

## **Tablets or Talk? A Critical Review of the Literature Comparing Antidepressants and Counseling for Treatment of Depression**

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*Antidepressants are generally considered to be the standard treatment for depression, despite a large body of research evidence documenting the equal or superior efficacy of counseling. This article provides a critical review of the literature comparing the efficacy of antidepressants and counseling for adults with depression. Highlighted are several issues that must be considered when reviewing the literature, including methodological problems, the placebo effect, trauma and depression, comparative safety profiles, and the marketing of antidepressants. Implications for mental health counseling practice and research, including the suggestion that counseling alone should be the first treatment of choice for most persons with depression, are discussed.*

Depression affects 9.5% of the U.S. population 18 years and older (NIMH, 2008), and women suffer depression at twice the rate of men (Antonuccio, Danton, DeNetsky, Greenbert, & Gordon, 1999; Nemeroff et al., 2003; Stoppard, 1999). Worldwide depression rates have increased 1,000-fold since the emergence of selective serotonin reuptake inhibitor (SSRI) antidepressants 15 years ago (Currie, 2005), and the World Health Organization (WHO) has predicted that by 2020 depression will be the second leading source of global disability (WHO, 2007).

Most persons with depression are treated by primary care physicians (Olfson, Marcus, Druss, Elinson, Tanielian, & Pincus, 2002), and 87 to 89 percent of U.S. physician visits for depression result in antidepressant prescriptions (Olfson et al; Stafford, MacDonald, & Finkelstein, 2001). The number of antidepressant prescriptions in Canada has increased exponentially, from 3.2 million in 1981 to 14.5 million in 2000 (Hemels, Koren, & Einarson, 2002),

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and the percentage of persons treated for depression with antidepressants in the U.S. jumped from 37.3% in 1987 to 74.5% in 1997 (Olfson et al.). Just as women are diagnosed with depression at twice the rate of men, they are given antidepressants at twice the rate (Munoz, Hollon, McGrath, Rehm, & VandenBos, 1994). Canadian statistics show that one in five women in the province of British Columbia was taking one or more SSRIs between 2002 and 2003 (Currie, 2005).

Given these statistics, counselors are likely to encounter clients (many of them women) who are taking antidepressants. Yet as Schaefer and Wong-Wylie (2008) found in their Canadian study, counselors vary considerably in their attitudes, practices, and training regarding antidepressants. Many bemoan the lack of clear guidelines on whether counseling alone, antidepressants alone, or a combination is optimal for treatment of depression. Furthermore, the literature comparing the effectiveness of antidepressants and counseling for depression is vast, complex, and often contradictory. And there is a paucity of concise and critical reviews of this literature, particularly from a counseling perspective.

Therefore, the purpose of this paper is to critique the literature on the comparable effectiveness of counseling and antidepressants for treating depression in adults. Given the 100+ research studies on this topic, this review is limited to *systematic reviews* and *meta-analyses* of studies published in the last 20 years (1987 onward). We also review issues that influence an understanding of the literature and conclude with recommendations for counseling practice.

### THE COMPARABLE EFFECTIVENESS OF ANTIDEPRESSANTS AND COUNSELING

A review of the MEDLINE, CINAHL, PSYCHInfo, and Academic Search Complete databases yielded 21 systematic reviews and 12 meta-analyses of research studies published since 1987 on the comparative effectiveness of any form of antidepressants or counseling, each addressing anywhere from six to over a hundred studies. A number of general conclusions emerge from these systematic reviews and meta-analyses, depending on the nature of the studies (i.e., level of depression, and monotherapy vs. combination therapy).

#### ***Monotherapy for Nonsevere Depression***

The majority of the reviews and meta-analyses concluded that antidepressants alone are as effective as counseling alone for the majority of adults with nonsevere or chronic depression (as defined by the researchers). This conclusion is supported by nine systematic reviews (Antonuccio, 1995; Hollon, Shelton, & Loosen, 1991; Hollon et al., 2005; Jindal & Thase, 2003; Parker, 2006; Petersen, 2006; Rupke, Blecke, & Renfrow, 2006; Schulberg, Raue, & Rollman, 2002; Spencer & Nashelsky, 2005) and seven meta-analyses

(Casacalenda, Perry, & Looper, 2002; De Maat, Dekker, Schoevers, & De Jonghe 2006, 2007; De Mello, de Jesus, Bacaltchuk, Verdelli, & Neugebauer, 2005; Piquart, Duberstein, & Lyness, 2006; Thase et al., 1997; Wexler & Cicchetti, 1992), although the authors of two meta-analyses (Dobson, 1989; Gloaguen, Cottraux, Chucerat, & Blackburn, 1998) concluded that counseling alone (monotherapy) was slightly more effective than antidepressant monotherapy for most nonsevere depressions. One systematic review (Hensley, Nadiga, & Uhlenhuth, 2004) and two meta-analyses (De Maat et al., 2006; Gloaguen et al., 1998) concluded that counseling may help to prevent relapse better than antidepressants.

