Recognition of anxiety disorders by family physicians after rigorous medical record case extraction ☆
Results of the Netherlands Study of Depression and Anxiety

Evelien H.C. Janssen, M.Sc.[a], Peter M. van de Ven, Ph.D.[b], Berend Terluin, Ph.D., M.D.[a],
Peter F.M. Verhaak, Ph.D.[c,d], Harm W.J. van Marwijk, Ph.D., M.D.[a], Mirrian Smolders, Ph.D.[e],
Klaas van der Meer, Ph.D., M.D.[d], Brenda W.J.H. Penninx, Ph.D.[a,f,g],
Hein P.J. van Hout, Ph.D.[a,*]

[a]Department of General Practice and Psychiatry, EMGO Institute for Health and Care Research, VU University Medical Center,
P.O. Box 7057, 1007 MB, Amsterdam, the Netherlands
[b]Department of Epidemiology and Biostatistics, VU University Medical Center, P.O. Box 7057, 1007 MB, Amsterdam, the Netherlands
[c]NIVEL, Netherlands Institute for Health Services Research, P.O. Box 1568, 3500 BN, Utrecht, the Netherlands
[d]Department of General Practice, University Medical Center Groningen, P.O. Box 196, 9700 AD, Groningen, the Netherlands
[e]Scientific Institute for Quality of Healthcare, Radboud University Nijmegen Medical Centre, P.O. Box 9101, 6500 HB, Nijmegen, the Netherlands
[f]Department of Psychiatry, University Medical Center Groningen, P.O. Box 30.001, 9700 RB, Groningen, the Netherlands
[g]Department of Psychiatry, Leiden University Medical Center, P.O. Box 9600, 2300 RC, Leiden, the Netherlands

Abstract

Objective: Previous studies reported low and inconsistent rates of recognition of anxiety disorders by family physicians (FPs). Our objectives were to examine (a) which combination of indications within medical records most accurately reflects recognition of anxiety disorders and (b) whether patient and FP characteristics were related to recognition.

Method: A cross-sectional comparison was made between FPs' registration and a structured diagnostic interview, the Composite International Diagnostic Interview, according to *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition,* criteria. Seven definitions of recognition were tested using diagnostic codes, medication data, referral data and free text in medical records. Data were derived from the Netherlands Study of Depression and Anxiety. A total of 816 patients were included.

Results: Recognition ranged between 9.1% and 85.8%. A broader definition was associated with a higher recognition rate, but led to more false positives. The best definition comprised diagnostic codes for anxiety disorders and symptoms, strong free-text indications, medication and referral to mental health care. Generalized anxiety disorder was best recognized by this definition. Recognition was better among patients with increased severity, comorbid depression and older age.

Conclusion: FPs recognized anxiety disorders better than previously reported when all medical record data were taken into account. However, most patients were nonspecifically labeled as having a mental health problem.

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Keywords: Anxiety; Recognition; Primary care; Family physician

1. Introduction

In the Dutch health care system, 96% of patient visits are handled solely by the family physician (FP) without referral to another health care professional [1]. The FP has to deal with different physical, psychosocial and mental demands at the same time [2]. Anxiety disorders are very common, but earlier research suggests that recognition of anxiety disorders by FPs is limited [3–6]. In a study by Ormel et al. [3], FPs diagnosed anxiety disorders or psychosocial problems or stress in 23% of the cases. Recognition rates varied across the several types of anxiety disorders. Social phobia was diagnosed in only 24.2% [5], while recognition rates for generalized anxiety disorder (GAD) ranged from 34.4% to 72.5% [6]. Recognition of panic disorder with/without agoraphobia by FPs has recently been studied, but panic disorder was registered by the FP in just three of the patients who did not meet the criteria for this condition [7].

However, the previous studies diverged widely in reference standards and the way FPs' diagnoses were recorded. Diagnosis by the FP was mostly determined by questionnaires. Studies examining medical records mostly based their estimates on a diagnostic code as evidence of the FPs' diagnosis [4,8]. Diagnostic codes only partly reflect the FPs' recognition. Patients with anxiety disorders might be labeled as having other psychiatric problems, or the diagnostic code could have been limited to a symptom, to psychosocial problems or to a prescription of medication [6,9]. The recognition by FPs may be better assessed when all available information from the medical records is taken into account.

