SHORT REPORT

Mixed emotional and physical symptoms in general practice: what diagnoses do GPs use to describe them?

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Aims: To determine what diagnostic terms are utilized by general practitioners (GPs) when seeing patients with mixed emotional and physical symptoms. **Method:** Prototype cases of depression, anxiety, hypochondriasis, somatization and undifferentiated somatoform disorders were sourced from the psychiatric literature and the author's clinical practice. These were presented, in paper form, to a sample of GPs and GP registrars who were asked to provide a written diagnosis. **Results:** Fifty-two questionnaires were returned (30% response rate). The depression and anxiety cases were identified correctly by most participants. There was moderate identification of the hypochondriasis and somatization disorder cases, and poor identification of the undifferentiated somatoform case. **Conclusion:** Somatization and undifferentiated somatoform disorders were infrequently recognized as diagnostic categories by the GPs in this study. Future research into the language and diagnostic reasoning utilized by GPs may help develop better diagnostic classification systems for use in primary care in this important area of practice.

Key words: diagnosis; general practice; somatoform disorders

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Background

Patients with mixed emotional and physical symptoms, but no biomedical diagnosis, have been described for centuries (Oken, 2007). However, the way in which their distress is understood, expressed and classified has changed significantly (De Gucht and Fischler, 2002; Sadler, 2002; Broome, 2007). The psychiatric classification of these patients has been heavily influenced by the cultural context in which diagnostic systems have been developed (Shorter, 1992). Until recently, these conditions have been classified as somatoform disorders in the Diagnostic and Statistical Manual of Psychiatric Disorders, DSM-IV (American Psychiatric Association, 1994).

Somatoform disorders are present in most cultures (Gureje *et al.*, 1997; Simon and Gureje, 1999; Gureje, 2004), have been described by a multitude

of diagnostic terms (Broome, 2007; McFarlane et al., 2008), and frequently co-exist with other psychiatric disorders. At least a third of the symptoms seen in primary care are medically unexplained (Kroenke and Hahn, 1994; Oye, 2004) but the prevalence of somatoform disorders is difficult to estimate due to variations in definition and measurement. Recent prevalence studies have estimated prevalence of 15–22% in primary care (Clarke et al., 2008; Steinbrecher et al., 2011; Morriss et al., 2012). Somatoform disorders are disabling, with morbidity similar to depression and anxiety (Kroenke et al., 1997a; Dickinson et al., 2003; de Waal et al., 2004). There is also some evidence for the efficacy of both antidepressant medication and cognitive behavioral therapy treatment (Kroenke, 2007; Sumathipala, 2007).

Recent discussions around the development of DSM-5 have highlighted some of the concerns around issues of classification and definition (Smith *et al.*, 2005; Oken, 2007; Regier, 2007; Rief and Rojas, 2007; Radden, 2009; Voigt *et al.*, 2010b).

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The DSM-IV somatoform disorders have been criticized for being unhelpful in primary care (Sharpe and Mayou, 2004; Mayou *et al.*, 2005), with poor reliability in both clinical practice and research (Fink and Taylor, 2008; McFarlane *et al.*, 2008).

In this study, the aim was to determine whether the cluster of symptoms identified in each of the diagnostic categories of depression, anxiety, hypochondriasis, somatization disorder and undifferentiated somatoform disorder were recognized by supervisors and registrars. For each cluster, the second aim was to identify which diagnostic terms were in current use. The study did not attempt to explore why general practitioners (GPs) chose each diagnosis, or the symptoms they identified that led them to choose a diagnostic category.

Methods

Cases, questionnaire design and sampling

Prototype cases were sourced from the psychiatric classification literature (the DSM-IV casebook; Spitzer *et al.*, 1994) and de-identified cases from the author's practice. The cases included an exemplar of depression and anxiety, and three cases of somatoform disorder: hypochondriasis, somatization disorder and undifferentiated somatoform disorder. Each case was carefully presented to include the majority of the diagnostic features required by DSM-IV for each diagnosis.

