Comorbidity of depressive and anxiety disorders: challenges in diagnosis and assessment

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Summary: Comorbid anxiety is common in patients with depressive disorders. It complicates the clinical presentation of depressive disorders and can contribute to treatment resistance. Clinicians can assess the degree of overlap between depressive and anxiety symptoms either by measuring the severity of anxiety symptoms in individuals who meet diagnostic criteria for depression or by determining whether or not an individual with depression simultaneously meets criteria for an anxiety disorder. However, multiple factors in the Chinese clinical setting make it difficult to accurately assess patients with comorbid conditions. The resultant under-diagnosis of comorbid depression and anxiety – the most common type of comorbid psychiatric condition in China – seriously diminishes the effectiveness of treatments for common mental disorders in the country. We argue that the widespread use of valid and reliable dimensional assessment tools in Chinese clinical settings will help improve the diagnosis and treatment of the many individuals who have concurrent depressive and anxiety symptoms.

Keywords: depressive disorders, anxiety disorders, comorbidity, diagnosis, assessment, China

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The concurrent presence of a depressive disorder with prominent anxiety symptoms or with an anxiety disorder is common in clinical practice. Studies have shown that more than 70% of individuals with depressive disorders also have anxiety symptoms and 40 to 70% simultaneously met criteria for at least one type of anxiety disorder.[1-4] In China, 69% of patients with depressive disorders[5] have a current anxiety disorder and 60%[6] have had a history of prior anxiety disorder(s). A study of 8487 patients treated in non-psychiatric outpatient clinics of general hospitals in urban China found that 8.6% of them met the diagnostic criteria of at least one type of anxiety disorder; and among those with anxiety disorders, 49% had a comorbid depressive disorder.[7] And a community-based epidemiological survey in mainland China reported that 63% of individuals with mood disorders had at least one type of anxiety disorder.[8]

The concurrent presence of anxiety symptoms or anxiety disorders often complicates the treatment of depressive disorders. These individuals are more dysfunctional and disabled than individuals with depression in the absence of anxiety symptoms, and they are more likely to be resistant to standard treatment with antidepressant medication. Therefore, to improve the clinical characterization of depression and the effectiveness of treatments for depressive disorders treating clinicians must simultaneously assess the severity of both depressive and anxiety symptoms and, if both types of symptoms are prominent, revise their standard treatment regimens accordingly.

1. Challenges in diagnosing comorbid depressive and anxiety disorders in China

Despite its high prevalence, the diagnosis of comorbid depressive and anxiety disorders in Chinese clinical settings is quite uncommon. There are several reasons for the failure to identify this common comorbid condition in clinical practice in China.

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(a) The clinical presentations of comorbid disorders are more complex than those of 'pure' disorders.

(b) Anxiety symptoms can fluctuate over time. A follow-up study of individuals with uncomplicated generalized anxiety disorder (GAD) at baseline found that at the end of three years the diagnosis of 24% of the participants had changed to depressive disorders and that of a further 16% had changed to depressive disorders comorbid with GAD.[9]

(c) The 'diagnostic hierarchy' approach adopted in 1980 with publication of the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), shifted the clinical decision making paradigm in psychiatry. According to this principle, severe mental disorders were prioritized and coexisting 'minor' mental disorders were not diagnosed. This principle has been widely used in psychiatry and in psychiatric training ever since. Therefore, when the diagnosis of a depressive disorder is evident, there is no need to determine whether or not comorbid anxiety disorders are present.

(d) In the two most commonly used diagnostic systems in clinical practice in China, the Chinese Classification of Mental Disorders (CCMD) and the 10th edition of the International Classification of Disease (ICD-10), standardized diagnostic evaluation using structured questionnaires is not emphasized and the diagnosis of comorbid conditions is not encouraged.

(e) In the busy, and often hectic, environment of many psychiatric outpatient departments in China, clinicians do not have the time needed to conduct the type of detailed examination needed to identify comorbid psychiatric disorders. In these settings they tend to take the time-saving 'diagnostic hierarchy' approach, so individuals with depressive disorders are not questioned further about anxiety symptoms. At best, the clinician may identify the concurrent presence of anxiety symptoms (without determining whether or not an anxiety disorder is present) by labeling the condition 'depression accompanied with anxious symptoms' or 'depression accompanied with anxiety'.

