Depression
Considerations Surrounding Treatment Choices

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You generously provided us with your positive feedback, comments and suggestions following the publication of the first issue of *Integrating Science and Research* in March 2010. We would like to thank you for your words of encouragement, which contributed greatly to our decision to publish a second issue and make a recommendation to the Ordre’s administrative committee to publish, under a pilot project, three issues in the series on topics relating to the professional practice of psychologists.

The objective sought by the series, i.e., to forge a solid link between psychology researchers and psychology practitioners, is more timely than ever with the advent of multidisciplinary interventions. Psychologists join with professionals and specialists in a variety of disciplines to provide their patients with the best treatments available. The treatment of depression is an eloquent illustration of the efficacy of evidence-based multidisciplinary interventions. This issue of the series presents articles by psychologists, physicians and researchers, all of whom share their reflections on the qualities of treatments offered to persons suffering from depression. We leave it up to you to see how these articles contribute to improving your knowledge and practice, and we look forward to hearing from you; let us know if we are on the right track. Please email us your comments at: dcote@ordrepsy.qc.ca.
The World Health Organization, ranked major depression as one of the most burdensome diseases in the world, placing it as the fourth most significant cause of disability and premature death worldwide. It is predicted to increase in number and gravity, becoming the second leading cause of medical disability by the year 2020. Research has shown that depression is associated with significant limitations in functioning and well-being and with immense personal suffering (e.g., Scott et al., 2003). Of greatest concern is the finding that major depression is a recurrent illness in 45-90% of those who experience a first depressive episode, and that it becomes chronic in 11-25% of cases (see Kupfer et al., 2001; Patten et al., 2009). In Canada, the one-year prevalence of major depression has been estimated at 5% (Patten et al., 2006, 2009; see also Waraich et al., 2004); the direct and indirect costs of depression and distress have been evaluated at $14.4 billion, making depression among the costliest conditions in Canada (Stephens et al., 2001).

These figures are certainly troubling; but what is more troubling is that too few individuals receive proper care for their condition. In primary care settings, it is estimated that one in two cases go undetected (Agency for Healthcare Research and Quality, 2002), and some studies suggest that up to three-fourths of depressed patients do not receive appropriate treatment (e.g., Gonzales et al., 2010; Katon et al., 1992; Rost et al., 1988). Furthermore, when treatment is provided, it is more often psychopharmacology than psychotherapy (e.g., Robison et al., 2005). This is astonishing given that the efficacy, efficiency and cost-effectiveness of psychotherapy are well established, given that there is strong evidence to the effect that psychotherapy has a lower relapse rate and a stronger prophylactic effect than pharmacology, given that there are clear recommendations for psychotherapy in most if not all clinical guidelines and strong evidence indicating that psychotherapy should be the initial treatment choice for most cases of depression, and, more importantly, given that patients generally prefer psychotherapy over antidepressant medication (see this issue; see also e.g., Dwight-Johnson et al., 2000; Greenberg et al., 2009; Imel et al., 2008; van Schaik et al., 2003).

So why isn’t psychotherapy available to all those in need in Quebec, regardless of their personal financial resources, as it is in the UK and Australia? The Ordre des Psychologues du Québec has already taken a position on this topic: psychotherapy should not be accessible only to those who have the financial resources to seek help in private settings, and patients should be given the option between different treatments when possible. While the president of the Ordre and myself have recently joined forces with other stakeholders in an organized effort to promote access to psychotherapy, and while the Ordre will maintain its efforts, concurrent with its mandate, to promote greater access to psychotherapy, this is an issue that, as the president and I have expressed in a number of public settings, we must now address as a society. In fact, over and beyond access to psychotherapeutic services, we must ask ourselves to what extent we value mental health and intend to support access to other psychological services as well. A recent letter from chief psychologists published in the May 2010 issue of Psychologie Québec indicates that many psychologist positions remain unfilled, and that resources in psychology are scarce to the point that access to services is increasingly reduced and that it is difficult to dedicate time to the supervision of psychology interns. Indeed, the current work conditions, especially the salaries of psychologists in the Quebec public health system are not congruent with the contributions psychologists make to the health system.

Assessing and treating depression is one of many such contributions. Indeed, psychologists have a true and well recognized expertise in treating depression as well as other mental disorders. It is for this reason that this second issue of Science and Practice does not focus specifically on the psychotherapeutic treatment of depression. Rather, it addresses a number of questions that cut across therapeutic modalities, are directly relevant to clinical practice or are often raised by patients or other professionals in the context of treating depression. More importantly, it covers a number of issues that should be considered before and when offering a treatment. As in our first issue of this new Science and Practice series, our intention with this issue was to make research available to, and useable by clinicians. The topics were once again selected based on their anticipated relevance and usefulness for clinical practice or for...
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Why isn’t psychotherapy available to all those in need in Quebec, regardless of their personal financial resources?

management or decision and policy making. And again, the authors were chosen based on their expertise and reputation.

We have received abundant positive feedback from Quebec psychologists following our first issue, as well as from the American and the Canadian psychological associations, amongst others. It is my hope that this second issue will be even more useful than the first, and that Science and Practice will become a permanent series which will cover different areas of clinical practice, but also other important domains in psychology, including neuropsychology, school psychology, industrial/organizational psychology and health psychology, to name but a few. Psychologists have much to offer and excel in many areas; research has shown us this countless times over. Now it is up to us to spread the word.

REFERENCES


Psychological manifestations in patients often cause us spontaneously to believe that a mental health problem exists in those persons. And yet, clinicians know full well that psychological problems frequently occur secondary to medical conditions, e.g., depression secondary to a stroke.