Directors of Training were approached and asked to participate in the study. Questionnaires were then circulated at an educational event and registrars and supervisors were invited to participate. These cases were presented in paper form in a random sequence. Each case was expressed in either a narrative form, or a summarized clinical form. Examples of two of the cases are presented in Table 1. Participants completed open responses to three questions:

- The most likely diagnosis.
- Any other diagnoses that may apply to the case.
- The key features of the case that led the participant to decide on this diagnosis.

Registrars in their first year of GP training and GP supervisors from Regional Training Programs across Australia were invited to participate. Participants were asked to supply demographic details, current practice context and previous mental health training and experience.

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Analysis

Accurate diagnoses (scored 3) included the major classification or sub-classifications of the disorder in DSM-IV or DSM-IV-R or ICD-10. Partly accurate diagnoses (scored 2) included terms used for this diagnosis in previous editions of DSM or ICD, or diagnoses proposed for use in DSM-5. Diagnostic terms outside these categories were scored 1, and those left blank were scored 0.

Diagnostic decisions for each case were compared using the Mann–Whitney test. Performance was also compared between supervisors and registrars.

Results

Fifty-two surveys (30% response) were returned and the characteristics of the sample are outlined in Table 2. Figure 1 shows a strong difference in the accuracy of diagnosis between prototype cases.

The marked difference in diagnostic accuracy between the case of depression and the case of undifferentiated somatoform disorder can be seen in more detail in Table 3, showing the frequency of diagnoses given for each case.

Statistical significance was calculated using the Mann–Whitney test. Diagnostic accuracy on the Anxiety and Depression cases were not significantly different ($P \sim 1.0$). Compared against the Anxiety case, accuracy in each of the other three cases was significantly different (P < 0.0002). There was no significant difference in performance on the basis of age, gender or experience in practice (P < 0.05), calculated using Fisher's exact test.

Discussion

There was a significant difference in the classification of the cases. Almost all of the participants identified the depression and anxiety cases by their correct diagnostic term. There was also significant agreement with the hypochondriasis case. Interestingly, there is some debate in the literature around whether hypochondriasis is better classified as an anxiety disorder (Phillips *et al.*, 2003), and this was reflected in the results, with many participants classifying this case as an anxiety disorder rather than hypochondriasis. Given that the treatment is likely to focus on managing anxiety around health

Table 1 Examples of the cases and their criteria

Narrative presentation of the case of depression	Criteria for the diagnosis
Samantha is a 23-year-old legal secretary who presents complaining of increasing fatigue. She is unable to fall asleep at night but also describes episodes when searly hours of the morning and is unable to fall asleep again. Samantha has nor appetite over the last three months and says she has lost interest in socialising, she finds it hard to concentrate, is unproductive at work and lacks motivation. Samantha constantly apologises for 'wasting your time' and says 'it's nothing really over it'. On further questioning, she becomes teary and tells you she feels guilty at way: she has a good job, a nice apartment and no reason to get herself down. You suicidal ideation, and she tells you she wishes 'it was all over' but denies any thouge Samantha moved to Sydney for work 12 months ago. She cannot identify any recent you she has no reason to feel this way. When you ask her to describe how she feels, s' 'empty'. Samantha has no relevant family, past medical or mental health history. She is not any prescribed medications, and has never smoked but states that for the last more taking St John's wort for her symptoms on a friend's recommendation. Her alcohood on examination, Samantha is alert and oriented but tearful. She denies suicidal ideation is normal, and routine blood tests (including thyroid function tests) and	e wakes in the ced a loss ofMust have a total of five symptoms for at least two weeks. One of the symptoms must be depressed mood or loss of interest 1. Depressed mood 2. Markedly diminished interest or pleasure in all or almost all activitiesljust have to get put feeling this ask her about hts of suicide.3. Significant (>5% body weight) weight loss or gain, or increase or decrease in appetite 4. Insomnia or hypersomnia 5. Psychomotor agitation or retardation 6. Fatigue or loss of energy 7. Feelings of worthlessness or inappropriate guilt 8. Diminished concentration or indecisiveness 9. Recurrent thoughts of death or suicidecurrently taking h, she has been use is light.Recurrent thoughts of death or suicide
Clinical presentation of a case of somatoform disorder	Criteria for the diagnosis
 Nikki is a 38-year-old woman who presents with the following symptoms preserements Heaviness and pain in the chest Epigastric pain Intermittent headaches Dizziness There was No change in appetite Some insomnia with persistent bad dreams No fatigue No weight loss No change in concentration Nikki appears irritable and demands 'pills' to eliminate her symptoms instead of these questions'. Nikki is G5P4 and married with four children. She had one termination of pregn ago. Nikki had been an administrative assistant before leaving work to care for Nikki has had a gastroscopy which was normal and treatment with antacids and o was not helpful. <i>Helicobacter pylori</i> testing was negative. A cardiac stress test am normal. There was no history of alcohol or drug use. On examination, Nikki looked depressed, but denied any depressive feelings. E: otherwise unremarkable. Full blood count, liver function tests and thyroid funct normal.	 One or more physical complaints (eg, fatigue, loss of appetite, gastrointestinal or urinary complaints) Either After appropriate investigation, the symptoms cannot be fully explained by a known general medical condition or the direct effect of a substance (eg, a drug of abuse, a medication) OR