Given the apparently equal efficacy of both monotherapies for the treatment of nonsevere depression, many authors suggested that client preference and tolerance should determine the choice of therapy. For both, intent-to-treat recovery rates (the percentage of people who recover, regardless of whether they complete their treatment or not) rarely exceed 50% to 60%, and full and sustained remission rates are generally even lower (Friedman et al., 2004).

### ***Monotherapy for Chronic or Severe Depression***

Fewer studies have compared antidepressant and counseling monotherapy for the treatment of adults with chronic or severe depression, and the conclusions are less consistent than for studies of nonsevere depression. Three reviews (Hollon, Thase, & Markowitz, 2002; Jacobson & Hollon, 1996; Spencer & Nashelsky, 2005) and one meta-analysis (deRubeis, Gelfand, Tang, & Simons, 1999) have concluded that counseling alone is as effective as antidepressants alone for severe or chronic depression, although two other reviews reached the opposite conclusion (Arnow & Constantino, 2003; Michalak & Lam, 2002). Thus, the comparable effectiveness of either monotherapy for chronic or severe depression is less clear and may be subject to researcher bias.

## **COMBINATION THERAPY: THE MORE, THE BETTER?**

Rather than receiving just antidepressants or just counseling, adults with depression may receive *both*—combination therapy (Greenberg & Goldman, 2009). While there is considerable research comparing combination with monotherapy, the results again vary with the severity of depression being studied.

### ***Non-Severe Depression: Combination Versus Monotherapy***

Most reviews and meta-analyses comparing combination therapy with monotherapy for adults with nonsevere depression state that combination therapy is no more effective than monotherapy alone. This conclusion was reached by eight systematic reviews (Hegerl, Plattner, & Moller, 2004; Hollon et al.,

1991; Hollon et al., 2002; Jindal & Thase, 2003; Otto, Smits, & Reese, 2005; Petersen, 2006; Segal, Vincent, & Levitt, 2002; Thase, 1999a) and two meta-analyses (De Mello et al., 2005; Wexler & Cicchetti, 1992), although one meta-analysis found a small benefit of combined treatment over medication alone, but not psychotherapy alone (Friedman et al., 2004).

Some research, however, supports the idea that combination therapy may be helpful in preventing relapse from nonsevere depression, an idea supported by six reviews (Hollon, 1991; Hollon et al., 2005; Paykel, 2006; Petersen, 2006; Rupke et al., 2006; Segal et al., 2002) and one meta-analysis (Friedman et al., 2004). Three reviews (Frank, Novick, & Kupfer, 2005; Petersen, 2006; Segal et al., 2002) suggest that various combinations of *sequencing* combined therapy (starting one therapy and adding the other) may be more effective than either simultaneous combination therapy or counseling alone, although sequences varied from study to study.

### ***Severe or Chronic Depression: Combination Versus Monotherapy***

For persons with chronic or severe depression, a combination of antidepressants and counseling appears to be more effective than either treatment alone, as evidenced by 12 systematic reviews (Arnow & Constantino, 2003; Franklin, 2005; Hegerl et al., 2004; Hollon et al., 2002; Hollon et al., 2005; Jindal & Thase, 2003; Michalak & Lam, 2002; Otto et al., 2005; Parker, 2006; Rupke et al., 2006; Segal et al., 2002; Thase, 1999a) and two meta-analyses (De Maat et al., 2007; Thase et al., 1997).

However, while these studies suggest that there are significant differences in effectiveness between combination therapy and monotherapy for severe or chronic depression, the differences are actually quite small. For example, De Maat et al. (2007) reported in their meta-analysis that the difference between remission rates of adults with depression in the combined groups (48%) and psychotherapy groups (32%) was only 16%. Similarly, Thase et al. (1997) found in their meta-analysis that the difference in recovery rates of combined treatment groups (43%) and psychotherapy-alone groups (25%) was only 18%. Therefore, statements to the effect that combining antidepressants and counseling is more effective than either therapy alone need to be tempered with the realization that the improvements in effectiveness are often 20% or less. These comparatively small differences in improvements need to be carefully weighed against the risks and costs of combined therapy—a point we revisit later.

In summary, the literature comparing the effectiveness of counseling and antidepressants for adults with depression indicates that (a) counseling alone is as effective as antidepressants alone for nonsevere depression; (b) counseling alone may be as effective as antidepressants alone for severe depression, although the evidence is equivocal; (c) the combination of counseling and antidepressants does not appear to be any more effective than counseling alone or

antidepressants alone for nonsevere depression; (d) counseling alone or in combination with antidepressants may help to prevent relapse compared with antidepressants alone; and (e) the combination of counseling and antidepressants appears to be 15%–20% more effective than either antidepressants alone or counseling alone for severe or chronic depression.

