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AN EPIDEMIC OF DEPRESSION OR THE MEDICALIZATION OF DISTRESS?

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ABSTRACT The syndrome of major depression is widely regarded as a specific mental illness that has increased to the point where it will be second in the International Burden of Disease ranking by 2020. This article examines the assumption that major depression is a specific illness, that it is rapidly increasing, and that a medical response is justified. I argue that major depression is not a natural entity and does not identify a homogenous group of patients. The apparent increase in major depression results from: confusing those who are ill with those who share their symptoms; the surveying of symptoms out of context; the benefits that accrue from such a diagnosis to drug companies, researchers, and clinicians; and changing social constructions around sadness and distress. Standardized medical treatment of all these individuals is neither possible nor desirable. The major depression category should be replaced by a clinical staging strategy that acknowledges the continuous distribution of depressive symptoms. Trials that test social and lifestyle treatments as well as drugs and cognitive behavioral therapy across different levels of severity, chronicity, and symptom patterns might lead to the development of a coherent evidence-based stepped treatment model.

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DEPRESSION IS REPORTED AS the leading cause of disability burden in the developed world (Murray and Lopez 1996). It is a major cause of impaired work performance, and if left untreated a significant economic burden on society (Kessler and Frank 1997; Rice and Miller 1995). Health care systems are criticized for failing to provide even minimally adequate treatment for the majority of individuals who suffer from depression (Sanderson et al. 2003). There appears to be a belief that guideline-concordant evidence-based care will reduce the disability for all with major depression if only clinicians could be taught to deliver it effectively.

This entire edifice relies on three assumptions. First, that there is an illness called major depression that can be clearly identified. Second, that major depression has increased and is now very common. Third, that this widespread illness requires a medical solution. This paper questions these assumptions.

AN ILLNESS CALLED MAJOR DEPRESSION

Debates about psychopathology are characterized by two polarized positions. One, sometimes called “medical naturalism,” assumes that mental symptoms, like bodily symptoms, are caused by disease (Pilgrim and Bentall 1999). The psychiatrist’s task is to identify their origin and nature by the methods of investigation and laboratory medicine (Hunter and Macalpine 1974). Psychiatric nosology proceeds incrementally, but with the confidence that there exists a real external world of natural disease entities. The second way to view psychopathology is usually called “social constructionism.” Here psychiatric diagnoses are seen as products of the activity of culturally legitimated mental health professionals (Horowitz 2002). The diagnoses are representations of a variegated but ultimately unknowable human condition (Pilgrim and Bentall 1999). Mental illness may be a reconceptualization of what, in other eras, would have been seen as weakness, bad habits, or sin.

The American Psychiatric Association’s *Diagnostic and Statistical Manual* (DSM-IV) concept of major depression is regarded as an expression of medical naturalism (APA 1990). DSM-IV presents depression as a distinct and recognizable medical syndrome. It lists nine symptoms of which five or more—including depressed mood and/or anhedonia—must be present during the same two-week period. Individuals are either diagnosed with major depression or they are not. While the general introduction to DSM-IV concedes that all its illness definitions are human constructions (p. xxxi), most mental health workers view depression as a specific mental illness, a natural entity rather than an arbitrary construction.

Is DSM-IV major depression a valid categorical entity? The criteria as listed do not distinguish a group of ill people from the rest of the population. There is no evidence that having five or more symptoms of DSM-IV major depression for two weeks creates a distinct category—in fact, all available evidence contradicts this idea. Numerous specialized statistical techniques—cluster analysis,

grade of membership analysis, latent class analysis, and taxometric analysis—have been used to examine the latent structure of depressive symptoms (Blazer et al. 1988; Paykel 1971; Sullivan, Kessler, and Kendler 1998; Waller and Meehl 1998). Taxometric analysis is considered superior when attempting to detect a categorical structure (Slade and Andrews 2005). However, four recent taxometric studies of depressive symptoms revealed a dimensional latent structure, indicating that differences between normal mood fluctuations and clinical depression are differences in degree, not in kind (Franklin, Strong, and Green 2002; Ruscio and Ruscio 2000, 2002; Slade and Andrews 2005). Thus, major depression appears to be a diagnostic convention imposed on a continuum of depressive symptoms of varying severity and duration (Kendler and Gardner 1998).

