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Research report

The role of somatic health problems in the recognition of depressive and anxiety disorders by general practitioners

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ABSTRACT

Background: Recognition of depression and anxiety by general practitioners (GPs) is suboptimal and there is uncertainty as to whether particular somatic health problems hinder or facilitate GP recognition. The objective of this study was to investigate the associations between somatic health problems and GP recognition of depression and anxiety.
Methods: We studied primary care patients with a DSM-IV based psychiatric diagnosis of depressive or anxiety disorder during a face-to-face interview ($n=778$). GPs' registrations of depression and anxiety diagnoses, based on medical file extractions, were compared with the DSM-IV based psychiatric diagnoses as reference standard. Somatic health problems were based on self-report of several chronic somatic diseases and pain symptoms, using the Chronic Pain Grade (CPG), during the interview.
Results: Depression and anxiety was recognized in sixty percent of the patients. None of the health problems were negatively associated with recognition. Greater severity of pain symptoms ($OR=1.18$, $p=.02$), and chest pain ($OR=1.56$, $p=.02$), in particular, were associated with more GP recognition of depression and anxiety. Mediation analyses showed that depression and anxiety in these patients were better recognized through the presence of more severe psychiatric symptoms.
Limitations: Some specific chronic diseases had low prevalence.
Conclusions: This study shows that the presence of particular chronic diseases does not influence GP recognition of depression and anxiety. GPs tend to recognize depression and anxiety better in patients with pain symptoms, partly due to more severe psychiatric symptoms among those with pain.

1. Introduction

Somatic health problems, such as chronic diseases or pain, may possibly influence the recognition of depressive and anxiety disorders by general practitioners (GPs). We need better insight into the role of somatic health problems on the diagnostic accuracy of GPs, since the number of patients with somatic and psychiatric co-morbidity is large and increasing, and unrecognized depression or anxiety could lead to suboptimal care for this group (Clarke and Currie, 2009; Gadermann et al., 2012; Means-Christensen et al., 2008). In general, studies on GP recognition of depression and anxiety report low to reasonable sensitivity, ranging from 20% to 68% (Cepoiu et al., 2008; Fernandez et al., 2010, 2012; Joling et al., 2011; Mitchell et al., 2009; Nuyen et al., 2005; Piek et al., 2012; Rost et al., 1998; Simon and VonKorff, 1995a; Simon et al., 1999).

The potential consequences of unrecognized depression and anxiety, particularly in patients with somatic health problems, include increased rates of disability, decreased work productivity, greater use of medical services and lower somatic treatment adherence (Aguera et al., 2010; Hirschfeld, 2001; Simon et al., 2005). In patients with somatic health problems the likelihood of a GP missing a diagnosis of depression or anxiety could well be increased as psychiatric symptoms may be overlooked or seen as being part of the somatic condition. Lack of time is also a frequently reported reason for missing a psychiatric diagnosis in general practice (Baik et al., 2005). In patients with somatic health problems, dealing with the physical symptoms might have priority over assessing depressive or anxiety symptoms (Klinkman, 1997; McGrady et al., 2010; Paykel and Priest, 1992).

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However, it could also be argued that GPs' recognition of depression and anxiety is better in the physically unhealthy. Somatically unhealthy patients, tend to contact their GP more often, which gives the GP more opportunity to recognize mental health problems (Baik et al., 2005; Menchetti et al., 2009; Rost et al., 1998; Verhaak et al., 2006). This increased frequency of contact in a continuity of care setting may make the GP more familiar with the patient's social environment and communication manner, and clues to mental health problems might be picked up more easily (Klinkman et al., 1998). Moreover, somatic health problems may be associated with more severe psychiatric symptomatology, which has been shown to be associated with increased recognition of depressive and anxiety disorders (Piek et al., 2012).

The few studies that report on the association between somatic health problems and GP recognition of depression and anxiety have shown inconclusive results. Some studies found no associations (Fernandez et al., 2010; Nuyen et al., 2005; Piek et al., 2012), while other studies found either lower (Freeling et al., 1985; Furedi et al., 2003; Tylee et al., 1995, 1993) or higher GP recognition rates (Robbins et al., 1994). In the above-mentioned studies on GP recognition, somatic health problems were determined predominantly by non-specific general measures of chronic disease. Specific chronic diseases and pain symptoms might have a different impact on GP recognition of depression and anxiety. For specific somatic diseases there is limited evidence from previous studies, that GPs are more likely to detect mental health problems in patients with hypertension, but no association was found for patients with cardiac disease (Borowsky et al., 2000; Fernandez et al., 2012). To the best of our knowledge no study has investigated the role of pain in the GP recognition of depressive and/or anxiety disorders.