and health-seeking behavior, this difference in classification is unlikely to be clinically significant.

The other two somatoform cases showed interesting results. Somatization disorder is rare, because it requires a higher number of symptoms than the less restrictive undifferentiated somatoform disorder. The case of somatization disorder was recognized by almost half of the participants, although a significant proportion of respondents classified this

 Table 2
 Characteristics of the sample

Experience	
Registrar	30
Supervisor	18
Not specified	4
Gender	
Male	25
Female	27
Indicates an interest in mental health	
Yes	10
No	42
Age	
20–30	12
30–40	16
40–50	5
50–60	12
60 +	2
Not specified	5
•	

case as depression. Other respondents used synonyms, such as psychosomatic disorder, or terms relating to particular body systems such as irritable bowel syndrome.

In the case of undifferentiated somatoform disorder, there were few references to somatization. While clearly the respondents recognized that the somatoform case represented a psychiatric disorder, they tended to classify the case as depression or anxiety rather than somatization. The diversity of responses between the somatoform cases and the depression cases were highly significant.

There are several possible interpretations of this data.

1. GPs do not recognize the category of somatoform disorder

There have been a number of studies focusing on increasing awareness of the diagnostic criteria for the somatoform disorders on the assumption that GPs fail to recognize the diagnosis (Rosendal *et al.*, 2003). In this study, the more severe form of the disorder, somatization disorder, was recognized more frequently. However, both cases were often diagnosed as depression.

Although somatization disorder frequently coexists with depression, both patients clearly denied depressed mood. It may be that the participants

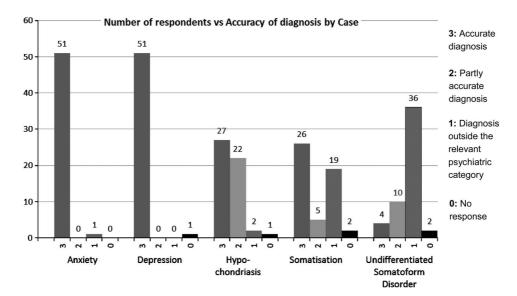


Figure 1 Accuracy of diagnosis by case Primary Health Care Research & Development 2015; 16: 207–213

Suggested diagnosis	Number of participants
Depression case	
Depression	37
Major depressive disorder	10
Depressive episode	2
Adjustment disorder	1
Mixed anxiety and depression	1
None	1
Undifferentiated somatoform disc	order case
Depression	21
Anxiety/depression	12
Post-traumatic stress disorder	3
Conversion disorder	2
Post natal depression	2
Adjustment disorder	1
Anxiety	1
Anxiety and somatization	1
Anxiety attack	1
Bereavement reaction	1
Dysthymia	1
Munchausen's syndrome	1
Pain disorder	1
Somatization disorder	1
None	2

Table 3	Frequency of diagnosis for the cases of depression
and undif	ferentiated somatoform disorder

recognized the presence of a psychiatric disorder, but were unable on the available evidence to distinguish between them and chose the most common alternative psychiatric diagnosis.