Is there clinical utility in viewing depression as DSM-IV classifies it? It can be argued that there are legitimate clinical and policy reasons for making categorical decisions even in the absence of a categorical structure (Kessler 2002). Cut-off points to define cases for policy makers and those who reimburse clinicians for services are obviously useful, but the difficulty lies in deciding which external criteria should be used to establish meaningful cut-off points.

Clinical utility may be judged by consideration of the usefulness of the major depression category in guiding treatment and investigating etiology, but there is little evidence that major depression performs well in either task. Treatment studies using DSM major depression assume that all patients with the diagnosis who score above some modest depression rating score comprise a homogenous class, and the multiple and dimensionally distributed criteria are collapsed into a single binary diagnosis. In reality, this creates a heterogeneous phenotype that obstructs research into treatments and etiology. All treatments appear to be indistinguishable in their efficacy (Parker 2005). Further, predictors of response to treatment appear more related to the individual (features such as personality, social support, and social class) than to the disorder. The relevance of multiple psychological, social, and biological factors is more determined by sample selection than by their being integral to depression.

These difficulties are illustrated by attempts to define the specific pathophysiology of depression. Biological abnormalities have been reliably recorded only in subgroups of DSM depression. In particular the majority of patients with melancholia (severe unreactive anhedonia, psychomotor retardation, diurnal variation, early morning awakening, anorexia, weight loss, and guilt) have been reported to have a decrease in rapid eye movement (REM) sleep, and increased activity in the hypothalamic pituitary adrenal (HPA) system usually detected by the dexamethasone suppression test (Carroll 1982; Kupfer and Thase 1983). Psychotic depression is also reasonably consistently associated with HPA abnormalities (Porter and Gallagher 2006). Beyond these subtypes, however, no consensus about pathophysiology exists. A review by Hickie (1996) concluded that patients with DSM major depression had failed to demonstrate any coherent pattern of neurobiological changes. In particular, biological changes failed to replicate

across different research groups and treatment settings that used DSM criteria for major depression.

In summary, the evidence does not support a distinct homogeneous illness called DSM depression. While the historical continuity and consistent description of depression suggest there is an underlying mental illness, the symptoms ticked off when using DSM diagnostic systems are common and appear to be continuously distributed in the population. It was not inappropriate for the DSM classification to initially favor a broad single entity given the absence of any accepted alternative model. However the definition appears to have set the bar for diagnosis too low. The DSM criteria define a heterogeneous group ranging from individuals whose symptoms are dysfunctional, serious, and ongoing to those whose symptoms are fleeting and related to social circumstances. The DSM categorical diagnosis appears largely unrelated to etiology, treatment response, or prognosis.

THE INCIDENCE OF MAJOR DEPRESSION

Epidemiological studies consistently report that DSM major depression has increased markedly during the latter half of the 20th century. Successive population cohorts since World War II have reported increasing rates of depression and earlier onset of the illness (Weissman et al. 1996). Depression is now considered a major public health challenge affecting around 15% of men and 24% of women (Hirschfeld et al. 1997). The World Health Organization (2007) estimates that by 2020 depression will be second in the International Burden of Disease ranking.

Rates of depression prior to the 20th century are difficult to estimate. Burton's (1621) classic text noted that melancholia "appeared common" in 17th-century Britain. Based on admission rates in the late 19th century, Healy (2004) suggests a prevalence of less than 0.1%. In the 19th century, however, psychiatrists dealt with a small number of bizarre and disruptive behaviors largely equivalent to psychotic behavior: most depression would not have been considered mental illness. The first official psychiatric nosology published in the United States, for example, comprised 22 categories; 21 of them were various forms of psychoses (Horowitz 2002).

