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The quantification inventory for somatoform syndromes (QUISS): a novel instrument for the assessment of severity

■ **Abstract** *Background* To date, specific scales for the assessment of severity of somatoform disorders are still rare. Characteristic cognitive and behavioural domains, representing severity are not incorporated in the existing scales. Results with the novel quantification inventory for somatoform syndromes (QUISS) are presented in this paper. *Methods* The QUISS has been developed as a qualified severity scale for patients fulfilling diagnostic criteria according to DSM-IV or/and ICD-10. It was designed to be particularly suitable for application in clinical trials and for monitoring the efficacy of psychotherapy and pharmacotherapy. Not only number, severity and frequency of somatoform symptoms, but also common cognitive and behavioural domains of somatoform disorders have been included into this instrument. Both an 18-item patient- and observer-rated version are available taking about 20 min to complete. The questionnaire was applied to patients with somatoform disorder ($N = 96$), major depression ($N = 24$), and panic disorder ($N = 16$). *Results* The psychometric properties of the scale are satisfactory. The QUISS showed high objectivity (Cronbach's $\alpha = 0.90$ for both versions; inter-scale correlations $r = 0.64$–0.88; $p < 0.05$), good test-retest- ($r = 0.87$; $p < 0.05$) and inter-rater-reliability ($r = 0.89$; $p < 0.05$). External validity (moderately high correlations of QUISS-T to SOMS 7T ($r = 0.54$), significant discrimination to major depression $p < 0.05$) was satisfactory. Factor structure revealed five relevant factors. *Conclu-*sions The QUISS could be a useful instrument in somatoform disorders for the assessment of syndrome severity and treatment outcome in scientific and clinical settings.

■ **Key words** somatoform disorders · severity scale · outcome · psychotherapy · pharmacotherapy

Introduction

Somatoform disorders are a frequent and incapacitating condition leading to restrictions in quality of life for subjects over relatively long courses of suffering often associated with relevant psychiatric comorbidity [1–5]. Patients frequently utilise medical services [6–8], causing extensive costs for national health systems [9, 10]. They are highly prevalent in primary care [5, 11, 29] and somatoform disorders are diagnosable in a large subgroup of very frequent healthcare users.

Treatments for somatoform disorders need to be empirically proven and effective. Clinical trials on pharmacotherapy and psychotherapy in somatoform disorders, however, have used a great diversity of measures [12, 13], which are often questionable in their suitability. Outcome and severity measures are still scarce because most instruments used in this field were not developed for the assessment of change but rather for screening or diagnostic purposes. Scales have been used as primary efficacy measures that assess severity of symptoms which are hardly characteristic or specific for somatoform disorders, such as the Hamilton Anxiety Scale [14], subscales of the MMPI [15], the SCL-90-R [28], the MADRS [16], the clinical global impression (CGI) [17], or the Global Assessment of Functioning Scale (GAF) [18]. With regard to controlled and open-label trials, structured interviews or scales for the assessment of primary and secondary efficacy and

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outcome parameters in somatoform disorders are often hampered by their low relatedness to somatoform disorders [19, 20].

Two recently developed instruments are exclusively based on the number and severity of symptoms. The "Screening for Somatoform Symptoms-7T" (SOMS-7T) [21], assesses number and severity of 53 somatoform complaints according to DSM-IV and ICD-10 [22, 23]. The patient health questionnaire (PHQ-15) is a brief severity measure comprising 15 somatoform symptoms to be rated by the patient on a 3-point severity scale [13].

However, it appears obvious that a treatment evaluation instrument for somatoform disorders needs a more complex approach than simply counting the patients' symptoms. Even though unexplained somatic complaints are core features of somatoform disorders, a far wider range of phenomena should be taken into account representing illness severity. These phenomena include cognitive and behavioural aspects like patients' health beliefs, worries, attributions, sensitization to bodily phenomena, illness behaviour (e.g. checking the body for symptoms, seeking verification in individual illness theories, distrust in medical and psychological treatment, taking of unneeded medication, e.g. for assumed medical diseases), distress and disability in relevant areas of life and relationships (ability to work, social withdrawal, family or partnership) and healthcare utilisation.

Characteristic domains of symptoms, cognitions and behaviour should be incorporated into a valid instrument measuring severity of somatoform disorders [24]. Assessment of change of syndrome severity and differential evaluation of effects of psychotherapy and pharmacotherapy, respectively should take such domains into consideration as core features characterising patients' impairment [25].

