The psychosocial evaluation of medically-ill inpatients: accordance between mental disorders and self-rated psychosocial distress

Die Evaluation psychosozial belasteter Krankenhauspatienten: Übereinstimmung zwischen psychischer Diagnose und Selbstbeurteilung psychosozialer Belastungen

Abstract

Background: Both psychometric questionnaires and structured psychodiagnostic interviews are used to identify medically-ill inpatients requiring psychotherapeutic treatment. The study examines the accordance between the diagnosis of a mental disorder (ICD-10) and self-rated psychosocial distress of unselected inpatients within the framework of a psychosomatic liaison service.

Methods: Of n=532 consecutive patients hospitalized in five departments of the University Hospital Freiburg, n=357 patients underwent a structured psychodiagnostic interview (Mini-DIPS) to obtain diagnoses according to ICD-10 F. Psychosocial distress (HADS), somatoform symptoms (SOMS-2 J), quality of life (EDLQ) and coping strategies (FQCI) were evaluated by self-rating questionnaires.

Results: A mental disorder requiring treatment was diagnosed in 44% of the patients. Predictors for the diagnosis of a mental disorder were the depression subscale of the HADS, the frequency of somatoform symptoms and depressive coping. The greatest accordance between mental disorders and screening instruments was found for the depression subscale of the HADS at a cut-off 8+. The area under the curve (AUC) was 0.75. With a specificity of 87% and a sensitivity of 53%, nearly half of all mental disorders requiring treatment were not identified by the HADS, especially in patients with neurotic, stress-related and somatoform disorders (F4), most of them cancer patients with adjustment disorders.

Conclusions: Case selection by the HADS is successful in disorders, where depressive symptoms are prevalent. For F4-diagnoses a lower cut-off of 6+ is recommended. The importance of a clinical interview is underlined. Other screening procedures, specific for the general hospital population, are discussed.

Keywords: mental disorders, psychosocial distress, screening, psychosomatic consultation liaison service, general hospital

Zusammenfassung

Hintergrund: Zur Identifizierung behandlungsbedürftiger psychischer Störungen bei körperlich Kranken werden sowohl psychometrische Fragebögen als auch strukturierte klinische Interviews eingesetzt. Untersuchungen zur Übereinstimmung zwischen Screeninginstrumenten und diagnostischem Interview für unselegierte Patienten im Akutkrankenhaus im Rahmen des psychosomatischen Konsil- und Liaisondienstes liegen bisher noch nicht vor.

Methoden: Von n=532 Patienten, die auf fünf Stationen des Universitätsklinikums Freiburg stationär behandelt wurden, wurden n=357 konsekutiv mit einem strukturierten diagnostischen Interview (Mini-
Introduction

The overall prevalence of mental disorders in patients in a general hospital and in university hospitals fluctuates between 15% and 47% [1], [2], [3], [4], [5]. The marked difference in results is due to the use of various diagnostic classification systems (ICD, DSM) and different definition of the cases, such as clinical assessment, structured or diagnostic interview and questionnaires. There are different results to be found with the questionnaires due to different cut-off scores selected. A comparison of the screening questionnaires with structured or standardized clinical interview was undertaken mainly in patients with cancer [6], [7], [8], [9], [10], [11], [12], [13]. Other studies examined the usefulness of screening instruments to diagnose specific mental disorders like major depression [14]. However, to date there have been only a few studies which tested the screening results of questionnaires against the "gold standard" of a structured clinical interview in unselected patient groups in hospital [15], [16]. Integrated treatment of mental disorders in one health service facility as liaison service is the most effective way [17], [18]. The development of the consultation-liaison (CL) services in Europe and Germany was promoted by the "European Consultation Liaison Workgroup (ECLW)". Psychiatrists and psychosomatic physicians in 14 countries have united with the aim of improving psychosocial care in general hospitals by means of pan-European cooperation [19]. At the university hospital Freiburg a psychosomatic liaison service exists for the departments of neurology, dermatology, gastroenterology, hematology-oncology and radiation therapy. The study presented is part of a broader study of need and use of psychotherapeutic interventions of medically-ill inpatients in the framework of the psychosomatic liaison service at the University Hospital of Freiburg. This first part of the study has three objectives:

1. Assesement of self-rated psychosocial distress and frequency of mental disorders requiring treatment.
2. Identification of predictors for the diagnosis of a mental disorder.
3. Accordance between mental disorders and self-rated psychosocial distress of the patients.