### METHODOLOGICAL LIMITATIONS

When reading the literature on the use of antidepressants or counseling for depression (or clinical guidelines based on it), it is important to be aware of methodological limitations that may limit the validity of many studies, such as the limitations of systematic reviews and meta-analyses, problems with the measurement of depression, sampling issues, client preferences, length of trials, effect of treatment choice, impact of the therapeutic alliance, and the lack of qualitative research.

#### *Limitations of Systematic Reviews and Meta-Analyses*

While there are numerous systematic reviews of the comparative effectiveness of counseling and antidepressants, systematic reviews typically suffer from significant shortcomings, such as author bias and allegiance effects, so that their conclusions may be influenced by professional or theoretical leanings (Bhandari et al., 2004; De Maat et al., 2006; Gauadiano & Herbert, 2005; Jacobson & Hollon, 1996; Streinbrueck, Maxwell, & Howard, 1983). While their authors aim to be systematic, summary reviews are easily subject to author bias (such as being 'pro' antidepressants or 'pro' counseling), so that authors reach different conclusions about the same research studies (Jacobson & Hollon, 1996).

Given the limitations of systematic reviews, meta-analyses are seen as more objective and bias-free, but they have serious limitations as well. To begin with, meta-analyses are only as good as the original research studies they include (Klein, 2000), which may contain numerous flaws, such as author allegiance, methodological limitations, and discipline bias (Franklin, 2005; Jacobson & Hollon, 1996). While meta-analysis techniques may be relatively bias-free, the researchers using them can introduce significant bias via decisions about which studies to include and the kinds of meta-analysis to perform (De Maat et al., 2007; Egger & Smith, 1998; Egger, Smith, & Phillips, 1997; Klein, 2000; Moncrieff, 2001; Streinbrueck et al., 1983). In addition, numerous authors have commented on the "file-drawer phenomenon," in which drug company-funded studies that produce unfavorable results are simply not reported or published—which produces a drug-friendly bias in the literature (Angell, 2004; Levine & Fink, 2006; Murray, 2006). Finally, authors have challenged the validity of meta-analyses comparing antidepressants and counseling, noting that they

compare a large range of variables—such as different drug classes, therapy types, kinds of depression, and measurement tools—that can exceed the heterogeneity normally assumed for valid meta-analysis (De Maat et al., 2006; Franklin, 2005; Klein, 2000; Streinbrueck et al., 1983).

### *Issues with the Measurement of Depression*

Another considerable methodological issue is how depression is defined and measured. Most researchers measure depression using the 17-item clinician-rated Hamilton Depression Rating Scale (HAM-D) (Hedlung & Vieweg, 1979), which was quickly adopted by the pharmaceutical industry and is often called the “gold standard” for measuring depression (Healy, 1997). Yet there are significant shortcomings to using the HAM-D to compare the effectiveness of antidepressants and counseling. In their review of the HAM-D, Bagby, Ryder, Schuller, and Marshall (2004) highlighted its significant conceptual and psychometric limitations. For example, there is questionable validity to such HAM-D items as “loss of insight” and “hypochondriasis,” which are highly subjective and not even considered aspects of contemporary understanding of depression. Several authors have also noted the conceptual difficulties inherent in the scoring protocol (which merely adds up all the responses to the 17 HAM-D items), which gives relatively benign items like “insomnia” equal importance with more clinically significant items like “suicidal impulses” (Healy, 1997; Parker, 2006; Parker, Anderson, & Haddad, 2003).

Moncrieff (2001, 2002) has noted that more than half the HAM-D items—such as those dealing with anxiety, weight loss, gastrointestinal problems, general somatic problems, and sleep difficulty—are likely to favor antidepressants over counseling due to many of the side effects of antidepressants (e.g., sedation and influences on appetite). Moreover, Stoppard (1999) has noted that depression tools like the HAM-D reflect the biomedical view of depression held by mental health professionals rather than the viewpoints of persons with depression themselves. Thus, tools like the HAM-D fail to cover other important aspects of depression (or the lack thereof), such as ability to cope with stress, quality of interpersonal relationships, learning of new skills, quality of life, and increased awareness and consciousness (De Maat et al., 2006; Munoz et al., 1994; Stoppard, 1999). These are qualities that are far more likely to be influenced by counseling than by antidepressants.

Finally, when researchers use the HAM-D, which relies on a subjective assessment of a client's depression, they often obtain higher ratings of antidepressant effectiveness than if they had used tools that rely on clients' own assessments of their depression, such as the Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961). This difference in ratings suggests that the HAM-D may be subject to problems with clinician/investigator bias (Antonuccio et al., 1999; Greenberg, Bornstein, Greenberg, & Fisher, 1992).

