried out by a CPU therapist of any discipline. The consultation could result in a referral to a CPU psychiatrist or to a GP for further evaluation. Whenever physical screening is carried out, history-taking and the performance of a routine, standardised physical examination (Summers *et al*, 1981) seem to be the most valuable elements in the entire diagnostic procedure. Somatic fixation or denial, on the part of both CPU therapist and patient, could be prevented by the above recommended physical screening procedures.

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*A. Honig, MRCPsych, Lecturer, Department of Mental Health Sciences, University of Limburg; Consultant Community Psychiatrist, Community Psychiatric Service, (RIAGG) Maastricht; P. Pop, Consultant in Internal Medicine, Department of Internal Medicine, University Hospital Maastricht; E. S. Tan, Statistician, Department of Medical Statistics, University of Limburg; H. Philipsen, Professor, Department of Nursing Science, University of Limburg; M. A. J. Romme, Professor, Department of Social Psychiatry, University of Limburg, Consultant Social Psychiatrist, Community Psychiatric Service, (RIAGG) Maastricht

*Correspondence: University of Limburg, Department of Mental Health Sciences, PO Box 616, 6200 MD Maastricht, The Netherlands.