In the 1970s and 1980s, clinicians and researchers such as Koranyi (1982) and Hall (Hall et al., 1978) raised our awareness of the fact that many patients (43% according to Koranyi) with psychiatric problems have physical illnesses that are often undiagnosed, and that psychiatric manifestations may, in fact, be the principal mode of presentation (in 9.1% of cases; Hall et al., 1978) in the case of not yet diagnosed physical illnesses. These physical pathologies in so-called psychiatric patient populations often go unnoticed (in more than 53% of cases; Koran et al., 1989). In a hospital setting, it is also frequent to see patients who have psychiatric manifestations associated with the administration of certain medications such as corticosteroids (Wada et al., 2001). Finally, although the available epidemiological data present variable frequency rates, it is recognized that the use of alcohol and/or street drugs is accompanied by a higher frequency (37 to 53% comorbidity between the abusive use of alcohol or substance abuse, and mental illness; Regier et al., 1990) of psychiatric manifestations, or else complicates pre-existing psychiatric conditions (Dickey et al., 2002).

Results of more recent studies confirm yet again the higher physical mortality and morbidity in patients with a psychiatric syndrome (Dickerson et al., 2006; Jones et al., 2004). The DIALOGUE study (Enquête Dépressions et mALadies OrGaniqUES associéEs) conducted in France in the early 2000s (Consoli, 2003) also underscores the high rate of comorbidity of major depression and/or dysthymic syndrome (in more than 40% of patients with physical illnesses). The high frequency of comorbidity between physical illnesses and mental disorders no longer seems to cast any doubt. Likewise, it would seem that the morbidity associated with this comorbidity is often higher than when the physical or psychological disorder is alone (Krantz and McGeney, 2002). These clinical elements, combined with the fact that people often find it hard to properly express their symptoms, are cause for some vigilance among clinicians before they conclude in the mere presence of a primary mental disorder in a person exhibiting a mood disturbance. Clinicians must be cautious until ruling out with certainty the possibility that an organic factor may play a causal role or be associated with the mental impairment.
Clinicians must be cautious until ruling out with certainty the possibility that an organic factor may play a causal role or be associated with the mental impairment.

The DSM-III (APA, 1980) introduced an approach to psychiatric classification where diagnostic criteria were proposed, together with a conceptual framework based on a phenomenological approach, i.e., the presence or absence of symptoms or signs (Jaspers, 1968). This was a movement away from a theoretical orientation approach. Moreover, the diagnosis is not unique but is conceptualized in a multiaxial approach. Of the five axes proposed in the DSM-III, only the first three axes (Axe I: Clinical Disorders and Other Conditions That May Be a Focus of Clinical Attention; Axis II: Personality Disorders and Mental Retardation; and Axis III: General Medical Conditions) then constituted the official diagnosis. With the DSM-III-R (APA, 1987), the five axes (i.e., the first three axes, plus Axis IV: Psychosocial and Environmental Problems, and Axis V: Global Assessment of Functioning) now constitute the official diagnosis. By introducing a multiaxial system, a more complete diagnosis was sought, providing a more comprehensive view of the individual and that individual’s condition. It also became clear that clinicians should look beyond Axis I. They had to give particular consideration to the client’s personality and, first and foremost, they had to ensure that a medical condition or substance was not instrumental in explaining the presence of the mental disorder.

With this in mind, the classification of mental disorders in the DSM-IV-TR (2000 / 2003) proposes Mood Disorder Due to a Medical Condition and Substance-Induced Mood Disorder. The DSM-IV-TR and Mood Disorder Due to a Medical Condition and Substance-Induced Mood Disorder

The DSM-IV-TR (APA, 2000/2003) presents diagnostic criteria for these two categories, whose chief characteristics are as follows: that the disturbance is the direct physiological consequence of a general medical condition and is not better accounted for by another mental disorder developed during, or within a month of substance intoxication or withdrawal, or medication use is etiologically related to the disturbance and the disturbance is not better accounted for by a mood disorder that is not substance induced.

Although the DSM-IV-TR proposes these general criteria, there are no studies in the literature that was consulted on the prevalence of these diagnostic entities using DSM-IV-TR criteria. Furthermore, the DSM IV-TR does not present prevalence rates for these entities. There is no indication in the literature that the morbidity or mortality associated with the two entities is higher or lower than primary mood disorders, except, as mentioned above, when they occur comorbidly with another mental or physical disorder.

Importance of Being Familiar With the Major Mood Disorder Categories

When initiating a therapeutic process, clinicians must know what they will be looking for. By this point, clinicians will have first identified an affective or dysphoria from the patient’s discourse. The DSM-IV-TR (APA, 2000/2003) proposes decision trees that can help clinicians in establishing the differential diagnosis for dysphoria. The value of using decision trees has been examined in studies that demonstrate the advantage of their use for honing clinicians’ diagnostic skills (Morgan et al., 2000).

TABLE 1 presents the main categories for the differential diagnosis of mood disorders, according to the DSM-IV-TR. As can be seen, Mood Disorder Due to a Medical Condition and Substance-Induced Mood Disorder are the first two clinical entities that must be ruled out. Then follows schizoaffective disorder—a possibility often overlooked by clinicians. Last of all, at the bottom of the decision tree, it can also be seen that our client’s clinical presentation may not correspond to a mood disorder, but rather a syndrome that is not a mental disorder, even though it is a problem that deserves clinical attention, without being a disorder within the meaning of the DSM-IV-TR.

Essential Questions That Clinicians Must Ask

For clinicians to rule out a disorder secondary to a medical condition or substance, it is important that the client be asked specific questions and, if possible, that the client’s records be consulted to verify the medical/surgical history and drug and/or substance use (Goldbloom, 2006; Morrison, 1997). Clinicians should
also check what medications the client is currently taking, and enquire about alcohol or drug use. Familiarity with the client's psychiatric history is also important because, once a major influence from a medical condition or substance has been ruled out, diagnostic hypotheses can be directed towards primary psychiatric diagnoses.

The mode of onset and duration of symptoms are also interesting indicators. A sudden or recent syndrome is more likely to be substance-induced, as compared to an insidious syndrome progressing for years, unless a substance has been taken on a regular basis. It is also necessary to establish the symptom severity level, and whether or not it interferes with the patient's level of personal, interpersonal, social or occupational functioning, so as to determine whether the impairment of functioning is significant and thus meets the criterion of mental disorder (Aragonès et al., 2006; Williams et al., 2002).