### ***Sampling Issues***

Due to sampling issues, the persons with depression studied in most research are very different from those seen in clinical practice. Often strict exclusion criteria prevent people with certain conditions from entering the study, such as persons with comorbid substance abuse, anxiety disorders, suicide intentionality, and DSM-IV-TR Axis II disorders, such as personality disorders (DeMaat et al., 2006). These criteria can exclude as many as 85% of persons who would have qualified for research on the basis of their depression alone (Antonuccio, Burns, & Danton, 2002; Morrison, Bradley, & Westen, 2003; Zimmerman, Mattia, & Posternak, 2002). The small minority of persons who do participate in research experience a high attrition rate: up to one-third of participants in depression treatment research drop out before treatment is completed (Anderson & Tomenson, 1995; Moncrieff, 2001; Munoz et al., 1994; Pampallona, Bollini, Tibaldi, Kupelnick, & Munizza, 2004; Thase, 1999b).

The high exclusion and attrition rates in depression treatment studies result in external validity problems because study participants are typically different from the kinds of persons experiencing depression seen in clinical practice. Thus, counselors need to be cautious when making clinical decisions based on such studies. (Antonuccio et al., 2002; De Maat et al., 2006; Khan, Warner, & Brown, 2000; Morrison et al., 2003; Munoz et al., 1994; Parker et al., 2003; Thase, 1999b; Zimmerman et al., 2002).

### ***Issues Related to Counseling Interventions***

Not only do depression research participants often bear little resemblance to those seen in clinical practice but the counseling interventions used in studies often bear little resemblance to those used in practice. In most studies comparing the effectiveness of counseling and antidepressants for depression, "counseling" or "psychotherapy" is typically cognitive behavioral therapy (CBT). With the possible exception of interpersonal therapy (IPT), there is little or no research comparing other forms of counseling for depression (e.g., narrative or feminist therapy) with antidepressants, so their comparative effectiveness is simply unknown (DeMaat et al., 2006; Jindal & Thase, 2003; Stoppard, 1999). On the other hand, research on counseling outcomes in general suggests that only a small proportion of outcomes is directly attributable to differences in counseling style (Duncan, Miller & Sparks, 2004). Furthermore, in an effort to standardize counseling interventions used in studies, researchers commonly *manualize* the CBT intervention, i.e., counselors must follow strict protocols for what they do and do not do with clients. While manualizing CBT may improve the consistency of counseling interventions for research purposes, it bears little resemblance to real-world counseling, which is often eclectic, spontaneous, and more focused on the counseling relationship and the therapeutic alliance (Casacalenda et al., 2002; Duncan et al., 2004; Munoz et al., 1994;

Rifkin, 2007; Parker, 2006; Segal et al., 2002).

Another difference from practice is that studies comparing counseling with antidepressants typically include only 8 to 12 weeks of weekly or biweekly counseling. While time-limited counseling has been shown to be very effective (Duncan et al., 2004), counseling with severely or chronically depressed clients may in fact require longer-term counseling to be effective (Morrison et al., 2003). Another difference between research trials and clinical practice involves the issue of client choice: typically research participants are randomly assigned to either antidepressants or counseling, whereas real-life clients often make their own choices.

Iacoviello et al. (2007) found in their study of former participants in a research project comparing psychotherapy and antidepressants that the client's ability to choose treatments can be extremely important. When the researchers asked the former participants what therapy they would have preferred, they found that participants who were randomly assigned to psychotherapy but would have preferred antidepressants developed less therapeutic alliance with their counselors than participants who were randomized to psychotherapy and actually preferred to receive psychotherapy. Given this effect of treatment choice on the therapeutic alliance, and the importance of therapeutic alliance as a predictor of outcome for both psychotherapy and antidepressants (Antonuccio et al., 1999; Iacoviello et al., 2007; Klein et al., 2003; Krupnick et al., 1996; Wolfaardt, Reddon, & Joyce, 2005), randomization may not allow for a realistic appraisal of the actual effectiveness of counseling.

### ***Lack of Qualitative Research***

Most of the research on depression treatments has been quantitative and conducted from a positivist, empirical paradigm. However, as Stoppard (1999) noted, most mainstream research studies on depression view it as a form of individual psychopathology, tend to disregard the sociocultural contexts in which depression arises, and are typically androcentric in their approach. Consequently, Stoppard and others (Kahn, 1990; Kaplan & Delgado, 2006) argue that qualitative research may help to address gender issues in depression research, resolve many of the methodological limitations pertaining to antidepressant/counseling research, and help clinicians to better understand how people with depression (particularly women) make sense and meaning of the mind/body dualism and dichotomy inherent in treating depression with two such different treatments.

Of the few published qualitative studies, one (Schreiber & Hartrick, 2002) found that women made extensive use of the biomedical model of depression and antidepressants to manage the stigma of depression, although use of this model also minimized and obscured their awareness of contextual factors, such as the "relevance of life's experiences and situations on the women's mood" (p.



101). In a second study, Kwintner (2005) described how women felt that the chemical deficiency theory of antidepressants helped to mitigate the stigma of depression, although they also felt that antidepressants caused other problems, such as fears of dependency and a loss of control. Many participants in Kwintner's study also received counseling, and while some women felt antidepressants assisted counseling, others felt they were a hindrance. Taken together, these two qualitative studies suggest that women bring vital perceptions, values, and feelings to bear on the experience of receiving counseling or antidepressants for depression; more research in this area is needed.