The FPs' recognition of anxiety disorders can be influenced by clinical-, patient- and FP-related characteristics. Previous studies reported that recognition was better in more severe and in co-occurring anxiety and depressive disorders [3,6,10]. On the other hand, social phobia was underdiagnosed when it occurred together with depression [5]. There seems to be a tendency for misclassification of anxiety as depression [11]. In family practice, mixed and subthreshold cases are frequently encountered [12]. Many patients with an anxiety disorder present physical symptoms as main reasons for visiting their FP [5,6,10,13,14]. FP-related factors that influence recognition may include limited knowledge concerning mental disorders [6,15] and time restraints in the medical setting [6,10]. In this study we were able to examine candidate determinants of recognition in conjunction with clinical, patient and FP characteristics in a large sample.

The objectives of this study were to examine (a) which combination of indications within FPs' medical records most accurately reflects recognition of anxiety disorders, calculated in relationship to diagnosis by a structured diagnostic interview, including the different types of anxiety, and (b) whether characteristics of patients and FPs were related to recognition.

2. Methods

2.1. Design

This study compared FPs' registrations of routine care contacts with a reference standard to diagnose anxiety disorders. FPs, patients and interviewers who conducted the structured diagnostic interviews were held blind to the diagnosis by the reference standard.

2.2. Study population and setting

We used data from the baseline measurements of the Netherlands Study of Depression and Anxiety (NESDA), a longitudinal cohort among 2981 participants aged 18 to 65 years. Recruitment for NESDA took place in the general population, in family practices and in mental health organizations. NESDA and the recruitment for the total NESDA cohort have been described in detail elsewhere [16].

Primary care patients were recruited from 21 family practices in the vicinity of Amsterdam, Groningen and Leiden between September 2004 and February 2007. For the selection of respondents, a three-stage screening procedure was used. Screening questionnaires were sent to a random sample of 23 750 patients who consulted their FP in the last 4 months irrespective of the reason for the patient's visit. The screening questionnaire consisted of the Kessler-10 (K-10) — a 10-item questionnaire on distress [17] — and five additional questions for the presence of specific anxiety disorders. Of the screeners returned, the 4592 screen positives (with a validated K-10 score of ≥ 20 or a positive score on any of the added anxiety questions) were approached for a telephone interview consisting of the Composite International Diagnostic Interview (CIDI) Short Form [18]. Those who met the criteria for a current anxiety or depressive disorder and who were not treated for psychiatric conditions in a psychiatric mental health care setting were invited to participate in the NESDA study primary care sample. In addition, a random selection of the screen negatives (both from the screening questionnaires and from the telephone interview) was invited to participate. In total, 1610 persons from primary care practices were recruited (898 screen positives and 712 screen negatives).

A total of 1403 participants gave informed consent including the use of Electronic Medical Record (EMR) data. All other participants were excluded. Another exclusion criterion was the absence of free-text data from FPs. Free text is part of the EMR and is used for notes about FP and patient encounters. The availability of the free-text data depended on approval of family practices or Medical Ethical Committees (MECs). The MEC in Groningen declined the use of the free-text data. As a result, 816 participants were included in this study. These patients came from 33 FPs from 12 family practices near Leiden and Amsterdam, and 308 participants had a current anxiety disorder (Fig. 1).
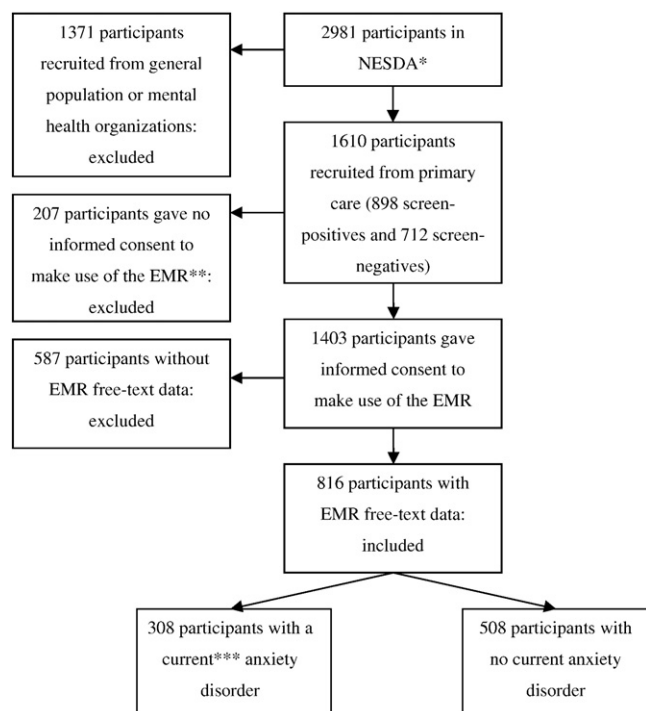
Fig. 1. Recruitment flow of participants of this study after the screening procedure of the total NESDA* cohort. *NESDA=Netherlands Study of Depression and Anxiety. **EMR=Electronic Medical Record. ***Current= present during the last six months according to the CIDI.