The objective of this study was to estimate to what extent somatic health problems, including specific chronic diseases and pain, are associated with GP recognition of depressive and/or anxiety disorders.

2. Materials and methods

2.1. Design

The Netherlands study of depression and anxiety (NESDA) is a longitudinal ongoing cohort study comprising 2981 patients (18–65 years old). Patients, recruited from community, general practice and secondary mental health care, were examined to investigate depressive and anxiety disorders. Penninx et al. (2008) provide a detailed description of the NESDA study design and sampling procedures. The Ethics Committee of participating universities approved the research protocol and written informed consent was obtained from all patients. Specially trained research staff conducted the interviews between 2004 and 2007.

2.2. Sample

For the present study, we used data only from the general practice patients ($n=1610$), who were not being treated for psychiatric conditions in a psychiatric mental health care setting and were included in the NESDA study. Patients were recruited from 21 general practices in the vicinity of the cities of Amsterdam, Groningen, and Leiden. For the selection of general practice respondents, a three-stage screening procedure was used as described in a study by Penninx et al. (2008). Kessler-10 screening questionnaires (K-10) (Kessler et al., 2003), were sent to a random sample of 23,750 patients who had consulted their GP in the last four months irrespective of reason for consultation. A screen-positive score on the K-10 was defined as a validated K-10 score of ≥ 20, or a positive score on any of the additional questions (Donker et al., 2010; Furukawa et al., 2003; Kessler et al., 2003). Respondents ($N=10{,}706$, 45%) who returned the screener were more likely to be female (59.3% versus 50.0%, $p<.001$) and older (44.4 versus 39.0 years, $p<.001$). Of these responders, the screen-positives (43%) were approached for a telephone screen interview consisting of the CIDI-short form. When they screened positive for depression and/or anxiety and were not being treated for psychiatric conditions in a psychiatric mental health setting ($n=1162$), they were invited for the baseline NESDA interview. Besides the phone-screen positive respondents a randomly selected sample of screen-negatives were also invited. During this interview, a total of 1610 general practice patients were assessed for having a depressive and/or anxiety disorder using the full DSM-IV based CIDI, life-time version 2.1 (Wittchen et al., 1991; Wittchen, 1994). The CIDI is a highly reliable and valid instrument for assessing depressive disorders (major depressive disorder, dysthymia) and anxiety disorders (social phobia, generalized anxiety disorder, panic disorder, agoraphobia) and was used as reference standard for the presence of a depressive and/or anxiety disorder in this study. The life-time version of the CIDI allowed us to determine the recency of the episode. Of the 1610 general practice patients, we included only those with a CIDI-based diagnosis of depressive and/or anxiety disorder in the past year ($n=798$). GPs and patients were blinded to the CIDI diagnoses. In addition to the interview, we used data extracted from the electronic medical records (EMR) to determine recognition by GPs. Twenty patients were excluded, because they did not give permission to use their EMR. Our study thus comprised 778 patients with a depressive and/or anxiety disorder according to the CIDI for the present study.

2.3. Measurements

2.3.1. Recognition of depression and anxiety as recorded by the GP

The EMR data of the 778 patients were searched for registered depression/anxiety diagnoses from one year before until one year after baseline interview, to create a fixed period of time in which the GP had the opportunity to recognize depressive or anxiety disorders. GPs often do not consistently use registration codes for all diagnoses made during the patient contacts, therefore, we decided to define GP recognition of depression and anxiety using the most reliable and sensitive definition based on previous NESDA studies (Janssen et al., 2012; Joling et al., 2011). GP recognition meant that at least one of three criteria was fulfilled: (1) The GP recorded either a diagnosis of depression and/or anxiety in the EMR according to International Classification of Primary Care codes (Wonca International Classification Committee. ICPC-2, 2012): depressive disorder (P76), depressive feelings (P03), anxiety disorder (P74), phobic disorder (P79) or feeling anxious, nervous or tense (P01) or other psychological diagnoses (P02/P04/P06/P27/P73/P75/P77/P78/P82/P86).

(2) The GP prescribed psychotropic medication according to the Anatomical Therapeutic Classification system (antidepressant (N06A) or anxiety medication (N05BA benzodiazepines, N05BB anxiolytics, N05BE buspirone).

(3) The GP made a referral to a mental health specialist (psychologist, psychiatrist, psychotherapist or social worker in either primary or secondary mental health care).

2.3.2. Somatic health problems

2.3.2.1. Chronic disease. First, patients were asked in the face to face interview whether they had been diagnosed with any of the cited specific chronic somatic diseases (Table 1). In order to assess the chronic diseases most 'objectively', we considered chronic disease only to be present if the participant stated that the disease was being treated by a healthcare professional or when medication was being used. As in a previous study (Gerrits et al., 2013), we assessed the