### PAUSING FOR THOUGHT: OTHER IMPORTANT CONSIDERATIONS

Other critical issues that clinicians must consider when comparing the effectiveness of antidepressants and counseling for depression include the placebo effect, the role of trauma, prevention of suicide, cost issues, safety considerations, and the marketing of antidepressants.

#### *The Placebo Effect*

A large body of research has revealed only slight differences between the effectiveness of antidepressants and inert placebo (sugar) pills, suggesting that the effect of antidepressants may largely be due to the placebo effect, whereby a person's condition improves as a result of receiving an otherwise inactive substance, simply because they *believe* the substance will produce a benefit (Antonuccio et al., 2002; Brown, 1994; Even, Siobud-Dorocant, & Dardennes, 2000; Greenberg et al., 1992; Greenberg & Fisher, 1997; Khan et al., 2000; Khan, Kahn, Leventhal, & Brown, 2001; Kirsch, Moore, Scoboria, & Nicholls, 2002; Kirsch & Sapirstein, 1998; Kirsch, Scoboria, & Moore, 2002; Moncrieff, 2001; Moncrieff & Kirsch, 2005; Thase, 1999b; Walsch, Seidman, Sysko, & Gould, 2002). In several of these studies and meta-analyses there has been only a 10% difference between rates of response to antidepressants and inert placebo pills, representing roughly a 1.8 point difference on the HAM-D 17-item scale (with scores ranging from 0 to 50) (Khan et al., 2000; Khan et al., 2001; Kirsch, Moore, et al., 2002).

Other evidence for the large placebo effect of antidepressants comes from the equivalency of different antidepressants. That is, not only are all the different classes of antidepressants (acting on different neurotransmitters) equally effective (Antonuccio et al., 1999; De Maat et al., 2007; Michalak & Lam, 2002; Moncrieff, 2002; Spencer & Nashelsky, 2005), but a wide variety of non-antidepressant drugs—including antipsychotics, barbiturates, benzodiazepines, buspirone, and certain stimulants—are all close in efficacy to “true” antidepressants (Moncrieff, 2001, 2002; Moncrieff & Kirsch, 2005). Taken together, these results suggest that other factors, such as the placebo effect, are

probably responsible for the actual effectiveness of antidepressants.

Moreover, it has been shown that the double-blind randomized clinical trials with antidepressants (where neither research participant nor researcher is told whether participants receive a real drug or a placebo) are actually broken by more than 80% of participants and researchers alike, who, as it turns out, can easily determine whether they receive a placebo or real drug by merely noting the presence or absence of side effects (Even et al., 2000; Moncrieff, 2001). Once research participants and researchers break study blinds by accurately guessing their treatment, all kinds of biases and expectations emerge that typically inflate the actual efficacy of an antidepressant (Even et al., 2000; Gaudiano & Herbert, 2005; Greenberg et al., 1992; Moncrieff, 2002; Munoz et al., 1994). In fact, when researchers compare antidepressants with *active placebos* (placebos with side effects, but no antidepressant effect per se) rather than inert placebos, the 10% difference in effectiveness between antidepressants and placebos approaches zero (Moncrieff, Wessely, & Hardy, 1998, 2004).

Finally, Jackson (2005) has described how drug companies include an initial "placebo washout" phase in antidepressant studies, whereby study participants who seem to be responding "too well" or too quickly to placebos are removed from the study. This practice makes the placebo effect of antidepressants seem smaller than it actually is because it removes people who in real life would otherwise gain benefit from actual antidepressants, merely because they happen to have particularly positive beliefs about how well or how fast antidepressants will work for them.

Overall, these findings suggest that much of antidepressant effectiveness is a placebo effect. Therefore, since antidepressants and counseling have very similar efficacy, which is in turn very similar to placebo, this raises the possibility that the effectiveness of counseling is also the result of a placebo effect: clients are helped by counseling simply because they *expect* to be. However, this possible placebo effect of counseling is difficult to research because there is no comparable inert counseling placebo that could be tested like a pill placebo (Andrews, 2001; Brown, 1994; Hagen & Gunn, 2006; Kirsch et al., 2002; Schulberg et al., 2002).

### **Trauma and Depression**

Although neither the biomedical theories behind antidepressants nor the cognitive distortion model inherent in CBT make any connection between trauma and the onset of depression, there is increasing evidence linking early childhood adverse events with subsequent adult depression. Nemeroff et al. (2003), for example, found that 45% of their sample of 681 persons with chronic forms of adult depression had experienced childhood physical abuse, and one-third had lost a parent before the age of 15. Chapman et al. (2004) also found a strong

dose response relationship between the number of childhood adverse events and adult depressive disorders in a study of nearly 10,000 adults. Likewise, Dube et al. (2001) found a similar graded relationship between adverse childhood experiences and the risk of attempted suicide throughout the lifespan in nearly 17,000 adults, and De Marco (2000) found in his Canadian study of 1,393 adults that childhood traumas were significant predictors of adult major depressive disorder.