As for how the onset of psychiatric symptoms and a medical condition are associated, that is a more complex issue. Indeed, some organic pathologies take many years to develop (e.g., brain cancer) and may be suggestive of a primary mental disorder for a long time.

### Other Indications of Organicity

As regards substance-induced mood disorder, information concerning the use of substances or medications, or the results of blood or urine screening tests, or serum concentration levels of such medications or substances, will guide clinicians towards the appropriate differential diagnosis. Medications that may induce a mood disorder include the following: antidepressants, corticosteroids, L-dopa, amphetamines, barbiturates, adrenaline, and other sympathomimetic agents.

As regards mood disorder due to a medical condition, there are several medical conditions that may have psychiatric presentations (infectious diseases, epilepsy, nutritional deficits, metabolic problems, cerebrovascular illnesses, toxins, degenerative illnesses, cancers, autoimmune diseases, trauma). The literature is rife with articles reporting cases where physical illnesses involving different systems of the human body have first manifested themselves by psychiatric symptoms. **TABLE II** presents such cases. These are for the most part file reviews, and therefore retrospective.

Some authors, concerned with facilitating the diagnostic process, propose tools to help clinicians, both with and without medical training (Leon et al., 2003; Morrison, 2007; Taylor, 2000), tackle the issue of Mood Disorder Due to a Medical Condition.  

In a practical manner, Beck (2004) underscores the following as key features suggestive of a physiological cause of psychiatric symptoms: an onset of symptoms that coincides with the onset, or flare-up, of a medical condition; psychiatric symptoms that improve with treatment of the medical condition; characteristics of the syndrome that are atypical for primary mental disorders; pathophysiological explanations for psychiatric symptoms based on the suspected existence of a medical condition; solid scientific literature that supports the medical causality of psychiatric symptoms; recognized associations (e.g., clinical case histories and small case series). For his part, Maldonado (2009) proposes a more elaborate table of clinical indicators suggestive of organicity (**TABLE III**).

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1. For Substance-Induced Mood Disorder, consult The Medical Letter, 1998, on this topic (see also Nash, 2008).
### TABLE II

**Frequent Medical Causes of Symptoms Resembling Depression***

| **AUTOIMMUNE DISEASES** | Systemic lupus erythematosus  
|                         | Rheumatoid arthritis  
|                         | Sarcoidosis |
| **CANCER**              | Brain  
|                         | Pancreas  
|                         | Lungs  
|                         | Kidneys  
|                         | Gastrointestinal |
| **DISEASES OF THE CENTRAL NERVOUS SYSTEM** | Parkinson's disease  
|                         | Degenerative dementias  
|                         | Normal pressure hydrocephalus  
|                         | Subarachnoid hemorrhage  
|                         | Huntington's disease  
|                         | Reversible dementias (alcoholic)  
|                         | Stroke  
|                         | Head injuries  
|                         | Temporal lobe |
| **ENDOCRINE DISEASES** | Hypothyroidism/Hyperthyroidism  
|                         | Addison's disease  
|                         | Cushing's disease  
|                         | Pituitary tumours  
|                         | Diabetes/Hypoglycemia  
|                         | Hyperparathyroidism  
|                         | Porphyria |
| **INTOXICATION** | Lead  
|                         | Mercury  
|                         | Thallium |
| **OCCULT INFECTIONS** | Liver  
|                         | Gastrointestinal  
|                         | And others... |
| **VIRAL INFECTIONS** | Influenza  
|                         | Mononucleosis  
|                         | Pneumonia  
|                         | Hepatitis  
|                         | HIV |

* Adapted from Rush, 1988

### TABLE III

**Mental and Physical Indicators Suggestive of “Organic” Mental Disorders**

| **Recent onset of symptoms after age 40** | Symptoms that occur during a major illness that impairs function of an organ (e.g., liver, kidney, pancreas)  
| **Symptoms that occur while the patient is taking a medication / substance with psychotropic effects** | History of use of multiple medications (with and without prescription)  
| **History of degenerative or hereditary neurological disorders (e.g., Alzheimer’s disease, Huntington’s disease) or hereditary metabolic disorders (e.g., diabetes, pernicious anemia, porphyria)** | Presence of altered states of consciousness (loss of consciousness; mental status changes; cognitive impairment; progression of episodic, recurrent, cyclical syndrome)  
| **Cortical dysfunction (e.g., dysphagia, apraxia, agnosia, visuospatial impairment)** | Diffuse subcortical dysfunction (e.g., dysarthria or psychomotor retardation, ataxia, impaired coordination, tremor, asterixis) |
| **Visual (mostly), tactile or olfactory hallucinations** | Abnormal vital signs (heart rate, respiratory rate, blood pressure, temperature), evidence of organ dysfunction, focal neurological deficits |
| **Abnormal gait (ataxia), changes in strength (weakness, paralysis)** | Speech dysfunction (aphasia, difficulty finding words, perseverance)  
| **Ocular abnormalities: pupil changes (asymmetry), nystagmus** | **Adapted from Maldonado, J.R., 2009**
Conclusion
As mental health clinicians, we must consider the presence of a mood disorder due to a medical condition and/or a substance-induced mood disorder in persons who exhibit a mood disturbance. All told, history-taking, the health record and our examination will guide us towards excluding these diagnoses. Collaboration with a physician, who has performed or can perform a medical assessment, will enable clinicians, even those with non-medical training, to pursue their diagnostic exploration. Indeed, comorbidity is frequent between physical illnesses and mental disorders, and it is not uncommon to encounter people with complex clinical syndromes who make it difficult to establish primary or secondary factors. For clinicians, the best guide is and always will be suspicion. Even once a diagnosis has been made, it is important never to forget that other elements may appear over the course of the condition, and the initial diagnosis should be questioned. Each time along the way, it will be necessary to rule out a mood disorder due to a medical condition or a substance-induced mood disorder.