Despite these dilemmas, it is reasonable to suggest that there has been an increase in major depressive symptoms as conceptualized in the DSM system over the latter half of the 20th century. There are four principal explanations for this. The first is that there is an "epidemic" of the illness major depression. The reasons for this increase are rarely considered; instead, measures to contain the epidemic—preventive strategies, de-stigmatization campaigns, and increased resources for treatment and research—are advocated. Unsurprisingly, a willing coalition of doctors, researchers, advocacy groups, drug companies, and sufferers support this model. Several countries have set up specific well-funded public health strategies (Beyond Blue 2000; Regier et al. 1988). There is little incentive

to challenge this increased funding, public acceptance, and advocacy for mental health services, research, and treatment.

The second explanation is that the depression epidemic is an artifact related to the DSM criteria. As with most DSM diagnoses, the criteria for depression focus on well-delineated and manifest symptoms. All persons who report enough symptoms are counted as having a mental disorder, regardless of context or circumstances. Since most depressive symptoms are common—consider sadness, tiredness, apathy, insomnia, lowered concentration, and appetite changes—then depression will be reported as a widespread medical illness. Preoccupation with obvious symptoms detached from etiology has increasingly been seen as a potential confounder in analyses of rates of depression (van Praag 1992). However, this explanation does not answer the question of why depressive symptoms appear to have been increasing in successive birth cohorts. The rise may be an artifact of earlier cohorts forgetting symptoms, or a genuine increase in such symptoms. The highly disparate rates of increase in different cultures—a recent survey of major depression in 14 countries reported yearly prevalence rates varying from 0.8% in Nigeria to 9.6% in the United States (WHO Mental Health Survey 2004)—suggest that cultural and social variables are a more likely explanation than a sudden rise in a mental illness.

The third explanation is that those with incentives, particularly financial ones, have elevated rates of major depression because it serves their interests. These incentives are particularly powerful for drug companies to improve their sales and profits. Drug companies attempt to expand their market for depression as for all medical illnesses, and they sponsor depression awareness campaigns, medical education, depression carer meetings, and conferences. This may be seen as effectively giving important information to the public and doing great good, or alternatively as largely self-serving. Drug companies also clearly influence the prescribing habits of doctors (Lexchin 1993; Wazana 2000). The fact that benzodiazepines were stigmatized as addictive in the 1970s may have added pressure to reconceptualize distress and adjustment difficulties as depression rather than anxiety, and to switch patients to the purportedly non-addictive SSRIs (Healy 2004).

The fourth explanation returns to the debate around conceptualizing psychopathology. This viewpoint considers the increase in depression to be a social construction, with the symptoms of depression residing in the cultural rules defining what is normal and abnormal, and the rules varying in different historical eras. At present, lack of motivation, low energy, unproductivity, and persistent unhappiness are conceptualized as illness. In the 18th and 19th centuries, however, similar symptoms may have been conceptualized as somatic or social ailments. While mental health workers are now the culturally legitimate agents to deal with this distress, previously many individuals with similar symptoms would have been managed separately (if at all) from health services.

The social constructionist argument is difficult to develop. It is easy to concede that depression is, at least partially, a social construction. So are most med-

ical illnesses. But this does not disprove that depression is a “real mental illness” that could be constructed in different ways. While we may be increasingly confusing those who are depressed with those who share some experiences with depressed people, there is no way of developing the argument. If depression is defined solely through culturally specific classifications then comparisons between different conceptualizations are meaningless. If there is no truth, then it makes no sense to discuss different versions of it (Horowitz 2002). Depression today is as valid—or not—as it was in the 19th century. The relevant question becomes which model of depression best serves suffering individuals and their society.

In summary, the reasons for the increased prevalence of DSM depression in some populations are likely to include classification bias, financial incentives, and social and cultural factors. It seems unlikely the “epidemic” is solely or even largely related to an increase in a mental illness called depression. This conclusion leads to the question of whether individuals with depressive symptoms are best served by a medical solution.