Some research also suggests that brain volume changes occasionally seen in persons with depression—often touted as evidence of biochemical causes of depression (Bremner et al., 2001)—could be the result of childhood trauma, not the depression itself. For example, Vythilingam et al. (2002) found that persons with depression and a history of childhood trauma had significantly smaller hippocampal brain volumes than persons with depression who had no such history.

Yet despite mounting evidence for a close link between childhood trauma and depression, the prominent message given to women in our society—who receive nearly 70% of all antidepressant prescriptions and who are often victims of childhood violence and abuse (Currie, 2005; Munoz et al., 1994)—is that depression is caused by chemical imbalances in the brain that require antidepressants. The alternative explanation—that depression in women may result from trauma, intimate family violence, poverty, poor housing, high stress jobs, unpaid care-giving, or lack of community support that women often experience—continued to be overlooked by the biomedical and reductionistic worldviews that tend to dominate the mental health system (Currie, 2005; Stoppard, 1999; Wong-Wylie, Bordua, & Sandhurst, in press).

Unfortunately, there are few studies comparing the effectiveness of trauma or feminist-based forms of counseling with antidepressants or CBT. In one of the few published studies comparing counseling for trauma to antidepressants for chronic depression, Nemeroff et al. (2003) found that while psychotherapy was generally as effective as antidepressants, for individuals with a history of childhood trauma, psychotherapy alone was superior to antidepressants alone, and combined therapy was only marginally superior to psychotherapy alone for the childhood trauma cohort. These results suggest the need for more research in this area and also highlight the need for counselors to ask clients with depression and histories of trauma (indeed, all clients with depression) how well the counselor's approach fits with their own theory of change (Duncan et al., 2004).

### *Prevention of Suicide*

While many counselors believe that antidepressants are needed for persons experiencing severe depression who are at risk for suicide, no consistent evidence has actually shown that antidepressants prevent suicide. Although some authors have reported a small correlation between increased rates of

antidepressant use and lower suicide rates (Gibbons, Hur, Bhaumik, & Mann, 2006), others have found that antidepressants may in some persons actually increase the risk of suicide (Gunnell & Ashby, 2004; Thompson, 2005). Other researchers have found no differences between the risk of suicide for people who receive placebos and for those who use antidepressants. Khan et al. (2000), for example, analyzed the Food and Drug Administration (FDA) database and found that rates of suicide and attempted suicide did not differ significantly between placebo and antidepressant groups. A replication study analyzing other FDA studies also failed to find differences in suicides or attempted suicides between placebos and antidepressants (Khan et al., 2001). Similarly, a Netherlands review of over 12,000 patients in 77 studies found no differences in the risk of attempted suicide between people receiving placebos and people receiving antidepressants (Storosum, van Zwieten, van den Brink, Gersons, & Broekmans, 2001).

### ***Safety and Side Effects***

Many reviews of the comparative effectiveness of antidepressants and counseling for depression fail to address their comparative safety. While some authors have noted that counseling could be potentially harmful if the counselor is unethical or incompetent (Grunebaum, 1986; Sherwood, 2001; Smokowski, 2001), there is no consistent evidence that counseling per se, delivered by trained and ethical practitioners, poses significant risks to clients.

The same, however, cannot be said of antidepressants, which have numerous side effects (Antonuccio et al., 1999; Antonuccio et al., 2002). For example, the manufacturer's website for Prozac lists almost 250 side effects, 34 of them involving the genital-urinary tract alone (Eli Lilly and Company, 2009). It is also widely accepted that the rates of antidepressant side effects are much higher than those given on package inserts. For example, while antidepressant package inserts state that rates of sexual side effects range from 5% to 15%, actual prevalence rates range from 30% to 60% (Consumer Reports, 2004; Gregorian et al., 2002). Many persons find such side effects intolerable; 30% to 60% of people taking antidepressants stop due to side effects (Antonuccio et al., 1999; Consumer Reports, 2004; Segal et al., 2002).

In addition to side effects antidepressants are linked to such adverse events as increased suicidal ideation. In 2003 six antidepressants were banned in the U.K. for use with children due to evidence linking them with increased risk of harm to self or others. Health Canada later issued a warning about the same risks (Kondro, 2004; Health Canada, 2004, June 3), as did the FDA in the U.S. (FDA, 2004), which announced "black box" warnings about increased suicidal thoughts and behaviors in children and adolescents treated with antidepressants. This warning was subsequently expanded to cover young adults aged 18 to 24 (FDA, 2007).

Health Canada has also issued advisories for serious interactions with antidepressants (2004, July 8) and for links between antidepressants and lung disorders in newborns (2006, March 10). In 2003, Health Canada (2003, November 10) also withdrew from the market the previously approved antidepressant nefazodone (Serzone) due to liver-related adverse effects, making it the fifth approved antidepressant to be withdrawn for safety reasons since 1963 (Lexchin, 2005).