In some trials, multiple scales have been used to assess these domains. However, in order to keep the type I error (altered level of significance by use of numerous outcome measures) low, it appears favourable to use only one instrument to assess syndrome severity instead of multiple scales and interviews [26].

Exclusive use of self-report scales in somatising patients may be hampered by the patients' tendency to aggravate or dissimulate symptom severity and their impact on several of the above mentioned domains which results in low objectivity. Therefore, a clinician-rated version to control for reliability is more appropriate for outcome evaluation.

In this article, the quantification inventory for somatoform syndromes (QUISS), a novel instrument to assess severity, course and therapeutic effect is introduced. This scale covers not only symptoms, but also different disorder related cognitive and behavioural domains. Data on the psychometric properties are presented.

Patients and methods

This study was approved by the local ethics committee.

The initial patient- and clinician-rated version of the QUISS included 22 items. Symptom items were chosen to cover both number of (DSM-IV and ICD-10) symptoms and number of related groups of somatoform symptoms and their frequency and overall severity. Both versions cover the past week.

Further items were chosen in order to cover the cognitive, perceptual and behavioural domains of somatoform disorders. All items were rated by both patients and clinicians.

Items of the initial versions of QUISS:

(1) Global assessment of the overall status of health
(2) Somatoform symptoms: This item is different for the patient- and clinician-rated version. In the latter, the clinician should assess the number of different somatoform symptoms the patient reports for the past week (2a) and assigns them to the number of respective groups (2b) of symptoms according to DSM-IV and optionally ICD-10, too. Both item answers are transferred to an interval scale (0–4 points). In the patient-rated version, all 41 common symptoms from the DSM-IV and the ICD-10 are listed (not all 53 symptoms appearing in both systems altogether). The present symptoms can easily be classified under the six given groups of symptoms according to DSM-IV (also covering those of ICD-10). Evaluation of item 2 from the patient-rated version parallels the rating of the clinician rated version, both number of overall symptoms and affected groups are transferred to the 5-point Likert scale.
(3) Frequency of somatoform symptoms
(4) Intensity of somatoform symptoms
(5) Overall quality of life
(6) Impairment of everyday activities
(7) Occupational impairment and impairment for unpaid work (e.g. house work)
(8) Social impairment
(9) Impairment of family functioning
(10) Hypochondriac beliefs
(11) Demand for further diagnostics
(12) Demand for prompt treatment (The words of this item were chosen carefully, not explicitly mentioning a wish to change the present clinician to avoid embarrassment during the interview. Due to this fact, the answer can also be interpreted as the immediate wish to see the present clinician to ask for help)
(13) Health care utilisation and time actually spent in medical treatment (including massages, physiotherapists, inhalations, homoeopaths, etc.)
(14) Reduced trust in clinicians
(15) Seeking help from others (e.g. relatives, friends, medical personnel)
(16) External influences (selective attention on body functions by reports of others or by media)
(17) Selective attention and sensitisation on body phenomena
(18) Feeling of not being taken serious (by medical personnel, family, friends, workmates and unknown people)
(19) Health worries
(20) Intake of prescribed medication (not including psychotropic medication, e.g. for assumed medical diseases)
(21) Intake of non-prescribed medication (self-administration)
(22) Fear of having an organic illness

■ Scales and interviews

QUISS-P and QUISS-T (see appendix)

Both (revised) versions consist of 18 items. Item 2 of the QUISS-P comprises 41 somatoform symptoms, subdivided into 6 subgroups. In this item, multiple answers are allowed. The total score of 0–76 for both inventories is calculated by summarising the single items except for item 2 from the QUISS-P, which is transferred to an

interval scale considering both total number and concerned subgroups of symptoms answered by the subject.

Hamilton Anxiety Scale [14]

The Hamilton Anxiety Scale (HAMA) is a widely used scale consisting of 14 items to be answered on an interval scale from 0 to 4. The HAMA considers psychic and somatic anxiety-symptoms present over the recent week.

Montgomery-Åsberg Depression Rating Scale [16]

The Montgomery-Åsberg Depression Rating Scale (MADRS) is a 10 item scale commonly used for the assessment of depressive syndromes. Items have to be answered on an interval scale from 0 to 6.

Screening for Somatoform Disorders 7T [21]

The Screening for Somatoform Disorders 7T (SOMS 7T) is an established severity scale for somatoform disorders. Number and severity of somatoform symptoms over the past week are measured on a 53 item 5 point Likert scale. Reliability measures for this scale are satisfactory.

Whiteley-Index [27]

The Whiteley-Index (WI) is a reliable screening measure for hypochondriac disorder and a severity scale, respectively. The scale consists of 14 items to be answered with either yes or no.