2.3. Measurements

2.3.1. Reference standard

The reference standard for the presence and absence of anxiety disorders was the CIDI — lifetime CIDI, WHO version 2.1 — which was used to diagnose current (i.e., in the past 6 months) anxiety disorders according to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV), criteria [19]. The CIDI is used worldwide, and WHO field research has found high interrater reliability [20], high test–retest reliability [21] and high validity for depressive and anxiety disorders [22]. Trained clinical research staff conducted the CIDI in person. GAD, panic disorder with and without agoraphobia, agoraphobia and social phobia were established with the CIDI.

2.3.2. Anxiety diagnosis by the FP

We used all available information from the FPs' medical records and constructed seven definitions of the diagnosis anxiety disorder varying from very specific to rather nonspecific (Table 2). We extracted data from the EMRs starting from 1 year prior to inclusion in NESDA to 1 year after inclusion. Some time was allowed for FP to detect anxiety disorders because patients visit their FP irregularly. The following elements from the EMR could be part of the various definitions:

2.3.2.1. Registered diagnosis.
Diagnoses were recorded by FPs according to the International Classification of Primary Care (ICPC) codes [23]. FPs were trained in ICPC coding and assembled regularly to support uniformity in coding. In this study, P-codes for psychological problems and mental disorders and Z-codes for psychosocial problems were used. P74 indicated an 'anxiety disorder' and P79 'phobic (and obsessive–compulsive) disorder'. P01 referred to feeling anxious, nervous or tense. A selection was made of P-codes referring to mood disorders. In the broadest definition, all P- and Z-codes were taken into account, referring to all mental and psychosocial problems. ICPC codes/diagnoses do not match the CIDI diagnoses. In case of multiple codes, all codes were checked, but the most anxiety-related code (or code group) was the decisive code.

2.3.2.2. Medication.
Medication use was both registered by FPs in the EMR and reported by the patients during interviews. The prescription of anxiety medication was recorded according to the Anatomical Therapeutic Chemical Classification System. In line with the National Dutch Pharmacotherapeutic Compass and/or the recommendations of the Dutch College of FPs on treatment of anxiety disorders, benzodiazepines and a selection of antidepressants were regarded as pharmacological treatment of anxiety disorders (Appendix). Documentation by either the FP or the patient was sufficient for scoring positively on the use of medication indicative of the presence of anxiety disorders.

2.3.2.3. Referrals to mental health.
Referral to mental health care was registered by the FPs with use of Working Committee for Information and Automation codes as well as patient self-report on the Trimbos/iMTA questionnaire for Costs associated with Psychiatric Illness (TiC-P). Documentation of referral by either one was sufficient for scoring positively on the item mental health referral indicative of the presence of anxiety disorders.

2.3.2.4. Free-text indications of anxiety disorders.
Part of the EMR is available for FPs to record information as free text. These free texts were scored for notes referring to anxiety and other mental and psychosocial problems. From an initial analysis of 30 medical records, all free-text phrases about mental and psychosocial problems were listed. On the basis of this list and according to the diagnostic criteria of the DSM-IV, a scoring system was created to score free texts consistently. The scoring system consisted of three categories: a strong, moderate and mild free-text indication indicative of the presence of anxiety disorders. Interrater reliability between two scorers was measured for 36 cases (kappa's between 0.56 and 1.00), after which all free texts were scored by one of them.