Patients and methods

Sample

Within a period of 6 months, a total of 532 patients was admitted to the 7 wards in 5 departments participating in this study. 48 patients (9%) were admitted more than once during this period. These patients were only counted once. The sample size was n=392. Figure 1 shows the patient recruitment and reasons for exclusion. The patients who were excluded from the study did not differ with respect to age and sex from the study population. Their illness was, however, significantly more severe (Karnofsky-Performance Status (KPS); p<0.001).
The study was performed within the framework of routine care by the psychosomatic liaison service. Each newly-admitted patient was visited by the research assistant within the first two days and informed about the study after a brief introductory conversation. Informed consent was given by all subjects. The study was approved by the Ethics-Review-Committee of the Freiburg University.

**Diagnostic procedures and measurements**

The diagnostic interview for mental disorders - the Mini-DIPS - [20] was conducted by research assistants, who were in their final semester and have since completed their doctorate. They were well trained in interview technique and were under continued supervision. The Mini-DIPS serves to record the most important mental disorders in the psychotherapeutic area based on the criteria of DSM-IV and ICD-10. The interrater-reliability of
In the ECLW study, some 76% of the raters had a kappa value of at least 0.70; 6% had a value between 0.40 and 0.70. In the HADS study, some 61% of the raters had a kappa value of at least 0.70; 12% had a value between 0.40 and 0.70. The kappa-values for the four interviewers were 0.54, 0.72, 0.81 and 0.81. In the ECLW study, some 76% of the raters had a kappa value of at least 0.70; 6% had a value between 0.40 and 0.70. Cooper's [22] criteria were used to estimate the severity of the mental disorders. 0 means no abnormalities, 1 means mild symptoms, no treatment necessary, 2 to 4 means increasing severity of symptoms and impairment, need for treatment ranging from outpatient to inpatient. Only patients with a severity of ≥2 (obvious mental illness requiring treatment) are listed (see Table 3). The research assistants were blinded to the results of the psychometric questionnaires.

Psychometric questionnaires

Patients filled in the following psychometric instruments:

Hospital Anxiety and Depression Scale

The HADS [23] is a well-validated, routinely-used screening instrument for the detection of mental disorders in physically-ill patients. The HADS has been translated into more than 30 languages and extensively validated in many of these versions [24]. The German version (HADS-D) was validated in 6200 patients and control persons and found equivalent to the English original [25].

Freiburg Questionnaire Coping with Illness - FQCI

The FQCI [26] addresses ways of coping at the levels cognition, emotions and behavior. The possible responses are on a 5-point scale from 1=not at all to 5=very strong. 35 items were assigned to 5 scales extracted on the basis of a factor analysis. For our study, three scales were assessed: Depressive coping, e.g. "withdraw from other people", Minimization and wishful thinking, e.g. "unwillingness to believe the event" and Active problem-orientated coping, e.g. "seeking information about disease and treatment" or "determined fighting against disease".

Screening for Somatoform Disorders - SOMS

The "Screening for somatoform Disorders (SOMS)" [27] is based on the somatization index (cut-off: 4 for male, 6 for female) of Escobar [28] and makes it possible in the form of self-rating to record 53 physical complaints from the DSM-IV which were present during the past 2 years (SOMS-2) or during the past 7 days (SOMS-7) and which were not attributable to an organic cause. After discussion with the authors of the instrument, the cutoff was increased from 6+ to 9+ symptoms, in order to avoid false positive cases confounding with physical disease.

The Every Day Life Questionnaire - EDLQ

The questionnaire consists of 42 items with a 5-point Likert scale [29]. It contains questions on physical, emotional, social and functional components of the quality of life, as well as satisfaction with life and medical treatment. For the study, the two scales Everyday life and Social life were assessed. The Everyday life scale includes the extent to which a person is able to work at a regular job, can take care of himself, can cope with daily problems and engages in leisure activities. The Social life scale asks about contacts with other people, the extent to which the person feels understood and supported and about the quality of the partner-relationship. Since there are no cutoffs for FQCI or EDLQ, a limit value for each scale calculated from the mean and one standard deviation was defined for the selection of distressed patients.
"Severity of the physical disease" Scale

The factor "Severity of the physical disease" was formed by factor analysis from Karnofsky-Performance Status (KPS) [30], the Charlson Morbidity Index (CMI) [31], the level of care required and the Physical stress scale of the Every Day Life Questionnaire [29]. The scores of this index were calculated as a weighted sum of the single scores, according to their factor loadings. The Karnofsky Index (0.815) and the level of care required (0.751) have the greatest impact on the factor.