2. *GPs do not find the diagnosis of somatization clinically helpful and so are reluctant to apply it to some cases*

There has been criticism of current classification systems for somatoform disorders, because they are not useful in a clinical context (Voigt *et al.*, 2010a). Some authors have also criticized GPs for being 'taxophobic': reluctant to use psychiatric labels at all (Phillips *et al.*, 2003). In this study, it could be argued that participants chose to utilize the term 'somatization' selectively, because it was used in one case by almost 50% of the participants, and not at all in the second case.

There is also criticism that somatoform disorders overlap significantly with depression and anxiety (Wollburg *et al.*, 2012). With the treatment of all three conditions involving antidepressants and cognitive behavioral therapy, there is an argument that differentiating the conditions is unhelpful. This idea is supported by the study data, which shows the majority of respondents diagnosed undifferentiated somatoform disorder as either depression, anxiety or both.

3. GPs use alternative names for somatization There are several proposed diagnostic frameworks in the literature, including abridged somatization (Escobar *et al.*, 1998), multisomatoform disorder (Kroenke *et al.*, 1997b), bodily distress disorder (Fink *et al.*, 2007) and complex somatic symptom disorder (Dimsdale *et al.*, 2009). In this study, there were several synonyms in use for both somatization and undifferentiated somatoform disorder, including psychosomatic disorder, neurasthenia, conversion disorder and masked depression.

4. GPs use alternative paradigms for somatization Current debates around the classification of somatization disorder describe the overlap between somatization disorder and the affective disorders (McFarlane et al., 2008), the personality disorders (Widiger and Samuel, 2005) and the functional disorders, syndromes with predominant symptoms in one body system such as irritable bowel syndrome and fibromyalgia (Kanaan et al., 2007). In the undifferentiated somatoform case, the participants suggested some alternative diagnoses that used different paradigms, such as chronic pain disorder, prolonged grief reaction, drug seeking behavior and interpersonal stress that represented different ways of understanding the clinical scenario separate to psychiatric classification.

Strengths and limitations of this study

This study had a small response rate, but the large effect size demonstrates a significant difference in the way GPs classify affective disorders such as depression and somatoform disorders. By using cases of depression and anxiety, the study design identified that participants were competent with common mental health diagnoses and by using free text responses, it demonstrated the broad variation of diagnostic frameworks in use in primary care. The study was designed to generate hypotheses, and so was not able to answer the question why the GPs did not use the somatoform disorder diagnoses, but it did support the literature in showing that GPs do not use these diagnostic terms readily.

Implications for practice

In order to manage patients, teach students and registrars and communicate with colleagues, *Primary Health Care Research & Development* 2015; **16**: 207–213 we need to have a common language. This language needs to enable clinicians and researchers to conceptualize and communicate information about somatization disorders using a framework that is valid, clinical useful, and is acceptable to patients and clinicians. Given that these patients commonly present in GP, and suffer significant disability, there must be conversations occurring between clinicians, and between GPs and patients in a variety of contexts. Further research into the language, diagnostic frameworks and clinical reasoning in current use in GP should enrich our understanding of this complex area of practice.

Conclusion

Patients with mental health disorders experience significant disability and GPs express dissatisfaction with current classification systems as they apply in primary care. This study suggests that certain categories of psychiatric disorder are not recognized, even when presented in a prototypical case. Future research needs to explore the language and diagnostic frameworks that novice and expert GPs use in diagnosing and managing patients with mental health disorders. Understanding a common language is the first step in defining a research agenda for this important area of clinical practice.

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Conflicts of Interest

None.

Ethics Committee Approval

Ethics approval has been granted from the University of Sydney Human Research Ethics Committee, reference 11502.

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