Another potential and insidious side effect of antidepressants (and the biomedical model of depression that underpins them) is the extent to which their use may discourage clients from seeking counseling or other safer forms of depression treatment. That is, antidepressants can "convey a powerful message that we are passive victims of our biology" (Moncrieff, 2002, p. 193), and may deter some persons from considering alternative treatments, such as learning new coping skills, becoming aware of gender and power imbalances, improving relationships, healing from trauma, gaining self-awareness, and gaining new resources (Friedman et al., 2004; Kwintner, 2005).

Moreover, because biomedical models seem to belie any theoretical compatibility with counseling and there are few good theoretical explanations for when a person needs antidepressants or counseling, many people, and their physicians, may simply opt for antidepressants, which are perceived to be faster, more accessible, more popular, and supported by the well-promoted biomedical model of depression (Antonuccio et al., 1999; Friedman et al., 2004; Gabbard & Kay, 2001; Kahn, 1990; Kaplan & Delgado, 2006; Kwintner, 2005; Schrieber & Hartrick, 2002).

### *Cost Issues*

While cost is obviously an important consideration when comparing depression treatments, few published studies have compared the cost-effectiveness of counseling and antidepressants, and the findings are equivocal. Hunsley (2003) in his extensive review of a wide range of child and adult health problems, including depression, concluded that when both cost-effectiveness and cost offsets are considered, psychological interventions like counseling are more economical than optimal drug treatments. Pirraglia, Rosen, Hermann, Olchanski, and Neumann (2004), in their review of treatments for depression, however, came to the opposite conclusion: "Pharmacologic treatment, either alone or in combination with psychotherapy, had a lower cost per quality-adjusted life year than psychotherapy alone" (p. 2157)—although they did not take into account the costs associated with antidepressant side-effects or adverse events; nor did they compare more cost-effective methods of psychotherapy, such as group therapy or therapist-assisted bibliotherapy (Antonuccio, 1995). Pirraglia et al. (2004) have commented on the paucity of research in this area, as have Barrett, Byford, and Knapp (2005), who noted that "on the basis of available evidence,

it is not possible to identify the most cost-effective strategy for alleviating the symptoms of depression" (p. 1).

Another perspective on the relative cost of antidepressants versus counseling is offered by Hollinghurst, Kessler, Peters, and Gunnell (2005). These researchers calculated how much counseling service could have been purchased with the money spent on the 2.8-fold increase in prescriptions for SSRIs in England between 1991 and 2002. They found that the increased spending on SSRIs, amounting to some £310 million, could have been used to employ 7,700 therapists, who could have annually provided 1.54 million counseling treatment courses consisting of six sessions each. Such research shows not only the tremendous amount of money that antidepressants consume within the mental health care system but also how the widespread use of antidepressants can preclude financial investment in other forms of treatment for depression.

### *The Marketing of Antidepressants*

Despite the large body of evidence that suggests that counseling is not only equal in effectiveness to antidepressants but also considerably safer (and potentially cheaper), antidepressants persist as the typical first choice of treatment for depression. As Antonuccio et al. (2002) have suggested, a major factor for this may be the manufacturers' marketing and promotion efforts. In Canada antidepressant sales have increased exponentially, from \$31.4 million in 1981 to \$543.4 million in 2000, for example, and the cost per prescription rose steadily from \$9.85 in 1981 to \$37.44 in 2000 (Hemels et al., 2002). SSRIs are among the highest-selling of all drugs in an industry that is widely considered to be one of the most profitable in the U.S. Worldwide sales for antidepressants and mood stabilizers were a staggering US\$19.8 billion in 2005 alone (IMS Health, 2007a).

Large marketing expenditures stand behind these sales figures. The U.S. pharmaceutical industry spent just under \$20 billion on marketing in 2003 alone (Lam, 2004), and in 2000 alone Glaxo Smith Kline spent \$91.8 million advertising the antidepressant Paxil in the U.S.—almost \$15 million more than Nike spent advertising its top brands of running shoes (National Institute for Health Care Management, 2000). Overall, the pharmaceutical industry spends two and half times more on marketing and administration than it does on research and development, and the gap appears to be growing; between 1995 and 2000 the number of marketing staff working for U.S. pharmaceutical companies increased by 60% while the number of research staff declined by 29% (Medawar & Hardon, 2004).

Of the various techniques pharmaceutical marketers use, the most traditional has been direct marketing to physicians who write the prescriptions, through sponsoring or paying physicians to attend conferences and continuing medical education events; advertising in medical journals; giving free drug samples,

information, and marketing tools (pens, coffee mugs, stethoscopes, etc.); and sponsoring promotional dinner meetings with substantial gifts or cash for physician attendees (Angell, 2004; Antonuccio et al., 2002). The pharmaceutical industry spent an impressive \$22 billion on direct marketing to physicians in the U.S. in 2003—an average of \$25,000 per physician (Center for Policy Alternatives, 2007). Drug companies consider these large outlays to be good investments, and indeed they have been shown to have significant influence on physician prescribing behavior (Andersson, Lindberg, & Troein, 2005; Katz, Caplan, & Merz, 2003).