A MEDICAL SOLUTION FOR DEPRESSION

If DSM depression is a widespread illness, then it requires a medical solution. But what would such a solution entail? The median estimates of the 12-month prevalence rates for DSM depression are around 6% (Andrews, Henderson, and Hall 2001; WHO Mental Health Survey 2004). Should we screen for these individuals and initiate treatment? Some argue that it may be more practical to initiate treatment at the primary care level. The published rates of DSM depression among patients attending a general practitioner vary widely but average around 20% (Kessler et al. 1999; Üstün and Sartorius 1995).

Taken at face value these figures imply that 1 in 15 in a general population or 1 in 5 patients visiting their general practitioner should be undergoing a clinical intervention for depression. Using current clinical guidelines this would involve 10 to 12 sessions of psychotherapy and/or the prescription and monitoring of an antidepressant drug for at least six months (Royal Australian and New Zealand College of Psychiatrists 2004). The effort required could overwhelm primary care and mental health services. Even if they had sufficiently trained staff, few countries could afford to offer treatment to such a large group of its citizens (Andrews 2001).

What evidence there is suggests that clinical resources are already stretched and misdirected. A recent WHO survey reported that although mental illness severity was correlated with the probability of receiving treatment, 35.5% to 50.3% of serious cases in developed countries and 76.3% to 85.4% in less developed countries received no treatment. In addition, due to the high prevalence of mild and sub-threshold cases, these cases constitute the majority or a near majority of people in treatment (WHO Mental Health Survey 2004). The evidence

therefore suggests that rather than attempting to classify and treat an expanding heterogeneous group of patients, resources would be better reallocated to identification and treatment of severe illness.

There are additional problems. Pathologizing distress as illness may lead individuals to increasing self-identification as helpless and reliant on the services of health professionals. Distress is seen as a signal that professional help is needed (Mulder 1992). Not seeking such help is sometimes itself seen as pathological, a refusal to acknowledge the real need to be treated. Inappropriate medicalization may help feed unhealthy obsessions with health. Illness models tend to focus on individualized, pharmacological, and private solutions rather than sociological or political explanations for health problems (Moynihan, Heath, and Henry 2002). There also may be philosophical and ethical implications. Further, the propagation of an expanding chemical imbalance illness model implies that there is a normal ideal neurochemical state that can be achieved by rectifying individual brain chemistry (Moncrieff 2006). Such beliefs significantly influence the funding, distribution, and structure of health services.

POTENTIAL SOLUTIONS

I have suggested that the DSM model of depression is neither valid nor especially clinically useful, and that the rise in depressive symptoms reflects an increasing confusion between those who have a depressive illness with those who share some experiences with them. Guideline concordant evidence-based care for all these individuals is not feasible and may lead to unintentional harm. Nevertheless, doctors will be faced with patients who are distressed and have depressive symptoms and will be pressured by the patient and their families to act. There is a broad expectation, partly of our own creation, that medical action is necessary.

The first step, it seems to me, is to abandon the DSM concept of a categorical mental illness called major depression. The battle to get a reasonably reliable classification for depression was important and necessary. As with other DSM diagnoses, major depression provided a frame of reference promoting diagnostic agreement and communication, and stimulated replicable research. Unfortunately, premature reification of the criteria and neglect of alternative models of classification has led to clinical stagnation, a checklist mentality, and standardized treatments given to a non-standardized group of patients.