Strong indications for anxiety involved anxiety, phobia, panic or other disorder-related phrases, comprising core symptoms of anxiety (comparable to ICPC codes P74/P79/P01). Moderately strong indications involved other anxiety or mood symptoms, like stress, sleeping problems, depression and irritability (comparable to the

selection of other ICPC P-codes included in definition 6). All other mental and psychosocial symptoms and problems received a mild indication (for example, problems at home or at work, debts and bereavement; comparable to the ICPC Z-section). Phrases that initially seemed to fit in one of the categories, but were actually related to physical illness (for example, anxious because of visual problems), and phrases in which it was unclear if it concerned a mental or psychosocial issue were encoded negative (for example, 'tired' without other appropriate text).

2.3.3. Characteristics of the disorder, patient and FP

The severity of anxiety was measured by the Beck Anxiety Inventory (BAI) (collected at the same time as the CIDI) and split up into four categories: normal (0–9), mild (10–18), moderate (19–29) and severe ($\geq$ 30). Comorbidity with depression or of different types of anxiety disorders was determined according to the CIDI. The relation between these factors and recognition of anxiety disorders by the FP was examined. The patient characteristics gender, age and years of education were also examined. Characteristics of the FPs examined were gender, years of experience, special interest in mental health problems and their opinion on whether time restraints, limited knowledge and skills were a problem for treating patients with anxiety disorders.

2.4. Statistical analysis

The reference standard was compared with the seven definitions registered by the FPs. Sensitivity and specificity were calculated. The overall accuracy of the various definitions was expressed in area under the curve (AUC). The AUC of a receiver operating characteristic curve is a function of the sensitivity and specificity combined and estimates the accuracy between 0.5 (not accurate at all) and 1 (perfect match of 100% sensitivity with 100% specificity). Furthermore, we examined to what extent FPs recognized the different types of anxiety diagnoses for various definitions to get an impression of possible differences.

To explore the relationship between clinical, patient and FP characteristics and recognition (diagnosed or not by the FP among the 308 CIDI positives), multivariate analyses were performed using multilevel logistic regression analyses. These relationships were examined for the most accurate definition only. Univariate logistic regression analyses were performed for all variables, and variables with a P value smaller than .1 were included in a subsequent multivariate analysis. Nonsignificant predictors were removed from the model by backward elimination. Elimination was based on the P value for the Wald statistic. After each elimination, a likelihood ratio test was performed to assess the impact of the elimination on the model fit. Elimination of a variable was not accepted if the likelihood ratio test was significant at the .05 level. The nonproportional sampling was taken into account by including the screening group as a categorical independent variable in the models, resulting in separate intercepts for the three screening groups. Multilevel logistic regression analyses were performed

using GLLAMM in Stata 11 with patient as level 1, physician as level 2 and practice as level 3. The other analyses were performed using SPSS version 15 for Windows.

Because the study sample was composed of three subgroups, weighting factors were used to recalculate the study population back to the source population. The calculation of the weighting factors has been described in detail elsewhere [24].

3. Results

3.1. Patient characteristics

Table 1 summarizes the characteristics of the included participants and FPs. The mean age of the 816 patients was 46.2 (S.D. 12.3) years, and 68.0% were female. A total of 308 patients had one or more anxiety disorders according to the CIDI. Social phobia was most prevalent in the patients diagnosed with an anxiety disorder (n = 136, 44.2%), followed by GAD (n = 104, 33.8%). Of the patients diagnosed with anxiety, 33.8% had two or more anxiety disorders. Co-occurrence of different types of anxiety was

Table 1
Baseline characteristics of the patients and FPs

Patients	Total (n = 816)	No anxiety disorder (n = 508)	Anxiety disorder (n = 308)
Age (S.D.)	46.2 (12.3)	46.6 (12.2)	45.5 (12.5)
Gender (female)	555 (68%)	341 (67.1%)	214 (69.5%)
Years of education (S.D.)	12.2 (3.4)	12.7 (3.4)	11.4 (3.2)
Anxiety diagnosis	308 (37.7%)		136 (44.2%)
Social phobia	136 (16.7%)		81 (26.3%)
Panic with agoraphobia	81 (9.9%)		54 (17.5%)
Panic without agoraphobia	54 (6.6%)		56 (18.2%)
Agoraphobia	56 (6.9%)		104 (33.8%)
GAD	104 (12.7%)		
Comorbid anxiety	104 (12.7%)		104 (33.8%)
(Comorbid) depression	254 (31.1%)	96 (18.9%)	158 (51.3%)
Severity of anxiety, BAI			
Normal (0–9)	444 (54.4%)	370 (72.8%)	74 (24%)
Mild (10–18)	212 (26%)	92 (18.1%)	120 (39%)
Moderate (19–29)	114 (14%)	38 (7.5%)	76 (24.7%)
Severe ($\geq$ 30)	44 (5.4%)	6 (1.2%)	38 (12.3%)
FPs	Total (n = 31; missing n = 2)		
Gender (female)	13 (41.9%)		
Years of experience (S.D.)	17.8 (9.6)		
Interest in mental health problems	14 (45.2%)		
Opinion of FP: time restraints	13 (41.9%)		
Opinion of FP: lack of knowledge and skills	6 (19.4%)		