REFERENCES


Therapeutic Factors in Mood Disorders*

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Division 12 of the American Psychological Association and the North American Society for Psychotherapy Research sponsored a Task Force to identify empirically based principles of psychotherapeutic change. The Task Force report was published in 2006. The 45 Task Force members reviewed the extensive literature on the psychotherapeutic treatment of dysphoric disorders, along with three other clusters of disorders, in order to ascertain a set of principles that can be used to guide the effective treatment of these disorders. This review focused on three domains of treatment-relevant factors: characteristics of the participants (i.e., client, therapist, family), characteristics of the therapeutic relationship, and characteristics of therapeutic procedures whose role in enhancing effectiveness has been empirically supported.

Overall, the Task Force identified 48 principles relevant to the treatment of dysphoric disorders. The principles within two of the three domains investigated - characteristics of the participants and characteristics of the therapeutic relationship - were grouped into clusters according to common themes that appeared among them. These principles are considered to be sufficiently well established to inform treatment. Below follows a characterization of the identified principles according to these domains and clusters (a principle-by-principle account is also provided in TABLES 1-4).

AN OVERVIEW OF THE PRINCIPLES

Treatment Principles Based on Client Characteristics

The first cluster of participant characteristics relevant to the treatment of dysphoric disorders includes characteristics related to the provision of differential treatment (see TABLES 1 and 4). Specifically, this cluster offers guidance as to how client characteristics can be effectively matched with treatment procedures and therapist factors. For example, it is advantageous to match the ethnicity and religious beliefs of the client with those of the therapist. As another example, impulsive and acting-out clients have been shown to be better candidates for behavioral and symptom-focused interventions than ruminative and self-deprecatory clients; instead, this latter group of clients is better served by insight and awareness interventions. Also, treatment is found to be more effective when interventions are geared to the client’s expectations, the degree to which the client has assimilated problematic experience, and the level of the client’s resistance. In regard to this latter point, the effectiveness of therapy is increased when the level of directiveness employed by the therapist is inversely proportional to the client’s level of resistance.

There is a second cluster of client characteristics which research has failed to show to be related to treatment outcome. Indeed, despite many speculations that client gender or therapist personal experience with a particular problem are relevant to treatment, there is insufficient proof in the literature to warrant treatments based on these assumptions.

The final cluster of client characteristics that were found to be relevant to the treatment of dysphoric disorders was related to client prognosis. Namely, there is a set of client characteristics that have been shown to predict how well clients are likely to respond to treatment. These characteristics include those pertaining to client demographics (e.g., low socio-economic status), problem severity (e.g., comorbidity and level of impairment), and psychological factors (e.g., readiness for change and ability to develop mature attachment).

### Treatment Principles Based on the Therapeutic Relationship

An examination of the literature pertaining to the therapeutic relationship revealed two clusters of treatment-relevant principles (see TABLES 2 and 4). The first cluster includes principles which speak to the importance of the therapeutic relationship itself, and the therapist’s ability to establish qualities that must be present in order to maintain that relationship (e.g., empathy, congruence, positive regard, and, generally, Rogerian-like interpersonal skills). The second cluster of variables offers a set of guidelines on how to deliver psychotherapy in such a way as to maintain the therapeutic relationship. For example, the principles in this cluster speak to the importance of supportive non-defensiveness in the course of repairing a ruptured alliance; they also discuss the role of supportive self-disclosure and how best to provide relational interpretations.

### Treatment Principles Based on the Therapeutic Procedures

The research-informed principles that emerged in the therapeutic procedures domain did not form obvious clusters (see TABLE 3). A few of these principles are directed at the structure of effective therapy, including such factors as time frame and intensity. The rest of the principles speak to the importance of focusing on a client’s emergent problems, providing a rationale for these problems and for their treatment, clearly defining treatment goals, exploring the client’s experience, assessing problematic patterns, encouraging small and incremental change, dealing appropriately with emotion, and others.
The above description summarizes the 48 treatment-relevant principles identified by the Task Force. Of these, 36 are principles relevant to at least two of the disorders addressed by the Task Force (i.e., dysphoric disorders, anxiety disorders, personality disorders and substance use disorders). However, 12 of the 48 principles (see Table 4) emerged clearly, only in research on the treatment of dysphoric disorders. Some of these latter 12 principles for treating dysphoric disorders have not yet been investigated in anxiety, substance use, or personality disorders.

As Tables 1-3 show, the 36 common principles are distributed among all three of the domains addressed by the Task Force - characteristics of the participants, characteristics of the therapeutic relationship and characteristics of successful therapeutic procedures. However, the principles unique to dysphoric disorders are almost entirely in the domain of participant characteristics. More specifically, 11 of the 12 dysphoria-unique principles are client characteristics while the remaining principle is one that addresses the therapeutic relationship.

Notably, all the procedural factors that are identified for the treatment of dysphoric disorders are common to the treatment of other problem classes as well. It should also be noted that the principles related to the participant characteristics point to interesting ways to direct and guide the delivery of therapeutic procedures. As noted earlier, for example, there are several client characteristics that are distinguished by the fact that they serve as markers to implement client-tailored treatment. In a similar way, client characteristics that identify patient prognosis can also be used to guide the process of therapy. Thus, for example, the length and intensity of treatment may be informed by level of a client's impairment.