The operationalization of depressive symptoms has advantages: standardized diagnoses are a prerequisite for meaningful research, and it would be foolish to turn our back on the achievements of DSM-III and subsequent editions. Therefore, DSM symptoms should be retained but seen as a transitory phase to greater diagnostic refinement, rather than becoming the endpoint. What van Praag (1993) calls “subjective” symptoms need to be reintroduced to the diagnosis of depression, and we should begin to debate which subjective symptoms should

be prioritized. I agree with van Praag that symptoms of depression should include the quality of the depressed mood—in other words, whether the mood is in some way comprehensible or not. Diagnosis also might include assessment of a patient's beliefs that are not yet delusional but certainly outside of the patients' normal experience, what German psychiatry called "*Wahnstimmung*" (van Praag 1993). Persistent irritability in a preoccupied nonspecific manner might also be considered a useful symptom. Attempting to delineate symptoms or qualitative aspects of symptoms outside the range of normal human experience seems to me the core of diagnosing psychopathology. A simple yes or no question will generally not reveal such states: a more open form of probing interview is necessary. The ultimate goal is to more clearly separate the depressed patient from the distressed one.

THE DEPRESSION DIMENSION

The fact that most depressive symptoms are continuous and common in a population does not rule out their usefulness for guiding treatment. Hypertension is a similar construct. The difference is that in hypertension the continuity and heterogeneity encompassed by the diagnosis are acknowledged, and this results in major differences in research into treatment and prognosis and in alternative treatments for varied symptoms and different levels of severity. In hypertension, causes are sought and specific treatment given if possible. If there is no identifiable cause, treatment is based on such factors as the degree of blood pressure abnormality, past history, and comorbid illnesses. Mild hypertension is treated with diet, exercise, and lifestyle changes; in moderate hypertension a drug might be added; and in more severe hypertension combinations of drugs are used.

Depression could be managed—and to some extent is managed—using a similar paradigm. In patients with mild depression in the context of life events, medical treatment could consist of explanation, reassurance, and monitoring. This "treatment" may be the most appropriate after ruling out organic or medication causes for the depressive symptoms. However, it currently has a minimal evidence base and is often implicitly criticized as being undertreatment. Despite these problems, doctors, particularly general practitioners, appear to use minimal interventions frequently. There is no good evidence that this strategy of minimal intervention, when it is compared to specific treatments, leads to worse outcomes in patients treated for depression in primary care (Goldberg et al. 1998).

A wide range of treatments, including antidepressants, cognitive behavioral therapy (CBT), and "alternative" treatments, are available for patients with more persistent mild depression and moderate depressive symptoms. A recent meta-analysis of various alternative treatments concluded that St. John's wort, exercise, light therapy, and self-directed cognitive treatment were as effective as antidepressants in mild to moderate depression (Jorm et al. 2002).

In general practice settings, the efficacy of antidepressants is modest at best. In

a large multinational study, Goldberg et al. (1998) concluded that the belief that depressed individuals significantly suffer by missing out on antidepressants has no empirical support. Two other studies that prospectively assessed outcome in depressed patients treated in general practice reported a slightly worse outcome in patients prescribed antidepressants even after baseline severity had been taken into account (Brugha et al. 1992; Ronalds et al. 1997). Because of the higher risk of side effects using antidepressants, and taking into account similar evidence to that presented above, the National Institute for Clinical Excellence in the United Kingdom has recommended that “antidepressants should not be used for the initial treatment of mild depression because the risk benefit ratio is poor” (NICE 2004). The high cost of CBT along with the shortage of trained therapists also limits the utility of this evidence-based treatment.

The implication of this is that so called “alternative” treatments might be regarded as the first choice in patients with mild depression. If rates of depressive symptoms are as high as surveys suggest, a staged strategy using simpler, cheaper treatments such as exercise and self-directed cognitive therapies (including computer-based ones) as first-line therapy needs to be tested.

THE DEPRESSIVE ILLNESS

When sadness or distress leads to distorted thinking, immobilization, or severe anorexia, it might be judged to have crossed the line to mental illness. This is where the “subjective” symptoms may be particularly important: a patient’s sub-paranoid or sub-aggressive state, along with a lack of understandability about his or her mood, may be qualitative features implying the need for a specific medical intervention. There is considerable clinical belief about these ideas but almost no evidence. Khan et al.’s analysis (2002) of the FDA database suggests that severity is important: they reported that superiority of drug over placebo ranged from 10% in mild depression to 70% in severe depression (all the depression was DSM major depression). In more severe depression, the benefits of drug treatment more clearly outweigh the risks.