Clinical global impression [17]

The clinical global impression (CGI) was used as a comparative marker of the disorder-related patient status. It is a commonly used instrument in clinical trials, often as a primary and secondary efficacy marker. It consists of an interval scale from 0 (not ill) to 7 (amongst the most severely ill among the respective group of patients). Ratings were obtained from the clinician being familiar with the respective patients over a longer period.

■ Patients

Patients where in- and outpatients recruited from four psychiatric or psychosomatic hospitals.

Individuals had to be aged between 18 and 75 years, and to meet criteria for a somatoform disorder according to DSM-IV and ICD-10 (F45.0, F45.1, F45.3, F45.4, F45.8). Patients suffering from hypochondria and body dysmorphic disorder were excluded, as these disorders do not appear in a comparable fashion or under the same category (somatoform disorders) in the two different classificatory systems.

Subjects without a somatoform disorder but suffering from major depressive disorder (single or recurrent episode), or panic disorder with or without agoraphobia were used as controls. Control subjects had no other axis-I disorders. This was done to assess the external validity of the scale as major depression and panic disorder are often associated with somatoform symptoms. A structured interview (SCID) and a diagnostic check-list according to ICD-10 were used for all participants. HAMA and MADRS were used for all subjects from the panic and depression group and for the first 39 patients recruited with a somatoform disorder. These scales are frequently used in severity measures for panic disorder and major depression and have been used in a number of trials in somatoform disorders, too. Comparisons of scores and group comparisons were performed to assess external validity.

Further exclusion criteria were severe medical illness, psychoses, bipolar disorder, and moderate to severe cognitive impairment. Subjects with major language problems were not included. Subjects were divided into the three respective diagnostic groups after having given informed consent.

All participants were interviewed by one of two experienced raters (clinical psychiatrists) using the SCID, QUISS-T, HAMA, MADRS.

Participants filled in the QUISS-P, the SOMS-7T and the Whiteley-Index separately on the same day. A CGI rating was provided by the clinician. Inter-rater- and test-retest-reliability was performed by the investigators on 25 patients with somatoform disorders. Test-retest-reliability was assessed with a time-gap of 3 days.

Item difficulty, internal consistency (Cronbach's α), correlations between patient- and clinician-rated version, factor analysis and correlations between the scales applied were computed for the patient group with somatoform disorders.

Correlations between the scales were computed for the major depression and the panic disorder group. Differentiations between groups as indicated by these scales were computed for all three groups, respectively.

■ Groups of Subjects (see Table 1)

Group I: Somatoform disorders (n = 96)

Subjects from this group where diagnosed as having either somatisation disorder (n = 35/33.6%), undifferentiated somatoform disorder (n = 51/53.1%), autonomic somatoform disorder (n = 6/6.3%), somatoform pain disorder (n = 6/6.3%) or somatoform disorder not otherwise specified (n = 1/1%). Thirty five of the 96 patients had a comorbid depressive disorder and 5 had a diagnosis of comorbid panic disorder.

Subjects had an average age of 41.7 ± 10.0 years, 46% were females, 54% males. 91.3% were inpatients, 8.7% were seen in the outpatients department.

Group II: major depression (n = 24)

Subjects from this group had an average age of 41.7 ± 10.0 years and were diagnosed as suffering from major depressive disorder, single episode, moderate (n = 9/37.5%) or severe (n = 4/16.7%) and recurrent mild (n = 1/4.2%), moderate (n = 8/33.3%), or severe without psychotic symptoms (n = 2/8.3%). 83% were females, 17% males, and 92% were inpatients.

No other axis-I diagnoses were allowed in this group.

Group III: panic disorder (n = 16)

Patients from this group had an average age of 39.0 ± 10.0 years and were diagnosed as suffering from panic disorder with (n = 11/68.8%) or without (n = 5/31.2%) agoraphobia. 75% were females, 25% males and 69% were inpatients.

No other axis-I diagnoses were allowed in this group.

■ Statistics

Data were computed by using a standard software program (STATISTICA, Version 5.5).

Group statistics were computed. Calculations for reliability and validity were done applying item analysis, and calculating internal consistency (Cronbach's α) of the QUISS-P and the QUISS-T in all groups. Item correlations between both versions of the inventory were calculated. Spearman rank-correlations for inter-rater- and test-retest-reliability were computed. A principle component factor analysis with Varimax rotation was performed. Spearman rank correlations were computed for correlations between groups and applied scales. The Mann-Whitney U-Test was applied for group comparisons.