A structured diagnostic interview could be performed in n=357 patients (91%). The return quota for the psychometric instruments was 75% for HADS, 74% for FQCI, 67% for SOMS and 71% for EDLQ. Complete data include age, sex, physical disease and severity of the physical disease. A multivariate model with the variables age, sex, severity of physical disease, mental disorders, somatic diagnoses and department/ward was tested and fitted to the data in order to determine the predictive factors with respect to filling out all four psychometric instruments. Logistic regression shows that the probability of filling out all four psychometric instruments decreases with higher age (p<0.001), the presence of a mental disorder (p<0.001) and in patients in the hematological-oncological ward (p<0.001). Model parameters: \( \chi^2=49.9; \) df=6; p<0.001; Hosmer-Lemeshow's C=5.2; Nagelkerke's R\(^2\)=0.18.

Statistical procedures

The data were analyzed using SPSS 10.0. The most important statistical analytical procedures on the bivariate level are contingency tables, \( \chi^2 \)-Tests and Fisher's exact test, if necessary and the comparison of means by single and multiple analyses of variance. Multiple linear regression, multiple logistical regression and factor analyses were used for multivariate analyses. Receiver operating characteristics (ROC) analysis [32], [33] was used to evaluate the diagnostic accuracy of the HADS subscales. The ROC-curve expresses the sensitivity and specificity for each score and represents an index of the overall ability of the instrument to discriminate between cases and non-cases [33].

Results

Sociodemographic data

The mean age of the sample was 54.5 years (SD 16.46) with a range from 18-84 years. The number of women (44%) and men (56%) was approximately equal. More than half the patients (54%) had a low educational level. 34% of the patients were retired, 15% unemployed and 14% on sickleave or disabled. More than half the patients were skilled and unskilled workers and 69% were married or living with a partner.

Somatic diagnoses

Due to the focus of the liaison activities, cancer diseases were most frequent (46%), followed by skin diseases (16%) and neurological diseases (11%) (see Table 1).

Screening for psychosocial distress

Table 2 shows the means and the percentage of patients with increased values above the cut-off for the four psychometric instruments.

Mental disorders

A psychodiagnostic interview was conducted with n=357 patients. Of these, n=142 (39.8%) had no mental disorder, n=57 (16%) had a diagnosis not requiring treatment (Cooper severity grade 1), n=158 (44.3%) had a diagnosis requiring treatment (Cooper severity grade 2 to 4). The distribution by ICD-10 classification is shown in Table 3. Adjustment disorder (F43) was the most frequent diagnosis (n=67; 18.8%). Most of the patient with a F43 diagnosis were cancer patients.

Accordance between mental disorder and self-rated psychosocial distress

Table 4 shows a comparison of mean values of the psychometric instruments with and without mental disorder by ICD-10, Cooper severity grade 2 to 4. The strongest relationships between a mental disorder and the scales of the self-rating instruments are found for Anxiety, Depression, Somatization and Depressive coping.

Looking at the total HADS score, there were no considerable changes: we found the greatest accordance at a cut-off of 14+. The percentage of correctly-classified cases is 73%. Specificity was 0.79 and sensitivity 0.63.
Table 1: Main somatic diagnoses

| Somatic diagnoses                  | n  = 392 | %   |
|-----------------------------------|----------|-----|
| Infectious diseases               | 78       | 2.4 |
| Malignomas                        | 181      | 46.2|
| Metabolism                        | 2        | 0.5 |
| Blood                             | 3        | 0.8 |
| Nervous system                    | 45       | 11.5|
| Eyes                              | 3        | 0.8 |
| Cardiovascular                    | 31       | 7.9 |
| Respiratory organs                | 5        | 1.3 |
| Digestive organs                  | 22       | 5.6 |
| Skin                              | 64       | 16.3|
| Skeleton/Muscle/Connective tissue | 20       | 5.1 |
| Other                             | 8        | 2.0 |

Table 2: Screening for psychosocial distress (self-assessment by the patients)

| Screening instrument              | N    | M (SD)   | % over cut-off |
|-----------------------------------|------|----------|----------------|
| HADS- Anxiety                     | 294  | 6.70 (4.12) | 18.4           |
| HADS- Depression                  | 294  | 6.34 (4.47) | 28.2           |
| FQCI Active problem-orientated coping* | 290  | 3.25 (0.87) | 8.3            |
| FQCI Depressive coping            | 288  | 2.13 (0.85) | 16.7           |
| FQCI Minimization and wishful thinking | 287  | 2.28 (0.87) | 8.0            |
| SOMS - Somatization               | 263  | 7.81 (7.89) | 32.1           |
| EDLQ - Everyday life              | 279  | 28.75 (9.10)| 37.2           |
| EDLQ - Social life                | 279  | 30.98 (8.64)| 29.4           |