(f) Government run medical insurance reimbursement plans in China (which cover over 90% of the population) prioritize severe diseases, reinforcing the diagnostic hierarchy approach that make a comorbid diagnosis of an anxiety disorder irrelevant if a diagnosis of a depressive disorder is already present.

(g) Most general hospitals – where many individuals with comorbid depression and anxiety seek treatment – do not yet have departments of psychiatry and the training of clinicians working in the psychiatry departments of general hospitals that do have departments of psychiatry is inadequate. Thus the service provision in non-specialized medical settings for common mental disorder is very limited. Clinicians working in these settings are both unable to identify complex comorbid conditions and, in most cases, would not even recognize the need to refer individuals with comorbid conditions to local specialized psychiatric settings for diagnosis and treatment.[10]

(h) Stigma prevents many individuals with mental disorders and their family members from seeking professional mental health care.

To avoid the under-diagnosis of comorbid conditions, some clinicians and most psychiatric researchers in China use foreign diagnostic systems with structural diagnostic instruments (such as the DSM-IV and SCID) to determine diagnoses. However, differences between the Chinese and Western populations should be considered when using these diagnostic systems in China. For example, using DSM-IV Shi and colleagues[5] found that 69% of the patients with depressive disorders in China had concurrent anxiety disorders but the pattern of comorbidity was quite different from that reported in the United States. Compared to results from the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study in the United States,[11] the proportion of depressed individuals with comorbid GAD was much higher in China (56.1% in China vs. 20.8% in the US); the proportion with comorbid panic disorder was similar (15.3% in China versus 20.5% in the US); and the proportion with comorbid social anxiety disorder was much lower (3.5% in China versus 29.3% in the US). Such stark contrasts suggest distinct comorbidity patterns in the Chinese and Western populations but they could also reflect problems in the use of western criteria to distinguish different types of comorbid anxiety disorders in individuals with depression from mainland China. There is substantial overlap of the symptoms in some of the subtypes of anxiety disorders and the criteria for some of the anxiety disorders –such as social anxiety disorder and panic attack—do not map well onto clinical presentations in China. These findings cast doubt on the validity of using Western diagnostic systems such as DSM-IV in routine clinical practice in China.

2. Dimensional assessment of comorbid depressive and anxiety symptoms

Comorbid mental disorders are common so the rigid application of a diagnostic hierarchy will not adequately identify clinically important differences between

patients. These 'secondary' disorders can complicate the management of the 'main' condition and may result in substantial distress and dysfunction in their own right, so they should not be overlooked when developing a treatment strategy for the patient. The use of a non-hierarchical diagnostic approach, which allows all diagnoses to co-exist is an improvement but such a system will also neglect potentially important sub-threshold symptoms. To some extent, using terms like 'subthreshold', 'subclinical' or 'not otherwise specified (NOS)' can mitigate the problem, but an alternative approach would be to complement the dichotomous diagnostic approach with dimensional assessments of the severity of different classes of symptoms.

To address these problems DSM-5 (2013) made a revolutionary amendment to the classification system: in addition to the original binary ('yes' or 'no') diagnoses, it emphasized the importance of the 'dimensional assessment' of mental disorders.[12,13] For instance, 'with anxious distress' was added as a specifier for both bipolar and depressive disorders; this specifier allows clinicians to record the presence and severity of sub-threshold but clinically significant anxiety symptoms in individuals who meet criteria for a bipolar or depressive disorder.