### Table 2

**Common Principles Related to the Therapeutic Relationship**

<table>
<thead>
<tr>
<th>Therapeutic Relationship and Therapist Qualities Cluster</th>
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<tr>
<td>1. IMPORTANCE OF WORKING ALLIANCE: Developing and maintaining a positive working alliance enhances treatment.</td>
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<tr>
<td>2. IMPORTANCE OF GROUP COHESIVENESS: Fostering a strong level of cohesiveness within the group enhances group therapy effects.</td>
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<tr>
<td>3. EMPATHY: High levels of empathy in the therapist are related to improved treatment outcomes across a wide range of problem conditions and client types.</td>
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<tr>
<td>4. POSITIVE REGARD: It is highly likely that therapist positive regard contributes to client benefit.</td>
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<tr>
<td>5. CONGRUENCE: It is likely that therapist congruence in regard to the expression of feelings or the transmission of knowledge contributes to improved client outcome.</td>
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### Table 3

**Common Principles of Therapeutic Procedures**

| 1. THERAPEUTIC RELATIONSHIP: Principles of therapeutic procedures are of value only if carried out within the context of a good therapeutic relationship. |
| 2. FOCUS ON PRESENTING PROBLEM: Advantageous techniques focus directly on presenting problems and concerns. On the other hand, an approach to therapy wherein the therapist fails to confront the client, fails to direct the client's efforts, or avoids raising the client's distress has limited effects. |
| 3. INCREASING ADAPTIVENESS: Effective treatments focus directly on helping the client modify maladaptive ways of feeling, behaving, and/or physiological responding. |
| 4. PATTERN IDENTIFICATION: Effective treatments include an initial assessment and identification of behaviors, feelings, and thinking patterns linked to the maintenance of problems. |
| 5. ONGOING ASSESSMENT: Treatment gains are maximized when there is ongoing assessment of whether therapy is meeting the collaboratively established treatment goals. |
| 6. RELATION BETWEEN THOUGHT, EMOTION, BEHAVIOR, AND ENVIRONMENT: Improvement is enhanced when there is emphasis on increasing the client's awareness of the relationship between the client's environment (interpersonal as well as physical) and the way in which the client thinks, feels, and behaves. |
| 7. THOUGHT IDENTIFICATION: Effective treatment includes identification and challenging of specific dysfunctional thoughts and negative core beliefs. |
| 8. PROVISION OF RATIONALE: Helpful treatments provide explanations to the client as to the nature of the client's problem and the rationale for the treatment of that problem. |
| 9. FOCUS ON INCREMENTAL CHANGE: Facilitation of incremental change increases rates of improvement. |
| 10. GOAL SETTING: Setting goals and achieving goals in a collaborative, clear, and explicit way allows for optimal treatment. |
| 11. NONDIRECTIVE INTERVENTION: Therapists should make skillful use of “nondirective” (e.g., validating) interventions. |
| 12. CLIENT SELF-EXPLORATION: It is useful to facilitate client self-exploration. |
| 13. EMOTIONAL EXPERIENCE: Helping the client accept, tolerate, and at times fully experience emotions is conducive of therapeutic change. |
| 14. EMOTIONAL CONTROL: It can be helpful to make use of interventions aimed at improving the client's control of emotion. |
| 15. TIMEFRAME: Except in the treatment of personality disorders, time-limited therapy can be beneficial. |
| 16. INTENSIVE THERAPY: Intensive therapy is related to and may be required for therapeutic change. |
| 17. GROUP THERAPY: Employing non-individual interventions (e.g., group and family therapy) can be beneficial. |
AN APPLICATION OF THE TREATMENT PRINCIPLES TO TREATMENT PLANNING

Research remains to be done on the relative importance of the Task Force’s 48 treatment-relevant principles to each other. Nevertheless, based on the above description of these principles, and specifically the nature of the domains and clusters they appear to form, certain inferences can be made about how these principles could inform treatment. For example, characteristics of the client that predict prognosis can be used to select clients who are likely to respond to psychotherapy. This decision may be most important when resources are limited, and may work to help conserve and direct these resources in the most productive directions. Similarly, this prognostic cluster can help identify clients who may be better suited for more intense interventions, and, perhaps, those who may be responsive to pharmacological interventions.

The therapeutic relationship is assumed to form the foundation of successful therapy. However, the principles defined by the Task Force give greater specificity to the nature of a helping relationship. Principles in the therapeutic relationship domain specify which therapist qualities are involved in building strong therapeutic relationships and offer guidance on how to deliver treatment so as to maintain and occasionally repair therapeutic relationships.

Within the specification of principles related to participants are several principles that are related to the delivery of differential interventions that are tailored to specific clients. This cluster of principles can be used in the process of treatment planning to optimize and enhance outcomes. They can provide guidance on how to modify therapeutic procedures in order to accommodate the particularities of the clients, when to add additional procedures, and when to stop treatment.

Lastly, the principles that identify effective therapeutic procedures highlight aspects of therapeutic procedures that are crucial to successful outcome. Thus, the principles in this domain could be used by practitioners as guidelines throughout the process of therapy itself. These principles could act to focus the practitioner on the active ingredients of therapeutic procedures.

Overall, the 48 principles identified by the Task Force have the capacity to inform the therapeutic process; they could help strengthen the therapeutic bond, improve the selection of clients who will benefit from treatment, sharpen the process of treatment planning, and hone the therapist’s use of therapeutic procedures.