* related to patients with lack of active problem-orientated coping

A more balanced ratio between specificity and sensitivity we found at a cutoff score of 6+, with a specificity of 0.67 and a sensitivity of 0.72 for the subscale depression. When ROC-analysis is performed, the AUC of the subscale depression surpasses the subscale anxiety, while the AUC of the total HADS-score expresses almost the same values as the subscale depression (see Figure 2). Specificity and sensitivity are also dependent on ICD-10 categories (see Table 5). They were high for mood disorders (F3) and low for substance abuse (F1) and neurotic, stress-related and somatoform disorders (F4). Comparison of the HADS subscales anxiety and depression with the ICD-10 diagnosis groups for anxiety (ICD-10: F 40, 41, 43.22) vs. others and depression (ICD-10: F 32-34, 43.20, 43.21, 43.22) vs. others shows only a moderately significant relationship for depression (F=6.711; df=1; p<0.05; Eta=0.247) and no significant relationship for anxiety (F=0.266; df=1; p=n.s.; Eta=0.051). Comparison of the SOMS scale with the ICD-
Table 3: Mental disorders according to ICD-10, Chapter F (first diagnosis), severity 2-4 on Cooper scale

| Classifications                              | n  | %  |
|----------------------------------------------|----|----|
| ICD-10 Diagnosis requiring treatment         | 158| 44.3|
| F0 Organic mental disorders                  | 3  | 0.8|
| F1 Substance abuse                           | 19 | 5.3|
| F2 Schizophrenia and other delusional disorders | 6  | 1.6|
| F3 Mood disorders                            | 30 | 8.4|
| F4 Neurotic, stress-related and somatoform disorders | 86 | 24.1|
| F5 Behavioral syndromes with physical symptoms | 9  | 2.5|
| F6 Personality and behavioral disorders      | 4  | 1.1|

Table 4: Comparison of means in self-rating instrument in the presence of ICD-10 diagnosis requiring treatment, Cooper grade 2

| Screening-instruments | No Mental Disorders N M (SD) | Mental Disorders N M (SD) | F (df) | p     | Eta   |
|-----------------------|------------------------------|---------------------------|--------|-------|-------|
| HADS - Anxiety        | 161 5.55 (3.89)              | 105 8.36 (4.43)           | 34.308 (1) | <0.001| 0.339 |
| HADS - Depression     | 161 4.82 (3.45)              | 105 8.80 (4.69)           | 63.334 (1) | <0.001| 0.440 |
| SOMS - Somatization   | 146 6.23 (6.97)              | 91 10.91 (8.77)           | 20.663 (1) | <0.001| 0.284 |
| FOCI - Depressive Coping | 156 1.88 (0.73)           | 104 2.55 (0.87)           | 44.546 (1) | <0.001| 0.384 |
| FOCI Active problem-orientated coping *      | 158 3.25 (0.90)              | 104 3.31 (0.75)           | 0.261 (1) | 0.610 | 0.032 |
| FOCI - Minimization and wishful thinking     | 262 3.28 (0.84)              | 259 2.48 (0.81)           | 8.809 (1) | 0.003 | 0.182 |
| EDLQ - Everyday life | 154 30.27 (8.80)            | 99 26.00 (8.86)           | 14.143 (1) | <0.001| 0.231 |
| EDLQ - Social life  | 154 32.38 (8.19)            | 99 28.34 (8.87)           | 13.697 (1) | <0.001| 0.227 |

* related to patients with lack of active problem-orientated coping
Figure 2: Receiver Operating Characteristics (ROC) curves for the detection of mental disorders. The areas under the curve (AUC) are 0.750 (0.689-0.812) for the subscale depression, 0.688 (0.622-0.754) for the subscale anxiety and 0.742 (0.680-0.804) for the total HADS score.

Table 5: Specificity and sensitivity depending on Chapter F1, F3, F4 of ICD-10 diagnosis group for somatoform disorders (ICD-10: F45) vs. others also shows only a moderately significant relationship (F=7.939; df=1; p<0.01; Eta=0.286).