Drug companies also use “direct to consumer” (DTC) ads to market antidepressants. DTC in the U.S. shot up from \$965 million in 1997 to \$2.6 billion in 2001 (IMS Health, 2007b), resulting in dramatic sales increases (Angell, 2004; IMS Health, 2002). DTC advertising not only markets antidepressants but also markets the very notion of depression itself, under the guise of increasing public awareness of it. Finally, DTC is used to promote widespread public acceptance of the biomedical models of depression as the dominant model of understanding and treating depression (Angell, 2004; Currie, 2005; Gabbard & Kay, 2001; Healy, 2003; Moncrieff, 2001; Moynihan & Smith, 2002; Stoppard, 1999).

Commentators have noted that even research studies on depression treatment can be seen as a powerful form of marketing. For example, Perlis et al. (2005) in reviewing 397 clinical trials of psychotropic drugs published in four major psychiatric journals between 2001 and 2003 found that 60% were funded by pharmaceutical companies, and 47% had at least one author with a reported financial conflict of interest with a pharmaceutical company. Remarkably, Perlis et al. found that research studies with a reported conflict of interest were five times more likely to reach results that were favorable to the drug than studies with no conflict of interest—suggesting that drug companies use research studies as an important and powerful form of marketing.

In comparison to the billions the pharmaceutical industry spends annually on marketing antidepressants, the counseling profession spends virtually nothing on promoting counseling services (Antonuccio, 1995; Hollinghurst et al., 2005). Consequently, the public and the majority of mental health practitioners are virtually unaware of nonpharmaceutical models for the origins and treatment of depression.

### SUMMARY AND IMPLICATIONS

In summary, an examination of systematic reviews and meta-analyses of research comparing the effectiveness of antidepressants and counseling for adults with depression has shown that counseling is as effective as antidepressants for mild to moderate depression and may be equally effective for chronic

or severe depression as well. In addition, counseling, either on its own or in combination with antidepressants, appears to help prevent depression relapse. The combination of counseling and antidepressants appears to be approximately 15%–20% more effective than either therapy alone for treating chronic or severe depression, although the added benefits of combination therapy need to be carefully weighed against the increased risk of side effects or other adverse effects associated with antidepressant use.

However, due to a wide variety of limitations and problems with the studies published, we would argue that it is difficult to draw many significant substantiated conclusions from the current literature on the relative effectiveness of antidepressants and counseling for the treatment of depression. Nevertheless, there are several important implications for mental health counselors that arise from our review.

First, counselors should be cautious when applying research studies and clinical practice treatment guidelines for depression. Much current research has significant shortcomings, and despite cries for evidence-based counseling practice, counselors need to be critical consumers who apply depression treatment research and treatment guidelines judiciously to their own practice.

Caveats about research shortcomings aside, the extensive literature does suggest that counseling should be the first-line treatment for most persons with depression. Given that most studies conclude that counseling alone is as effective as antidepressants for mild and moderate depression—and that combination therapy is only slightly more effective for severe depression—there seems to be no good reason for choosing antidepressants, alone or in combination with counseling, as a first-line treatment for depression, particularly given the risks they entail. Moreover, as most limitations within the literature appear to overestimate the effectiveness of antidepressants (e.g., the placebo effect), we believe our conclusion is sound until less-biased research begins to prove otherwise.

Finally, it is imperative that counselors become educated and aware of these issues. Counselors are urged to engage in advocacy efforts to counter the massive promotion of antidepressants by the pharmaceutical industry by emphasizing the comparable effectiveness and safety of counseling, the large placebo effect inherent in antidepressants, the role of trauma in depression, and the nature of pharmaceutical efforts to market antidepressants.

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## **Search: Editor Search for the Journal of Mental Health Counseling**

The *Journal of Mental Health Counseling* is opening a search for the position of Editor to begin July 2011. The position is for a three-year term with the possibility of a second term serving two consecutive terms. Responsibilities include coordinating the peer review process, managing correspondence in a timely manner, editing submissions, oversight of the editorial board, and collaborating with the publisher to enhance the journal's visibility and readership. Qualifications include having served as an associate editor for *JMHC* or having equivalent editorial experience that would qualify the applicant for the position of editor. Applicants must also have sufficient understanding of scientific methods, research and publishing ethics, and the discipline of mental health counseling. The successful applicant will begin transitioning into the Editor's position in early fall 2010. To apply, please submit a cover letter detailing your vision for the *JMHC* and *vitae* electronically to James R. Rogers at [jrogers@uakron.edu](mailto:jrogers@uakron.edu). Final selection of the new Editor will be made by the AMHCA Board of Directors.

**Deadline for applications for this position is July 1, 2010.**

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