In support of this approach several reports in China[2,14] and elsewhere[1] have shown that depressed individuals who have comorbid subthreshold anxiety symptoms (i.e., a score ≥ 7 in the anxiety/somatization factor of the Hamilton Rating Scale for Depression [HAMD-17]) have different clinical characteristics, poorer prognosis, and higher rates of adverse reactions than depressed individuals without comorbid anxiety.[1,2,14] Chinese patients with depression tend to complain about various somatic symptoms instead of their depressed mood so using a dimensional measure of anxiety and somatic symptoms (such as the anxiety/somatization factor of the HAMD-17) to identify comorbid subthreshold anxiety symptoms in individuals with depressive disorders might be particularly important in China. Moreover, GAD is the most commonly co-occurring anxiety disorder with depressive disorders in China,[5] so the use of a dimension measure that assesses the core symptoms of GAD would also facilitate the identification of individuals with comorbid depressive and anxiety disorders.

Assessing core symptoms of anxiety in depressed individuals can both refine the present diagnosis[15,16] and help predict the subsequent onset of the full-blown anxiety disorder.[17] However, most of the studies in this area have been cross-sectional or retrospective so high-quality longitudinal studies are urgently needed to characterize the different trajectories of individuals with comorbid depression and anxiety and, hopefully, to identify targeted treatments for the different trajectories that result in improved outcomes. In the process of conducting such studies we may find that the current methods for sub-classifying anxiety disorders need to be re-evaluated.

The dimensional assessment of anxiety in clinical settings in China should help reduce the under-diagnosis of comorbid depression and anxiety disorders, but further work is needed before recommending the widespread implementation of such an approach. There is a wide range of instruments available for assessing the severity of anxiety in China but there has been little work on the validity of the subtypes of anxiety assessed by these instruments. Head-to-head comparisons of the most promising scales in sufficiently large samples of representative community members are needed to select the most appropriate instrument (or to construct a China-specific instrument). When assessing the validity of these promising instruments it is necessary to consider their relevance to the clinical presentation of anxiety in China (i.e., 'face validity'), the degree to which the identified subtypes are homogeneous subgroups of individuals (i.e., those who have similar biomarkers, treatment responsiveness, and long-term outcomes), and the extent to which the measure is sensitive to clinical changes in the severity of symptoms over time (which is necessary if the instrument is to be used as a measure of treatment efficacy). It is certainly possible that some of the anxiety symptoms are 'states' that fluctuate over time while other anxiety symptoms are 'traits' that remain relatively stable over time; if true, it will be important to distinguish these two types of anxiety symptoms in Chinese populations. Comprehensive assessment of the validity of different candidate instruments will require well-powered studies in clinical and non-clinical settings that regularly follow individuals (at least every three months) for at least two years.

3. Conclusion

Depressive disorders comorbid with anxiety symptoms and anxiety disorders are common in clinical practice in China and pose challenges for treatment. A number of problems limit the identification of comorbid psychiatric conditions in China, so the neglect or under-treatment of anxiety disorders in individuals with depression is widespread. The introduction of dimensional approaches to the assessment of anxiety (and depression) in clinical settings in China should help ameliorate this problem. But before the promulgation of such a major change in the clinical assessment of patients, substantial work will be needed to identify and validate the best instruments for doing this. Both in China and elsewhere much more work is needed to identify distinct comorbid entities that have common biological substrates, treatment responsiveness, and long-term trajectories.

Conflict of Interest

The authors report no conflict of interest related to this manuscript.

抑郁障碍共患焦虑：诊断与评估之挑战

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概述：抑郁障碍共患焦虑是常见的精神病理现象。该现象使抑郁障碍临床表现复杂化，并导致治疗困难。通过评定符合抑郁症诊断标准患者的焦虑症状严重程度或者通过确定抑郁症患者是否同时符合焦虑症诊断标准，临床医生评估抑郁症状和焦虑症状之间的重叠程度。然而，中国临床医疗中存在很多因素，往往难以准确评估患者的共患情况。在中国对于这种最常见的精神病理共患现象——抑郁障碍共患焦虑——的诊断缺乏严重削弱了国内对常见精神障碍治疗的有效性。我们认为，中国临床广泛使用有效可靠的评估工具将有助于对许多同时存在抑郁症状和焦虑症状的患者的诊断与治疗。

关键词：抑郁障碍，焦虑障碍，共病，诊断，评估，中国

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