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Detecting psychotic major depression using psychiatric rating scales

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Abstract

Objective: The aim of this study was to assess whether individual or clusters of psychiatric symptoms can differentiate patients with psychotic major depression (PMD) from those with nonpsychotic depression (NPMD).
Method: Data were pooled from two studies investigating patients with moderate depression. A total of 129 subjects were studied. Patients in Sample 1 were unmedicated, while the majority of the patients in Sample 2 were taking psychotropic medications. Baseline rating scales were obtained for all subjects, including the Hamilton depression rating scale and the brief psychiatric rating scale (BPRS). We used discriminant function analyses, logistic regression, and ROC analyses to determine the patterns in symptoms that differentiated the groups.
Results: Psychotic patients were adequately differentiated by the unusual thought content (UTC) item of the BPRS. Even mild UTC endorsement was an indicator of PMD. Furthermore, results suggest that the positive symptom subscale of the BPRS was even better at differentiating PMD from NMPD patients. Sensitivity and specificity for this scale were 84% and 99%, respectively.
Conclusion: Psychotic major depression is often undiagnosed and poorly treated. One reason for this trend is the failure of physicians to inquire in a more detailed manner about positive symptoms in patients with primary mood symptoms. Although physicians are not likely to have the time to conduct an entire BPRS during an evaluation, our results suggest that a few key symptoms, if assessed directly, may aid the psychiatrist to more effectively diagnose and subsequently treat their depressed patients.

Keywords: Depression; Psychosis; Diagnosis; Psychotic major depression

1. Introduction

Depression is one of the most common mental illnesses in the United States, with its prevalence estimated between 2.1% and 7.6% (Blazer et al., 1994; Weissman et al., 1996). Of those diagnosed with major depressive disorder (MDD), some patients also have psychotic symptoms (i.e., hallucinations or delusions). In a recent study, Ohayon and Schatzberg (2002) reported that in the general population in five European countries 2.4% of those surveyed met criteria for unipolar major depression, of whom, nearly 19% also had psychotic features. Thus, they found a prevalence of 0.4% of major depression with psychotic features. This percentage of major depressives with psychotic features is consistent with other estimates (Johnson et al., 1991).

Although the DSM-IV suggests that the essential difference between major depression with psychotic features (PMD) and major depression without psychotic features (NMPD) is the presence of delusions or hallucinations, a

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number of researchers have suggested that PMD and NPMD are very distinct syndromes, with different symptoms, clinical courses, familial patterns, cognitive abilities, and biological features (Rothschild, 2003; Schatzberg and Rothschild, 1992). Indeed, PMD patients often have longer duration of episodes (Coryell et al., 1987), a greater likelihood of recurrence of depression (Aronson et al., 1988; Lykouras et al., 1986), as well as a higher mortality rate than do NPMDs (Vythilingam et al., 2003). Recently, research has found that PMDs, as compared with NPMDs, have greater deficits in various tests of cognition (Schatzberg et al., 2000).

Frequently, the psychosis of someone with PMD is not as obvious as that seen in patients diagnosed with other psychotic disorders such as schizophrenia, which makes it more difficult to diagnosis. Indeed, Dubovsky (1991) concluded that about half of the depressed patients refractory to antidepressants have delusions and/or hallucinations of which the treating physician is unaware. The reasons why these symptoms are not reported vary, including that these symptoms are not bothersome to the patient, the patient does not want to be considered "crazy", some deny the symptoms, and some physicians do not inquire about these specific symptoms. Furthermore, Parker et al. (1991) suggested that overt psychotic symptoms are not always seen in depression because they are masked by other prominent depressive symptoms, such as psychomotor disturbances. Even family members find it difficult to recognize psychotic symptoms in some patients (Chambers et al., 1982). Often these patients do not seem ill enough to be psychotic. A recent case report of a Cushing's disease patient with psychotic depression highlights the difficulty in correctly making the diagnosis (Chu et al., 2001).

A variety of methods are often used to assess psychiatric patients, and these methods have considerable impact upon diagnosis and treatment. Dawes et al. (1989) suggested that reliance on clinical judgment alone rather than statistical and standardized measures leads to less accurate diagnoses, which Lèowe et al. (2004) recently confirmed. Many health professionals use unstructured interviews, although structured interviews and computer-based assessments are widely available. The time pressures for most mental health professionals often do not allow for thorough structured interviews or questionnaire, such as the SCID or Hamilton depression rating scale (HDRS). Miller et al. (2001) found that the structured and computer-based assessments had more diagnostic accuracy than the commonly used unstructured interview. Although there is no gold-standard for diagnosing in psychiatry, the SCID is well-established; however, the SCID can often be a long (two or more hours for a complete assessment) and cumbersome tool in clinical settings. Not only is the reliability and validity of an assessment tool important in the clinical setting but so is the ease of administration. Given that major depression with psychotic features is often misdiagnosed, and therefore, mistreated, it is worth exploring if there are additional tools which can quickly assess specific symptoms to improve diagnosis and treatment in these patients.

Psychotic major depression is typically severe in nature, and patients often have relatively high depression levels (Lykouras et al., 1986). Indeed, they often score higher on total depression scores than their NPMD counterparts (Coryell et al., 1984). Although severity of depression increases the likelihood of psychotic features. Ohayon and Schatzberg (2002) found that subjects with mild to moderate depression also commonly reported psychotic symptoms. Additionally, many severely depressed patients do not develop psychotic features (Endicott and Spitzer, 1979; Glassman and Roose, 1981). Thus, severity of depression alone does not entirely account for the presence of psychotic symptoms.

Specific symptoms, however, appear to be more severe in PMD patients. For example, Rothschild et al. (1989) reported that while PMD patients had higher depression scores than NPMD, they found this was primarily due to elevations on the retardation and cognitive disturbance items in PMD patients. Researchers have consistently reported that more frequent and severe psychomotor difficulties (either agitation or retardation) (Charney and Nelson, 1981; Lykouras et al., 1986) and increased feelings of guilt (Glassman and Roose, 1981; Lykouras et al., 1986; Parker et al., 1991) are associated with PMD. Beyond delusions and hallucinations, Parker et al. (1991) found that PMDs were distinct from NPMD melancholic patients on psychomotor disturbance, depressive content, diurnal variation, and constipation. Even when researchers have matched patients for total depression scores, PMD patients demonstrated higher scores on psychomotor disturbances (Glassman and Roose, 1981). A number of other symptoms have been reported to be greater in PMDs as compared to NPMDs, including depressed mood, paranoia, hypochondriasis, and anxiety. However, the empirical support for these is less robust and less consistent than are data supporting higher levels of psychomotor disturbances and increased guilt. Thus, it appears that although PMDs often have higher depression scores, it is likely due to specific, rather than a global, symptom elevation.

Most of the research thus far has examined specific differences in depressive symptomatology via the HDRS, without more systematic examination of psychotic symptoms. There are a number of scales and interviews used to assess the presence of psychotic symptoms. Our research group has debated how to most accurately assess psychotic symptoms within major depression, as there is no one scale that adequately