less prevalent in patients with panic disorder without agoraphobia ($n = 19$, 35.2%) and most prevalent in patients with panic disorder with agoraphobia ($n = 47$, 58%) and GAD ($n = 61$, 58.7%). Depression was common in patients with an anxiety disorder (51.3%), a little less prevalent in patients with agoraphobia ($n = 24$, 42.9%) and most prevalent in patients with GAD ($n = 72$, 69.2%).

3.2. FPs' characteristics

Of the 33 FPs in this study, characteristics of 2 FPs were missing. Forty-two percent of the FPs were female ($n = 13$), and they had on average 17.8 (S.D. 9.6) years of experience. Fourteen FPs (45.2%) had a special interest in mental health problems. While 13 FPs considered 'not enough time' as a problem for recognition anxiety disorders (41.9%), 6 FPs (19.4%) considered a lack of appropriate knowledge and skills as a problem for recognition.

3.3. Recognition of anxiety disorders

Table 2 shows the recognition rates for all used definitions. Recognition (sensitivity) varied between 9.1% for definition 1 and 85.8% for definition 7. Specificity varied between 98.1% and 53.2%. The broader the definition, the higher the recognition rate, but the more false positives were included as well, decreasing specificity. Definition 5 appeared to be the most accurate, based on the highest AUC of 0.72, with a sensitivity of almost 70% and a specificity of 75%. This rate indicates a moderate accuracy [25].

Table 2
Recognition of anxiety disorders by FPs ($n = 816$) according to seven definitions based on EMR

Definition of recognition	Sensitivity	Specificity	AUC
1. Diagnostic codes for anxiety disorders (ICPC P74 & P79)	9.1%	98.1%	0.536
2. Definition 1 & diagnostic code for anxiety symptoms (ICPC P01)	16.5%	97.2%	0.569
3. Definition 2 & strong free-text indications on core symptoms of anxiety	26.7%	95.3%	0.610
4. Definition 3 & medication for anxiety problems	56.3%	83.5%	0.699
5. Definition 4 & mental health referral	69.8%	75.1%	0.724
6. Definition 5 & other diagnostic ICPC P-codes[a] & moderately strong free-text indications on anxiety	82.6%	58.1%	0.703
7. Definition 6 & other diagnostic ICPC Z-codes[b] & mild free-text indications on anxiety	85.8%	53.2%	0.695

ICPC P-codes[a]	ICPC Z-codes[b]
P01 Feeling anxious/nervous/tense	Z01 Poverty/financial problem
P02 Acute stress reaction	Z02 Food/water problem
P03 Feeling depressed	Z03 Housing/neighbourhood problem
P04 Feeling/behaving irritable/angry	Z04 Social cultural problem
P06 Sleep disturbance	Z05 Work problem
P27 Fear of mental disorder (did not occur)	Z06 Unemployment problem
P73 Affective psychosis	Z07 Education problem
P74 Anxiety disorder/anxiety state	Z08 Social welfare problem
P76 Depressive disorder	Z09 Legal problem
P77 Suicide/suicide attempt	Z10 Health care system problem
P78 Neurasthenia/surmenage	Z11 Compliance/being ill problem
P79 Phobia/compulsive disorder	Z12 Relationship problem with partner
P82 Post-traumatic stress disorder (did not occur)	Z13 Partner's behaviour problem
P86 Anorexia nervosa/bulimia (did not occur)	Z14 Partner illness problem
	Z15 Loss/death of partner problem
	Z16 Relationship problem with child
	Z18 Illness problem with child
	Z19 Loss/death of child problem
	Z20 Relationship problem parent/family
	Z21 Behaviour problem parent/family
	Z22 Illness problem parent/family
	Z23 Loss/death parent/family member
	Z24 Relationship problem friend
	Z25 Assault/harmful event problem
	Z27 Fear of a social problem
	Z28 Limited function/disability (z)
	Z29 Social problem Not Otherwise Specified