### TABLE 4
Unique Principles for Treating Depression and Dysphoria

<table>
<thead>
<tr>
<th>Client Characteristics Prognostic Cluster</th>
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<tbody>
<tr>
<td>1. AGE: Age is a negative predictor of outcome in general psychotherapy.</td>
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<tr>
<td>2. ETHNICITY: Conventional psychotherapy produces less benefits in clients representing an underserved ethnic or racial group than it does in clients from Anglo-American groups.</td>
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<td>3. LEVEL OF IMPAIRMENT: In severely impaired clients, the addition of treatment components, and specifically the provision of a longer treatment course, may increase the benefit of therapy.</td>
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<table>
<thead>
<tr>
<th>Client Characteristics Treatment-Tailoring Cluster</th>
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<tbody>
<tr>
<td>4. ASSIMILATION OF PROBLEMATIC EXPERIENCE: Selecting interventions which are responsive and consistent with the client’s level of problem assimilation increases the benefits of therapy.</td>
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<tr>
<td>5. ETHNIC MATCHING: If clients and therapists share the same or similar racial/ethnic backgrounds, dropout rates decrease while improvement increases.</td>
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<tr>
<td>6. RELIGIOUS PREFERENCE MATCHING: If clients prefer religiously oriented psychotherapy, the accommodation of these preferences enhances treatment benefit.</td>
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<tr>
<td>7. LEVEL OF RESISTANCE: Interventions that induce client’s resistance (sometimes measured by the degree of collaborative engagement) are not likely to enhance outcome as they tend to reduce the client’s compliance. These interventions include elements such as therapist over-control, therapist over-directiveness, and confrontation that exceeds the client’s level of tolerance.</td>
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<td>8. LEVEL OF RESISTANCE AND THERAPIST DIRECTIVENESS: Directive interventions should be planned to correspond inversely with the client’s manifest level of resistant traits and states.</td>
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<td>9. IMPULSIVE, ACTING-OUT CLIENTS: Clients characterized by impulsivity, social gregariousness, and external blame benefit more from direct behavioral change and symptom-reduction efforts (e.g., building new skills and managing impulses) than they do from insight and self-awareness focused procedures.</td>
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<tr>
<td>10. RUMINATIVE, SELF-DEPRECATORY CLIENTS: Clients characterized by low levels of impulsivity as well as high levels of indecisiveness, self-inspection, and over-control tend to benefit more from procedures that foster self-understanding, insight, interpersonal attachments, and self-esteem, than they do from direct symptom-altering and social-skill-building procedures.</td>
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<td>11. SECURE ATTACHMENT: When therapists have a secure attachment pattern the treatment process appears to be facilitated.</td>
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Therapeutic Relationship

12. SUPPORTIVE SELF-DISCLOSURE: Therapist self-disclosure is likely to be helpful, especially when used to reassure and support rather than challenge.
The APA Presidential Task Force on Evidence-Based Practice (2006) defined empirically supported therapies (EST) as just one of the aspects of evidence-based practice (EBP). The relevant “evidence” in EBP may be classified into three very general categories (Arkowitz, 1989). To determine if change occurs, we have of course the analysis of therapeutic outcomes or results, which are now called “clinical studies.” To determine how change takes place, we use process studies. The third category relates to fundamental research on human functioning and psychopathology, which is essential for informing therapists as to what must be changed.

The APA working group focused on the central role that clinical expertise plays in the implementation of intervention procedures or principles of change. As such, what has been formally admitted is what we knew already, that is, that in order to provide an effective therapy, a competent clinician is needed. Whether we are researchers or clinicians, when a therapist must be recommended to a friend or someone close to us – or when a physician must be selected to perform a complex medical procedure – we are careful to choose someone who has up-to-date knowledge and who is experienced and competent.

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For the treatment of mild to moderate depression, it is recommended that either antidepressant medications or psychotherapy be used, depending on the patient’s preferences. For severe or refractory depression, treatment combining psychotherapy and antidepressant medications may be considered.

The document entitled Treatment Choice in Psychological Therapies and Counselling - Evidence Based Clinical Practice Guideline recommends, for example, the use of interpersonal or cognitive behavioural therapy. The document further recognizes the efficacy of behavioural therapy, problem-solving therapy, group therapy, psychodynamic-interpersonal psychotherapy and brief psychodynamic psychotherapy.

When individual psychotherapy is used, it is recommended that interpersonal psychotherapy, cognitive psychotherapy or cognitive behavioural psychotherapy be used as the first-line treatment. Behavioural therapy may be used as second-line treatment, while brief psychodynamic psychotherapy may be used as third-line treatment.

Some evidence would also seem to exist that acceptance and commitment therapy, emotion focused therapy and brief psychodynamic therapy are effective.
EVIDENCE AND EMPIRICALLY SUPPORTED THERAPIES

Some confusion often arises between these concepts; they are related, to be sure, but they nevertheless refer to different constructs, that is, evidence-based practice and empirically supported therapies. As highlighted by Dr. Goldfried, President of Division 12 of the APA, these two concepts are neither equivalent nor interchangeable. Empirically supported therapies are merely a part of evidence-based practice, whereas the latter refers to a more complete and more complex set of empirical data that go beyond demonstrating the efficacy of a particular treatment. As such, the American Psychological Association defines evidence-based practice as the integration of the best empirical data with clinical expertise in consideration of the context of patient characteristics, culture and preferences (www.apa.org/practice/guidelines/evidencebased.pdf). The Ordre des psychologues du Québec adopted this definition of evidence-based practice in October 2008. (www.ordrepsy.qc.ca)

National Institute For Health and Clinical Excellence (NICE) – 2009, United Kingdom
NICE clinical guideline CG90 and the accompanying documentation propose stepped care. Following a rigorous and thorough intervention, it is recommended that preference be given to low-intensity interventions for subsyndromal or mild depression, i.e., patient training and supervision in the use of guided self-help, computerized cognitive behavioural therapy, or a structured physical activity program. If a patient does not respond to the preceding interventions or if the patient exhibits mild to moderate depression, it is recommended that a psychotherapeutic intervention be used, e.g., cognitive behavioural therapy or interpersonal psychotherapy, or else a combination of psychotherapy and antidepressants. In cases of severe and complex depression, it is recommended that the following be used: antidepressants, psychotherapy, electroconvulsive treatment or a combination of these treatments. In all cases, the guidelines underscore the importance of ongoing monitoring of the effects of treatment and patient compliance.