Results

■ Item difficulty

Due to low item difficulty (<0.2) three items were eliminated from the original 22-item QUISS versions.

Table 1 Group characteristics

	Prevalence of diagnosis n (%)	Mean age (years ± sd)
Somatoform disorders		41.7 ± 10.0
Total	96 (100)	
Somatisation disorder	35 (36.4)	
Undifferentiated somato- form disorder	51 (53.1)	
Somatoform pain disorder	6 (6.3)	
Autonomic somatoform disorder	5 (5.2)	
Somatoform disorder, not otherwise specified	1 (1)	
Major depressive disorder		49.0 ± 13.0
Total	24 (100)	
Single episode, moderate	5 (21)	
Single episode, moderate without somatic syndrome	4 (17)	
Single episode, severe without psychotic symptoms	4 (17)	
Recurrent, light	1 (4)	
Recurrent, moderate	4 (17)	
Recurrent, moderate without somatic syndrome	2 (13)	
Recurrent, moderate with somatic syndrome	1 (4)	
Recurrent, severe without psychotic symptoms	2 (8)	
Panic disorder		39.0 ± 10.0
Total	16 (100)	
With agoraphobia	11 (69)	
Without agoraphobia	5 (31)	

These asked about the influence of external factors (like media and information by others) on illness-related behaviour (item 16), recent alarming body phenomena (item 19), and self-applied medication (item 21).

Internal consistency (Cronbach's α)

Values 0.69 or greater were regarded as acceptable. Due to low internal consistency, one item was eliminated from the original QUISS version. This item asked about beliefs of an organic illness (item 22). This reduced the number of items to 18.

Cronbach's α for the final version of QUISS-T and QUISS-P were $r = 0.88$ ($p < 0.01$). Inter-scale correlations between QUISS-T and QUISS-P for individual items ranged between $r = 0.69$ and 0.98 for the single items (total $r = 0.93$; $p < 0.01$).

Mean total scores

The maximum score on both forms of QUISS is 76 points (92 points in the first version before elimination of the reported 4 items). Ratings for patients with somatoform disorders on the clinician-rated version of QUISS averaged 45.4 ± 13.0 with a range of 9–82. Scores on the patient-rated version averaged 47.2 ± 13.0 ranging from 12 to 82 for this group.

Correlation between items of QUISS-P and QUISS-T

Spearman correlations between the single items of the patient and clinician rated version of QUISS ranged between $r = 0.64$ and 0.88 (for all $p < 0.05$).

The correlation between the total scores of both versions was $r = 0.79$ ($p < 0.001$).

Test-retest-reliability

Test-retest-reliability obtained from repeated testing after 3 days of 25 patients with somatoform disorders with QUISS-T showed satisfactory results ($r = 0.87$; $p < 0.05$).

Inter-rater-reliability

Inter-rater-reliability obtained from 25 patients with somatoform disorders by two experienced, independent raters (clinical psychiatrists) showed satisfactory results ($r = 0.89$; $p < 0.05$).

Validity measures

The validity of the chosen items derives from their context to the overlapping DSM-IV and ICD-10 symptoms' severity and frequency as well as to the characteristic cognitive and behavioural domains of somatoform disorders.

Factor analysis (see Table 2)

Part of the construct validity of the revised QUISS version was obtained by a factor analysis following the principle component method with Varimax-rotation.

Before rotation, the primary component identified a general factor explaining 41% (QUISS-T) and 40% (QUISS-P) of the variance, indicating that a subdivision into subscales was not appropriate.

Rotation of variables identified four factors explaining 70% of the variance for the QUISS-T and 64% for the QUISS-P, respectively. Factor 1 explained 25% (QUISS-T) and 24% (QUISS-P) of the

Table 2 Factor analysis of QUISS

Factor	Explained variance	Description
1	QUISS-T = 25% QUISS-P = 24%	Quality of life
2	QUISS-T = 16% QUISS-P = 18%	False cognitions
3	QUISS-T = 15% QUISS-P = 14%	Number of symptoms
4	QUISS-T = 8% QUISS-P = 7%	Severity of symptoms (QUISS-T only) and use of medication

variance. This first factor loaded high on aspects of a general reduction of quality of life and social and occupational functioning. Factor 2, explaining 16% (QUISS-T) and 18% (QUISS-P) of the variance loaded high on aspects of the disorder dealing with cognitive dysfunction and false beliefs on health, including hypochondriac beliefs. Factor 3, explaining 15% (QUISS-T) and 14% (QUISS-P) of the variance loaded high on the number of displayed symptoms and factor 4 explaining 14% (QUISS-T) and 8% (QUISS-P) of the variance loaded high on severity of symptoms and amount of medication intake. Hence, the homogeneity of the scales can be stated by the authors.