Predictors for mental disorder

Predictors for the presence of a mental disorder were the subscale depression of the HADS (p<0.001), the frequency of somatoform symptoms (SOMS) (p<0.001) and depressive coping with illness (FQCI) (p<0.05) (Model parameter: Chi²=63.2; df=3; p<0.001; Nagelkerke R²=0.33).

Discussion

HADS as screening instrument

The subscale depression of the HADS at a cut-off 8+ attained the best accordance (74%) with the presence of a mental disorder in general. The specificity was 87%, but the sensitivity with 53% was low. The best balance between specificity and sensitivity was found at a cutoff score of 6+. A review [34] about the validity of the Hospital Anxiety and Depression Scale identified 12 studies of noncancer medical patients and 10 studies of cancer patients. For noncancer patients the mean optimal
Comparison of patients with complete data sets in the self-rating instruments with those of patients without questionnaire data showed higher age, presence of a mental disorder and hospitalization in a hematological-oncological ward to be significant factors of influence in a multivariate analysis. The patients who did not participate in the questionnaire study were thus not only more physically limited, but also under greater mental stress. These results correspond to previous studies [1], [15], [39].

The study was designed as a consecutive survey. Each patient had the same chance of being assigned to the sample. This avoided overrepresentation of patients with longer hospitalization times and corresponding characteristics, which would be the case in a purely cross-sectional selection.

Conclusions

The HADS is a valid screening instrument for mental disorders in which depressive symptoms are prevalent. The low sensitivity for patients with substance abuse and for neurotic, stress-related and somatoform disorders leads to the following considerations: most of patients with F4-diagnoses are cancer patients. As shown in other studies [34] the sensitivity of the HADS in cancer patients is low. A lower cut-off, like 6+, results in higher sensitivity. For somatoform disorders or substance abuse a lower cut-off point or a specific instrument is also necessary. The diagnostic weakness of the HADS in somatoform disorders cannot be offset by the SOMS. Our study also brings very little evidence in this regard, since the number of patients with somatoform disorders (n=9) is very small. Agreement between F45 diagnoses and the SOMS is significant (p<0.01), but not overwhelming (Eta=0.286). Based on the data available from this study with its low number of cases, we can only recommend the SOMS as a screening instrument with reservations, and then preferably in combination with HADS or GHQ.

For patients who deny their psychosocial distress although physicians and nurses see need for psychotherapeutic support, a clinical interview is necessary to recognize a psychiatric morbidity. In this respect, appropriately-trained physicians and nurses are the best screening tools for psychosocial distress in medically-ill patients [40].

Other approaches to case-finding are the Patient Health Questionnaire (PHQ), developed and validated within the Prime-MD (an interview for mental disorders in primary care) [41] and the INTERMED [42]. The PHQ which has been translated into German, was favourably rated in comparison studies with respect to statistical parameters and ROC-curves [43], [44], [45]. The INTERMED has been developed by a European team to determine the need for treatment. INTERMED describes the patient's care needs in biological terms, (chronicity and severity of illness), psychological terms (coping and psychosocial distress), social terms (e.g. family disruption) and the healthcare needs (e.g. complexity of care). The goal of

Representativeness

The study population did not differ essentially with respect to age and gender from the patients at the participating departments in the years 1998 and 1999. The distribution of the somatic main diagnoses is also typical for the departments in question and includes a large part of the relevant medical diagnoses of the university hospital. The other sociodemographic data also agree largely with the findings recorded in studies in general hospitals and university clinics in Germany [35], [36], [37], [38], [39]. The quota of patients refusing to participate was low (9%). Excluded patients and refusers showed significantly higher severity of disease. Age and gender were comparable.
this instrument is to detect those patients that receive the most medical and nursing care during their stay but not to detect patients suffering mental disorders per se. There is a need for further research on differential usability of specialised screening procedures (PHQ, IN-TERMED), traditional psychometric testing (eg. HADS) and psychodiagnostic interview.

**References**

1. Mayou R, Hawton K. Psychiatric disorder in the general hospital. Br J Psychiatry. 1986;148:172-90.
2. Mayou R, Hawton K, Feldman, E, Arden M. Psychiatric problems among medical admissions. Int J Psychiatry Med. 1991;21:71-84.
3. Levenson J, Härter M, Reuter K. Screening for mental disorders in cancer patients with cancer. J Psychosom Res. 1991;35:331-40.
4. Cavanaugh SA. The prevalence of emotional and cognitive dysfunction in a general medical population. Am J Psychiat. 1990;147:1498-503.
5. Bell G, Reinstein DZ, Rajiyah G, Rosser R. Psychiatric screening and psychodiagnostic interview. TERMED), traditional psychometric testing (eg. HADS). There is a need for further research on differential not to detect patients suffering mental disorders per se. There is a need for further research on differential usability of specialised screening procedures (PHQ, IN-TERMED), traditional psychometric testing (eg. HADS) and psychodiagnostic interview.