Institut National de la Santé et de la Recherche Médicale (INSERM) – 2004, France
Based on the work of the expert panel assembled by INSERM (Psychothérapie : trois approches évaluées, 2004) to assess psychodynamic/psychoanalytical, cognitive behavioural, and family/couple therapies, cognitive behavioural therapies showed their efficacy for unipolar depressive disorders in hospitalized patients. Cognitive psychotherapies and interpersonal therapies also proved to be effective in cases of moderate or mild depression treated on an out-patient basis. Couple therapies appeared to be effective in the case of subjects living with a critical spouse.
American Psychiatric Association – 2000/2005, United States

The APA guidelines on the treatment of depression are out-of-date (2000), although they are in the process of being revised. A more recent addendum (Guideline Watch: Fochtmann & Gelenberg, 2005) underscores the efficacy of problem-solving therapy and the cognitive behavioural analysis system of psychotherapy. The efficacy of electroconvulsive therapy is also reported; when administered three times a week to treat severe depression, it may produce rapid effects and a relatively sustained response. The use of transcranial magnetic stimulation or vagal nerve stimulation appears promising, although it is still too soon to recommend their use in routine clinical practice. Treatment where antidepressant medication and psychotherapy are used in combination may improve treatment adherence and be more effective with certain patient sub-groups.

WONCA – 2004, International

The World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) has produced the Culturally Sensitive Depression Guideline, a clinical practice manual for treating depression where the patient’s culture is taken into consideration. Although the manual looks primarily at the pharmacological treatment of depression, reference is also made to cognitive behavioural therapy and narrative therapy. Particular emphasis is placed on the role that culture plays in the manner in which patients report their problems, and on patients’ response to the treatment offered.

Beyondblue – 2002, Australia

The Australian organization Beyondblue has produced a number of reference guides for various types of depression or clinical practice contexts. For example, in the case of first-line intervention, cognitive, interpersonal or psychodynamic therapy may be recommended, depending on the type of depression exhibited by the patient. Ellis and Smith (2002) point out that, in cases of mild or moderate depression, the choice of one type of treatment as opposed to another is less important than continuing therapy for a sufficiently long period of time.

Alternative and Complementary Treatments

According to US studies (e.g., Kessler et al., 2001), more than one out of every two people with depression makes use of what are commonly called “alternative” treatments, that is, treatments that are not usually considered to derive from conventional professional practices. Consequently, it is not unusual for patients to ask you about the efficacy of some of these treatments for depression. Let’s see what Cochrane (www.cochrane.org) has to say...

**Acupuncture.** The data do not justify use of this treatment method (Smith, Hay & MacPherson, 2010).

**Music therapy.** Preliminary data suggest that music therapy is well tolerated by patients and that it may be associated with improved mood. However, because of the small amount of research that has been done in this area and the methodological weakness of existing studies, it would be premature to conclude that music therapy is effective (Maratos, Gold & Crawford, 2008).

**Physical exercise.** Physical exercise may reduce the symptoms of depression. However, when only those studies that used a more sound methodology are considered, it would appear that the effects of physical exercise, when used alone, are not significant (Mead, Morley, Campbell, Greig, McMurdie & Lawlor, 2009).

**Relaxation.** The use of relaxation techniques would seem to be more effective than no treatment whatsoever, but less effective than psychotherapy (Jorm, Morgan & Hetrick, 2008).

**Light therapy.** The use of light therapy in non-seasonal depression produces moderate effects. It is important to point out that this treatment may also lead to the appearance of hypomanic symptoms (Tuunainen, Kripke & Endo, 2004).

**Hypericum perforatum (St. John’s wort).** Hypericum extracts seem to have efficacy superior to placebo and generally comparable to antidepressants. However, the effect of these extracts varies from one population and culture to another (Linde, Berner & Kriston, 2008). It should further be noted that although certain guidelines recognize the efficacy of hypericum for mild depression, others question its efficacy. According to the American Psychiatric Association Guideline Watch 2005 (www.psychiatryonline.com/pracGuide/pracGuideTopic_7.aspx), the extract’s efficacy would seem to have been more considerable in initial studies, whereas more recent studies would tend to question its efficacy. NICE clinical guideline CG90 (http://guidance.nice.org.uk/CG90) does not recommend the use of hypericum perforatum.

**Folate (folic acid).** Folate may potentially be used as a complementary treatment in addition to other treatment modalities. Its efficacy remains uncertain nonetheless (Taylor, Carney, Geddes & Goodwin, 2003).

**REFERENCES**


Claude Ménard
President of the Regroupement provincial des comités des usagers (provincial patients committee group) (www.rp cu.qc.ca).

For a patient suffering from depression, navigating our healthcare system may entail its share of complications, noticeably the (excessively long) waiting lists, choosing a professional caregiver and choosing a particular treatment. It is on the latter that the Regroupement provincial des comités des usagers (RPCU) proposes a few thoughts for consideration.

Indeed, what rights do patients have when it comes to proposed treatments? Just how far can professionals go in exercising their therapeutic freedom? Is it possible for a patient and his/her professional caregiver to mutually agree on the treatment to be provided?

Treatment Choice and Patients’ Rights
The choice of treatment hinges on the professional’s therapeutic freedom. Generally speaking, any patient can choose to refuse or agree to the treatment proposed by a professional, provided that the patient’s decision is freely made and informed. However, are there limits to a professional’s therapeutic freedom?

Therapeutic Freedom and Mutual Agreement
A professional’s therapeutic freedom rests upon his or her qualifications to recommend the best treatment for the patient. In the case of a patient who suffers from depression, the RPCU believes that therapeutic freedom must also respect the patient’s choices. As a result, patients should be consulted towards establishing a mutual agreement, so that they can be part of the solution. By so doing, the chances of a patient refusing treatment would diminish, since he or she would feel actively involved in the treatment process and would come away with the feeling that his or her choices are being respected.

A Collaborative Vision
From this perspective, the RPCU believes that the professional’s obligation to inform his or her patient also extends to the different treatment options that are available. Consequently, it is the professional’s duty to inform and guide the patient as to the various treatment options open available, while ensuring that those options will be effective considering the patient’s particular circumstances. This way, discretionary authority in regards to therapeutic freedom remains, since the professional is the only one to decide on the particular treatments that need to be proposed. As a result, the RPCU is convinced that a collaborative vision is compatible with the therapeutic freedom of professionals.