External validity

Correlations between scales (see Table 3)

In the group of patients with somatoform disorders ($N = 96$) high correlations were found for total scores of QUISS-T and SOMS 7T ($r = 0.54$) and slightly lower for QUISS-P and SOMS 7T ($r = 0.46$). Both versions of QUISS showed higher correlations with the CGI than the SOMS 7T ($r = 0.62/0.63$ versus $r = 0.18$).

Group 1: somatoform disorders

QUISS-T correlated with the CGI to a lower degree, however significantly ($r = 0.62$; $p < 0.001$) as well as QUISS-P ($r = 0.63$; $p < 0.001$). In this group, CGI correlated with ratings on the HAMA (Spearman rank correlation, $r = 0.47$; $p < 0.005$) and MADRS ($r = 0.49$; $p < 0.005$) significantly but to a lower degree.

Group 2: major depression

In the major depression group QUISS-ratings in both versions correlated significantly ($r = 0.83$; $p < 0.001$). Total scores on the anxiety and the depression scale showed significant correlations with the severity of somatoform complaints as indexed by the QUISS. A relationship between values from the depression and the anxiety scale were obvious.

However, correlations between QUISS-rating and the CGI were lower than in group 1 but still significant.

Group 3: panic disorder

Ratings on both QUISS scales correlated significantly in this group ($r = 0.94$; $p < 0.001$). Significant correlations were also found for the ratings on the anxiety and the depression scale, as well as for the relationship between depression and anxiety.

However, in this group no significant correlation could be found between the CGI and the other four scales.

■ Group-characteristics by the applied scales

See Table 3 for detailed results.

QUISS

Patients with a somatoform disorder had the highest ratings on the QUISS-T (clinician-rated version) and differed significantly from the group suffering from major depression (Mann-Whitney U-test, $p < 0.005$), whereas panic disorder subjects did not differ significantly from the somatoform disorder group. The

Table 3 Spearman-correlations between scales

Somatoform disorders	QUISS-T	QUISS-P	SOMS-7T	HAMA	WI	MADRS
HAMA	0.55****	0.56****	–	–	–	–
MADRS	0.47****	0.50***	–	0.74****	–	–
SOMS-7T	0.54***	0.46***	–	–	–	–
WI	0.37*	0.44***	0.41*	–	–	–
CGI	0.62****	0.63****	0.18	0.47***	0.02	0.49***
Major depression $n = 24$						
QUISS-P	0.83****					
HAMA	0.81****	0.71****				
MADRS	0.66****	0.63***		0.61***		
CGI	0.41*	0.42*		0.48*		0.59***
Panic disorder $n = 16$						
QUISS-P	0.94****					
HAMA	0.68***	0.73***				
MADRS	0.59**	0.62***		0.70***		
CGI	0.19°	0.21°		0.18°		0.22°

****$p < 0.001$; ***$p < 0.005$; **$p < 0.01$; *$p < 0.05$

comparison of QUISS-T scores between panic disorder and major depression showed a trend to higher ratings from panic disorder patients ($p = 0.07$).

QUISS-P (patient-rated version) showed highest ratings in the somatoform disorders, too, followed by panic disorder and major depression. However, differences between Group 1 (somatoform disorders) and Group 2 (major depression) and between group 2 (major depression) and 3 (panic disorder) were not significant. Patients with somatoform disorders showed significantly higher ratings as major depressive patients as revealed by QUISS-P ($p < 0.005$).

HAMA

The HAMA could not differentiate between the three groups of patients. Nevertheless, total scores were numerically highest for the panic disorder group, followed by the somatoform disorders and major depression (Spearman–rank correlation).

MADRS

Major depressive patients scored highest on the MADRS scale, followed by panic disorder and at least somatoform disorders. Depressive patients differed significantly from somatoform disordered patients ($p < 0.01$). Panic patients and somatoform disorder patients could not be differentiated by the MADRS.

CGI

Total CGI scores were highest for panic disorder, followed by somatoform disorders and depression.

Discussion

To date, no severity scale for somatoform disorders is available that is able to measure disorder related domains appropriately.

Other scales frequently used to assess severity in scientific or clinical settings are often hampered by their non-specifity for somatoform disorders and are hardly compatible with the classificatory systems DSM-IV and ICD-10 with regard to the respective somatic complaints [20]. One timely measure coping with these issues is the SOMS-7 [21]. However, relevant cognitive, perceptual and behavioural domains of somatoform disorders characterising severity have not been incorporated in any severity scale so far, as suggested by some authors (e.g. [25]).