References

1. Mayou R, Hawton K. Psychiatric disorder in the general hospital. Br J Psychiatry. 1986;148:172-90.
2. Mayou R, Hawton K, Feldman, E, Arden M. Psychiatric problems among medical admissions. Int J Psychiatry Med. 1991;21:71-84.
3. Levenson J, Härter M, Reuter K. Screening for mental disorders in cancer patients with cancer. J Psychosom Res. 1991;35:331-40.
4. Cavanaugh SA. The prevalence of emotional and cognitive dysfunction in a general medical population. Am J Psychiat. 1990;147:1498-503.
5. Bell G, Reinstein DZ, Rajiyah G, Rosser R. Psychiatric screening and psychodiagnostic interview. TERMED), traditional psychometric testing (eg. HADS). There is a need for further research on differential not to detect patients suffering mental disorders per se. There is a need for further research on differential usability of specialised screening procedures (PHQ, IN-TERMED), traditional psychometric testing (eg. HADS) and psychodiagnostic interview.

References

1. Mayou R, Hawton K. Psychiatric disorder in the general hospital. Br J Psychiatry. 1986;148:172-90.
2. Mayou R, Hawton K, Feldman, E, Arden M. Psychiatric problems among medical admissions. Int J Psychiatry Med. 1991;21:71-84.
3. Levenson J, Härter M, Reuter K. Screening for mental disorders in cancer patients with cancer. J Psychosom Res. 1991;35:331-40.
4. Cavanaugh SA. The prevalence of emotional and cognitive dysfunction in a general medical population. Am J Psychiat. 1990;147:1498-503.
5. Bell G, Reinstein DZ, Rajiyah G, Rosser R. Psychiatric screening and psychodiagnostic interview. TERMED), traditional psychometric testing (eg. HADS). There is a need for further research on differential not to detect patients suffering mental disorders per se. There is a need for further research on differential usability of specialised screening procedures (PHQ, IN-TERMED), traditional psychometric testing (eg. HADS) and psychodiagnostic interview.

References

1. Mayou R, Hawton K. Psychiatric disorder in the general hospital. Br J Psychiatry. 1986;148:172-90.
2. Mayou R, Hawton K, Feldman, E, Arden M. Psychiatric problems among medical admissions. Int J Psychiatry Med. 1991;21:71-84.
3. Levenson J, Härter M, Reuter K. Screening for mental disorders in cancer patients with cancer. J Psychosom Res. 1991;35:331-40.
4. Cavanaugh SA. The prevalence of emotional and cognitive dysfunction in a general medical population. Am J Psychiat. 1990;147:1498-503.
5. Bell G, Reinstein DZ, Rajiyah G, Rosser R. Psychiatric screening and psychodiagnostic interview. TERMED), traditional psychometric testing (eg. HADS). There is a need for further research on differential not to detect patients suffering mental disorders per se. There is a need for further research on differential usability of specialised screening procedures (PHQ, IN-TERMED), traditional psychometric testing (eg. HADS) and psychodiagnostic interview. There is a need for further research on differential usability of specialised screening procedures (PHQ, IN-TERMED), traditional psychometric testing (eg. HADS) and psychodiagnostic interview.
Corresponding author:
Prof. Dr. med. Kurt Fritzsche
Department of Psychosomatics and Psychotherapy,
University Hospital Freiburg, Hauptstr. 8, 79114 Freiburg,
Tel.: 0049/761/270-6871, Fax: 0049/761/270-6885
kf@psysom.ukl.uni-freiburg.de

Please cite as
Fritzsche K, Burger T, Hartmann A, Nübling M, Spahn C. The psychosocial evaluation of medically-ill inpatients: accordance between mental disorders and self-rated psychosocial distress. GMS Psychosoc Med. 2005;2:Doc11.

This article is freely available from http://www.egms.de/en/journals/psm/2005-2/psm000020.shtml

Copyright
©2005 Fritzsche et al. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en). You are free: to Share — to copy, distribute and transmit the work, provided the original author and source are credited.