Similarly, it might be expected that chronicity would be a useful measure of the need for a specific medical response. When depression remains well beyond the persistence of potential stressors, then it may indicate that expectable consequences of stress have become internal dysfunction. Again little is known; beyond deciding whether it is two weeks or not, length of illness is not routinely part of DSM symptom gathering. There is some evidence that chronicity may be associated with a poorer response to placebo (Brown, Johnson, and Chen 1992).

The most robust evidence that depression is at some level an illness is in patients with psychotic depression. In this case, some of the symptoms, notably delusions or hallucinations, are not shared with individuals who are distressed or unhappy. Psychotic depression also includes a loss of vitality, anhedonia, and psychic retardation—much more than being miserable. In fact, depressed mood is

not generally considered a necessary part of the disorder. The few placebo-controlled trials in patients with psychotic depression report a very low placebo response rate (Spiker and Kupfer 1988). It seems reasonable to prioritize its treatment over other less severe forms of depression.

None of what I have proposed is new: quite the opposite. The evidence at present suggests that older diagnoses (and even treatments) may be superior to newer industry-promoted diagnoses and patent-protected drugs. Categorizing depressive symptoms along a dimension while carefully seeking symptoms that are distinct from distress and unhappiness is, I suspect, what psychiatrists have always tried to do. Chiseling out psychotic depression, melancholic depression, severe depression, and chronic depression from undifferentiated depressive symptoms is not simply an academic exercise. Such patients are the least likely to respond to placebo or spontaneously resolve. They justify active medical interventions, and it is sensible and humane to have a medical response to such suffering.

SUICIDE

One argument put forward to support the widespread prescribing of antidepressants is that it may be reducing suicide rates. Since depression is a major—probably the major—risk factor for suicide and serious suicide attempts (Beautrais et al. 1996), it is claimed that nondiscriminatory treatment of mild depression may, despite other shortcomings, be useful since it lowers suicide rates. There are two major problems with that argument. The first is that most of the evidence linking depression with suicide is from patients with severe depression. For example in Angst et al.'s (2002) cohort of 400 patients, which reported an 18-fold increase in suicide rate over 40 years, 61% had psychotic depression.

The second is that the impact of antidepressants and other treatments on suicide rates is uncertain. While some ecological studies suggest a small but significant reduction in suicide rates among patients receiving SSRIs (Korkeila et al. 2007; Tiihonen et al. 2006), a recent literature review concluded that national differences between rates of completed suicide and SSRI utilization are marked, that suicide rates have fluctuated considerably over the past century, and that the available ecological evidence does not support a relationship between rates of completed suicide and SSRI utilization (Safer and Zito 2007). There are also a number of studies claiming SSRIs increase suicide ideation and suicide rates when prescribed in primary care (Healy 2004).

While this evidence needs to be continually reevaluated, the data at present suggest that increased efforts to treat the more severely depressed patients, rather than stretching resources to treat all individuals with depressive symptoms, might be the best method to reduce suicide within the depressed population.

CONCLUSION

Depression symptoms outlined in DSM major depression are common in the community. Most are shared between individuals who are distressed and those who are ill. The DSM categorization of major depression was a worthy attempt to distinguish between these groups, but it has failed and has led to the unintended consequences of reification and stagnation.

Formal psychotherapy or drug treatment for all depressed individuals is neither feasible nor justified. What we need is some type of clinical staging that acknowledges the distribution and heterogeneity of depressive symptoms. In order to develop a coherent evidence-based stepped-treatment model, large randomized controlled trials must be conducted to compare simple social and cognitive treatments with antidepressants and formal cognitive behavioral therapy across different levels of severity, chronicity, and symptom patterns. Diagnosing depression needs to move beyond the obvious symptoms and reintroduce subjective psychopathology along with context and meaning. To claim that all individuals suffering from a checklist of common complaints are ill and require specific professional treatments does them—and us—a disservice.

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