The Quantification Interview for Somatoform Syndromes (QUISS) is a new instrument focussing on specific cognitive, perceptual and behavioural domains of somatoform disorders. The scale incorporates common somatic complaints according to DSM-IV and ICD-10 prevalent in both classificatory systems in number, severity, and frequency. The QUISS is available in a patient- and a clinician-rated version, QUISS-P and QUISS-T. In our investigation, there were no significant differences between patients' and clinicians' ratings. Both are 18-item scales easy to apply and taking both patient and interviewer approximately 20 min to complete. The QUISS is particularly suited for the measurement of syndrome severity of somatoform disorders and their course, e.g. in therapeutic or scientific settings. Recently used instruments for somatoform disorders mostly have not been developed to measure change.

In our initial trial with 96 patients with somatoform disorders the psychometric properties of the scale were excellent, revealing a good validity and reliability of both versions of QUISS. From a first version of QUISS, four items were eliminated due to poor reliability. Correlations between scores from the patient- and the clinician-rated form were high. Results for test-retest and inter-rater-reliability were satisfactory. Factor analysis revealed four main factors with number and severity of symptoms not being the highest loading factors. It could be demonstrated that general reduction in quality of life and restrictions in family, social and occupational functioning had the greatest impact. The second factor described disorder-related dysfunctional cognitions in patients.

Although, as could be expected, all three investigated disorders (somatoform disorders, major depression and panic disorder) displayed a high amount of somatoform symptoms, yet, both versions of QUISS were able to discriminate between somatoform disorders and major depression showing a good external validity. Probably due to the small size of the investigated subgroup, differences between somatoform disorders and panic disorder were not significant. However, for the complete group of somatoform patients correlations between QUISS and SOMS 7T and CGI were accurate.

In conclusion, the QUISS might be a useful tool for the assessment of severity of somatoform disorders measuring relevant disorder-related domains and number, severity and frequency of common symptoms of both DSM-IV and ICD-10. It could become a promising instrument to apply in scientific and clinical trials and appears suitable to measure the impact of therapy in outcome evaluations.

In further investigations, the sensitivity of the scale to measure changes during treatment should be investigated in randomized, controlled treatment studies.

Appendix

Quantification-Inventory for Somatoform Syndromes (QUISS)

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Clinician version - QUISS-T-

Name:
Date of birth:
Diagnosis:
Date of interview:
Interviewer:

1. How has the patient's state of health been over the past week?
- ☐ 0   very good
- ☐ 1   good
- ☐ 2   moderate
- ☐ 3   bad
- ☐ 4   very bad

2a. Number of patient's symptoms over the past week
- ☐ 0   none
- ☐ 1   1-2
- ☐ 2   3-6
- ☐ 3   7-12
- ☐ 4   more than 12

2b. Number of groups of symptoms the patient is complaining about
Group 1: Gastro-intestinal symptoms,
Group 2: Pain-symptoms,
Group 3: Cardiopulmonary symptoms,
Group 4: Pseudo-neurological symptoms,
Group 5: Uro-genital & sexual symptoms,
Group 6: Unspecific symptoms or skin symptoms

- ☐ 0   no symptoms
- ☐ 1   1   group
- ☐ 2   2 - 3 groups
- ☐ 3   4 - 5 groups
- ☐ 4   6   groups

If the patient does not complain about any of these symptoms, questions 3 –19 do not have to be answered as they relate to this list of symptoms.

3. How often did the patient suffer from the above mentioned symptoms over the past week?
- ☐ 0   never
- ☐ 1   rarely
- ☐ 2   sometimes
- ☐ 3   often
- ☐ 4   permanently

4. How intense have the mentioned symptoms been over the past week?
- ☐ 0   no complaints
- ☐ 1   mild
- ☐ 2   moderate
- ☐ 3   intense
- ☐ 4   very intense

5. How strong has the patient's quality of life been restricted by the mentioned symptoms over the past week?
- ☐ 0   not at all
- ☐ 1   mild
- ☐ 2   moderate
- ☐ 3   strong
- ☐ 4   very strong

6. On how many days of the past week has the patient been so impaired by the mentioned complaints that the daily routine could not or just insufficiently be managed?
- ☐ 0   not at all
- ☐ 1   on 1 day
- ☐ 2   on 2 - 3 days
- ☐ 3   on 4 - 5 days
- ☐ 4   on 6 or more days