Because the study sample was composed of three subgroups, weighting factors were used to recalculate the study population back to the source population on all figures.
[a] Diagnostic ICPC P-section: psychological problems.
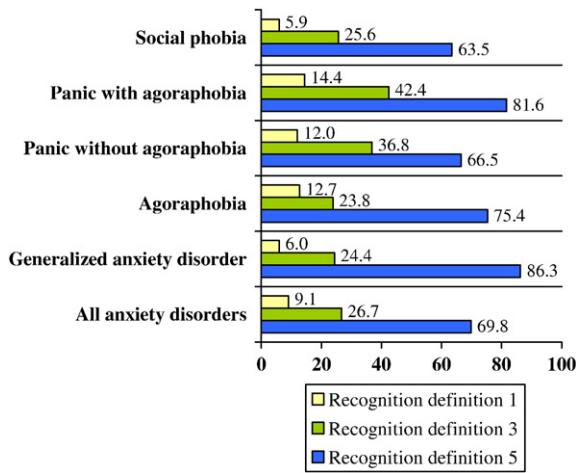[b] Diagnostic ICPC Z-section: psychosocial problems.

Fig. 2. Recognition of different types of anxiety disorders (percentage diagnosed by the FP according to definitions 1, 3 and 5 within the CIDI positives on a specific anxiety disorder). Because the study sample was composed of three subgroups, weighting factors were used to recalculate the study population back to the source population on all figures.

Fig. 2 illustrates the percentages recognized, i.e., the sensitivity of the FP for the different types of anxiety disorders according to definitions 1, 3 and 5. According to definition 5, GAD was best recognized (86.3%), while social phobia was less recognized (63.5%).

A comparison of the patients diagnosed by the FP before the CIDI interview with the patients diagnosed by the FP after the CIDI showed that there was no significant difference between these groups (χ^2=2.231, P=.135). This finding supports the fact that FPs were blind for inclusion of the patients in NESDA.

3.4. Characteristics related to recognition by the FP

We explored associations of patient and FP characteristics with recognition using definition 5, which demonstrated the highest AUC (Table 3). Significant univariate determinants (severity of anxiety, having comorbid anxiety, having comorbid depression, age of the patient and years of experience of the FP) were entered in a multilevel logistic

regression model that adjusted for all variables simultaneously. The recognition rate for definition 5 was higher in patients with higher anxiety scores on the BAI [odds ratio (OR)=1.07, 95% confidence interval (CI) 1.03–1.11], patients with comorbid depression (OR=1.86, 95% CI 1.06–3.27) and older patients (OR=1.02, 95% CI 1.00–1.04). FP characteristics were not associated with recognition.

4. Discussion

4.1. Recognition of anxiety

In this study, we examined the accuracy of FPs recognizing anxiety disorders in routine primary care by exploring the full content of their medical records. Recognition rates using seven different but gradually less specific definitions ranged between 9.1% and 85.8%. Specificity ranged accordingly between 98.1% and 53.2%. The broader the definition, the higher the recognition rate (sensitivity), however, at the expense of a worse specificity. Nonspecific definitions could for example also include medication and mental health referrals that can be used for other mental and psychosocial problems as well.

The best definition comprised diagnostic codes for both anxiety disorders and symptoms, free-text words strongly indicating anxiety, medication indicative for anxiety and referrals to mental health care. GAD was best recognized, while social phobia was less recognized in this definition. Recognition rates were higher compared to previous studies [3,5], in which medication, referral and other mental and psychosocial problems were not considered.

An important conclusion of our study is that FPs recognize a mental health problem in most of their patients with an anxiety disorder. However, they have difficulty recognizing a specific anxiety disorder.