7. Impairment in occupational functioning (including housework) over the past week (if on sick leave: rate 4)
- ☐ 0   no impairment
- ☐ 1   mild impairment
- ☐ 2   moderate impairment
- ☐ 3   strong impairment
- ☐ 4   maximum impairment

8. Impairment in social functioning and leisure activities over the past week (sports, parties, going out, etc.)
- ☐ 0   no impairment
- ☐ 1   mild impairment
- ☐ 2   moderate impairment
- ☐ 3   strong impairment
- ☐ 4   maximum impairment

9. Impairment in family functioning (partnership, children, parents)
- ☐ 0   no impairment
- ☐ 1   mild impairment
- ☐ 2   moderate impairment
- ☐ 3   strong impairment
- ☐ 4   maximum impairment

10. Hypochondriac beliefs:
The patient has been worrying about having a serious illness over the past week.
☐ 0   not at all
☐ 1   hardly correct
☐ 2   partly correct
☐ 3   mainly correct
☐ 4   absolutely correct

11. Wish for diagnostic interventions:
The patient had wishes about further diagnostic interventions in order to find the reasons for his complaints.
☐ 0   not at all
☐ 1   hardly correct
☐ 2   partly correct
☐ 3   mainly correct
☐ 4   absolutely correct

12. How often has the patient thought about better seeing a physician immediately over the past week?
☐ 0   never
☐ 1   rarely
☐ 2   sometimes
☐ 3   frequently
☐ 4   permanently

13. How much time has the patient spent in medical treatments over the past week (e. g. seeing physicians, homoeopaths, masseurs, physiotherapists)?
☐ 0   none
☐ 1   0-1 hours
☐ 2   1-3 hours
☐ 3   3-6 hours
☐ 4   more than 6 hours

14. The patient believes his physician is wrong in saying there is nothing to worry about over the past week.
☐ 0   not at all
☐ 1   hardly correct
☐ 2   partly correct
☐ 3   mainly correct
☐ 4   absolutely correct

15. The patient needed help from others (e.g. relatives, friends) to cover his daily routines over the past week.
☐ 0   not at all
☐ 1   rarely
☐ 2   sometimes
☐ 3   frequently
☐ 4   permanently

16. The patient had the feeling of not being taken serious by others over the past week.
☐ 0   never
☐ 1   rarely
☐ 2   sometimes
☐ 3   frequently
☐ 4   permanently

17. The patient has been worrying about his health over the past week.
☐ 0   never
☐ 1   rarely
☐ 2   sometimes
☐ 3   frequently
☐ 4   permanently

18. Prescribed medication:
The patient has been taking medication for his complaints that has been described by his physician (except psychopharmacologic drugs).
☐ 0   not at all
☐ 1   on 1 day
☐ 2   on 2-3 days
☐ 3   on 4-5 days
☐ 4   on 6-7 days

Sum up total score.

Σ: points

Quantification-Inventory for Somatoform Syndromes (QUISS)

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Patient version - QUISS-P-

Name:
Date of birth:
Diagnosis:
Date of interview:

1. How has your health been over the past week?
- ☐ 0   very good
- ☐ 1   good
- ☐ 2   moderate
- ☐ 3   bad
- ☐ 4   very bad

2 Tick the complaints that have been incapacitating you over the past week.
- ☐   1. stomach pain
- ☐   2. nausea
- ☐   3. vomiting
- ☐   4. flatulence
- ☐   5. diarrhoea
- ☐   6. bad taste in the mouth or extremely furred tongue
- ☐   7. incompatibility of certain kinds of food
- ☐   8. feeling stuffed
- ☐   9. headaches
- ☐   10. back-pain
- ☐   11. pain in the arms or legs
- ☐   12. pain in the joints
- ☐   13. painful urination
- ☐   14. pain in the anal region
- ☐   15. shortness of breath, feelings of suffocating
- ☐   16. chest-pain
- ☐   17. Loss of memory
- ☐   18. hallucinations
- ☐   19. disturbances in balance or coordination
- ☐   20. difficulties in swallowing
- ☐   21. loss of voice
- ☐   22. deafness, difficulties in hearing
- ☐   23. doubled visions
- ☐   24. blindness
- ☐   25. Loss of sensitivity to touch or pain
- ☐   26. Loss of consciousness
- ☐   27. Seizures
- ☐   28. Paralysis, weakness of muscles
- ☐   29. Difficulties urinating
- ☐   30. Unpleasant feelings in or around the genital area
- ☐   31. Sexual indifference
- ☐   32. Painful sexual intercourse
- ☐   33. Difficulties with erection or ejaculation
- ☐   34. Severe menstrual pain
- ☐   35. Irregular menstruation
- ☐   36. Very strong menses
- ☐   37. Unusual or intensive vaginal discharge
- ☐   38. Tiredness
- ☐   39. Loss of appetite
- ☐   40. Uncomfortable paraesthesias
- ☐   41. Spotted skin or changes of skin colour

If you have not ticked any of these symptoms, questions 3 –19 do not have to be answered as they relate to this list of symptoms.

3. How often did you have the mentioned symptoms over the past week?
- ☐ 0   never
- ☐ 1   rarely
- ☐ 2   sometimes
- ☐ 3   often
- ☐ 4   permanently

4. How intense have the mentioned symptoms been over the past week?
- ☐ 0   no complaints
- ☐ 1   mild
- ☐ 2   moderate
- ☐ 3   intense
- ☐ 4   very intense

5. How strong has your quality of life been restricted by the mentioned symptoms over the past week?
- ☐ 0   not at all
- ☐ 1   mild
- ☐ 2   moderate
- ☐ 3   strong
- ☐ 4   very strong

6. On how many days of the past week have you been so impaired by the mentioned complaints that the daily routine could not or just insufficiently be managed?
- ☐ 0   not at all
- ☐ 1   on 1 day
- ☐ 2   on 2 - 3 days
- ☐ 3   on 4 - 5 days
- ☐ 4   on 6 or more days

7. How strong has your impairment in occupational functioning (including housework) been over the past week (if sick leave: rate 4)?
- ☐ 0   no impairment
- ☐ 1   mild impairment
- ☐ 2   moderate impairment
- ☐ 3   strong impairment
- ☐ 4   maximum impairment

8. How strong has your impairment in social functioning and leisure activities been over the past week (sports, parties, going out, etc.)?

- ☐ 0   no impairment
- ☐ 1   mild impairment
- ☐ 2   moderate impairment
- ☐ 3   strong impairment
- ☐ 4   maximum impairment

9. How strong has your impairment in family functioning been over the past week (partnership, children, parents)?

- ☐ 0   no impairment
- ☐ 1   mild impairment
- ☐ 2   moderate impairment
- ☐ 3   strong impairment
- ☐ 4   maximum impairment

10. Have you been worrying about having a serious illness over the past week?

- ☐ 0   not at all
- ☐ 1   hardly correct
- ☐ 2   partly correct
- ☐ 3   mainly correct
- ☐ 4   absolutely correct

11. Have you had wishes about further diagnostic interventions in order to find the reasons for your complaints?

- ☐ 0   not at all
- ☐ 1   hardly correct
- ☐ 2   partly correct
- ☐ 3   mainly correct
- ☐ 4   absolutely correct

12. How often have you thought about better seeing a physician immediately over the past week?

- ☐ 0   never
- ☐ 1   rarely
- ☐ 2   sometimes
- ☐ 3   frequently
- ☐ 4   permanently

13. How much time have you spent in medical treatments over the past week (e. g. seeing physicians, homoeopaths, masseurs, physiotherapists)?

- ☐ 0   none
- ☐ 1   0-1 hours
- ☐ 2   1-3 hours
- ☐ 3   3-6 hours
- ☐ 4   more than 6 hours

14. Did you believe your physician is wrong in saying there is nothing to worry about over the past week?

- ☐ 0   not at all
- ☐ 1   hardly correct
- ☐ 2   partly correct
- ☐ 3   mainly correct
- ☐ 4   absolutely correct

15. Have you been needing help from others (e. g. relatives, friends) to cover your daily routines over the past week?

- ☐ 0   not at all
- ☐ 1   rarely
- ☐ 2   sometimes
- ☐ 3   frequently
- ☐ 4   permanently

16. Have you had the feeling of not being serious by others over the past week?

- ☐ 0   never
- ☐ 1   rarely
- ☐ 2   sometimes
- ☐ 3   frequently
- ☐ 4   permanently

17. Have you been worrying about your health over the past week?

- ☐ 0   never
- ☐ 1   rarely
- ☐ 2   sometimes
- ☐ 3   frequently
- ☐ 4   permanently

18. Have you been taking medication for your complaints that has been described by a physician (except psychopharmacologic drugs)?

- ☐ 0   not at all
- ☐ 1   on 1 day
- ☐ 2   on 2-3 days
- ☐ 3   on 4-5 days
- ☐ 4   on 6-7 days

After evaluation of questions 2a & 2b sum up total score.

Σ: points

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