4.2. Characteristics influencing recognition

Recognition was better in older patients, severe disorders and disorders with comorbid depressive disorders. This is in line with earlier research [3,6,10]. In contrast to previous

Table 3
Multilevel logistic regression results for definition 5: determinants of recognition (among CIDI positives, n=308)

		Univariate analysis OR (95% CI) P value	Multivariate analysis OR (95% CI) P value
Patient characteristics	Severity of anxiety (BAI total score)	1.07 (1.03–1.10) P<.001[a]	1.07 (1.03–1.11) P=.001
	Having comorbid anxiety	1.75 (0.98–3.12) P=.059[a]	
	Having comorbid depression	2.28 (1.33–3.91) P=.003[a]	1.86 (1.06–3.27) P=.029
	Gender of patient	1.08 (0.62–1.87) P=.794	
	Age of patient	1.02 (1.00–1.04) P=.089[a]	1.02 (1.00–1.04) P=.051
	Years of education	0.99 (0.92–1.08) P=.891	
FP characteristics	Gender of FP	1.37 (0.75–2.51) P=.308	
	Years of experience of FP	1.02 (1.00–1.06) P=.093[a]	
	Interest in mental health problems	1.53 (0.80–2.95) P=.199	
	Opinion of FP: no time restraints	1.02 (0.58–1.77) P=.948	
	Opinion of FP: no lack of knowledge and skills	1.56 (0.68–3.57) P<.295	

[a] Included in multivariate analysis (P<.1).

studies, we found no associations of recognition with FPs' characteristics such as knowledge level of FPs concerning mental disorders and FPs' time constraints [6,10,15].

4.3. Limitations and strengths

Our study has some limitations. First, bias due to the selection of patients might be possible. Patients were recruited from two large cities in the Netherlands and spoke Dutch fluently. Our results may overestimate recognition rates because a linguistic barrier can hinder detection of anxiety disorders by the FP. On the other hand, recognition rates would likely be higher for the patients with more severe disorders, excluded from our study. Second, bias due to the selection of family practices might have influenced our recognition rates. FPs in this study were willing to participate in research about depression and anxiety. Besides that, there were relatively more academically joint family practices represented in our study sample than there are in the Netherlands. Third, a selection of antidepressants, regarded as pharmacological treatment of anxiety disorders, is included as medication in some of our definitions. It is possible that the FPs recognized and treated the comorbid depression but did not recognize the anxiety disorder. Fourth, data from the EMRs were extracted from 1 year prior to inclusion in NESDA to 1 year after inclusion. Because the 6-month recency diagnoses of anxiety are the default in NESDA research, CIDI current anxiety diagnoses were the reference standards of our study. Overdiagnoses by FPs may theoretically be possible when they stated a diagnosis before the time frame of the diagnostic procedure. However, in the CIDI interview, we asked about symptoms with both 6 and 12 months recency, virtually covering the EMR time frame. Underdiagnoses by FPs are theoretically possible when a disorder started during our diagnostic procedure but after the patient's visit to the FP. However, for the presence of an anxiety diagnosis, we used a minimum time frame of 6-month presence of symptoms, so it seems unlikely that such underdiagnoses have occurred. In conclusion, both over- and underdiagnoses due to a mismatch of the two procedures seem rather unlikely.

The time issue, however, may be seen as a strength of this study as well. Because most patients do not visit their FP regularly, some time should be allowed for the FP to detect anxiety in practice. Moreover, the FP was blind to the CIDI diagnoses. Other strengths of our research were the large study population and the different types of anxiety disorders included measured by a state-of-the-art reference standard, which enabled us to examine the recognition of separate anxiety disorders. We were also able to study determinants of recognition from clinical, patient and FP characteristics in conjunction.

4.4. Clinical implications

FPs recognize a mental health problem in most patients with anxiety disorders. Their recognition is considerably better than previously reported when all available medical information is taken into account. However, FPs have difficulty in diagnosing specific anxiety disorders as such. A possible solution to better specify anxiety disorders in the future might be the use of a case-finding instrument, such as the Four-Dimensional Symptom Questionnaire or the Hospital Anxiety and Depression Scale, in suspected cases [26].

Appendix

The following medications were regarded as pharmacological treatment of anxiety disorders:

Alprazolam, bromazepam, buspirone, chlordiazepoxide, citalopram, clobazam, clomipramine, clorazepine-acid, diazepam, duloxetine, escitalopram, fluoxetine, fluvoxamine, hydroxyzine, lorazepam, oxazepam, paroxetine, pregabalin, sertraline, sulpiride, venlafaxine.

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