Confidence in our Healthcare System
The RPCU maintains that, in order to act in a patient’s best interest, he or she should be consulted and take part in the choice of treatment being offered. We believe that, if patients participate in the planning of their treatment, their interests will be safeguarded, they will feel their choices are being respected and the chances of treatment acceptance will be greater because of their active involvement.
Almost all guidelines for the treatment of depression discuss the issue of informed consent and patient preferences. The choice of treatment options and the delivery of treatment must respect the patient’s preferences, but must also consider a host of other factors that may impact on treatment compliance and outcome. Even though unfortunately little is still known about the factors that influence the response to one particular treatment over another, research provides us with some insight nonetheless.

**Patient Preferences.** There is still some controversy as to the importance of patient preferences on the effectiveness of any given treatment. Some studies show no connection between being able to choose one treatment over another and the outcome of that treatment (see, for example, Bedi et al., 2000; King, 2005; Leykin et al., 2007; Van et al., 2009). However, other authors report that patients, whose treatment is reflective of their preferences, demonstrate a more rapid improvement in their depressive symptoms (Lin et al., 2005), greater symptomatic improvement (Kocsis et al., 2009; Swift & Callahan, 2009) and, most of all, greater compliance with treatment (Raue et al., 2009; Van Schaik et al., 2004).

**Culture.** Certain studies indicate that patients with Asian origins tend to exhibit more somatic than psychological symptoms when they suffer from depression (Bhui et al., 2001; Gillam et al., 1980). As a result, depression is not always recognized and diagnosed in those patients, as is the case with patients of Lebanese, Turkish, African American and Italian origin (Soykan & Oncu, 2003). Research further demonstrates marked cultural differences in the metaphors used by patients to describe depression. Research also suggests that Asian patients experience more side effects from pharmacological treatment and, like African American patients, they prefer structured psychotherapeutic treatments such as cognitive behavioural therapy (Gonzales et al., 2010; Lin & Cheung, 1999). Other groups of patients, however, would seem to prefer more narrative approaches (see Wonca, 2004; see also Cooper et al., 2003, Dwight-Johnson et al., 2000, and Miranda et al., 2005).

**Concomitant Axis II Disorders.** Although it is generally admitted that the presence of personality disorders has a negative effect on treatment outcome, some studies provide no evidence of this effect resulting from the presence of a personality disorder on the outcome of an intervention intended to treat depression (see, for example, Bagby et al., 2008; Kool et al., 2005; Mulder, 2002; Newton-Howes et al., 2006; Shea et al., 1990).

**Personality.** The majority of studies have examined predictors of response to treatment without directly comparing different types of treatment. According to studies that have examined differential effects based on the type of treatment, patients with a tendency to self-criticize (Rector et al., 2000), with a high score of neuroticism or with less of a tendency to trust others (Bagby et al., 2008) do not react as well to CBT as they do to pharmacotherapy. Patients with an avoidant attachment style (McBride et al., 2006) or schizoid symptoms (Joyce et al., 2007) would seem to react better to CBT than to interpersonal therapy (see also Bagby et al., 1995; Blatt et al., 1998; Sotsky et al., 1991 or 2006).
WHAT THE JOURNAL OF CLINICAL PSYCHIATRY THINKS

More recently, the Journal of Clinical Psychiatry published a series of articles on so-called alternative treatments for depression. In the view of Freeman et al. (2010a), it would seem that natural treatments (St. John’s wort, omega-3 and S-adenosyl-L-methionine), much like antidepressant medications, produce effects superior to placebo. In a second article, Freeman et al. (2010b) evaluated the efficacy of various so-called alternative treatments. They concluded that: 1) St. John’s wort may be beneficial for certain patients with milder cases of depression; 2) too few data are available to justify the use of S-adenosyl-L-methionine or folate; 3) light therapy may be used as a complementary treatment in cases of non-seasonal depression; 4) acupuncture must not be recommended for the treatment of depression; 5) physical exercise may be used as a complementary treatment; and 6) omega-3 fatty acids may be used as a complementary treatment for depression. A more recent study led by Lespérance et al. (to be published), and certainly the most important clinical trial on the issue, further demonstrated that omega-3 fatty acids produce effects superior to placebo in patients who are depressed but do not have a concomitant anxiety disorder.

REFERENCES


Lespérance, F., Frasure-Smith, N., St-André, E., Turecki, G., et al. (to be published). The efficacy of omega-3 supplementation for major depression: a randomized controlled trial. Journal of Clinical Psychiatry.
Depression is a debilitating condition estimated to affect more than 151 million people world-wide each year (WHO; World Health Organization, 2004), and antidepressant medications are the most common treatment for depressive symptoms. Indeed, the proportion of the U.S. population taking antidepressant medication nearly doubled between 1996 and 2005 (Olfson & Marcus, 2009), and antidepressant medications rank as the most commonly prescribed class of drugs in the U.S., according to most recent data reported by the Centers for Disease Control (National Center for Health Statistics, 2010). In the January 6, 2010 edition of the Journal of the American Medical Association, our research group published the results of a patient level meta-analysis in which we examined whether or not the efficacy of antidepressant medications depends on the severity of the depressive episode (Fournier et al., 2010).

We initiated this study following the publication of two meta-analyses that focused on the relation between depression symptom severity and the magnitude of the placebo-controlled benefit of antidepressant medications (Kirsch et al., 2008; Khan et al., 2002). Both investigations yielded results that suggested that antidepressant medications are more effective for patients whose depressive symptoms are more severe, relative to those with less severe symptoms. Moreover, in both of these investigations there were indications that the benefit of the medications was absent or minimal for patients with lower levels of severity when treatment was initiated. Our study aimed to address the limitations of these two meta-analyses, most importantly that neither investigation included data from patients who were in the mild or moderate range of depressive symptoms. The mean baseline symptom severity levels in all but one of the studies included in these two meta-analyses were in the severe to very-severe range. A second difference between our study and the two previous meta-analyses is that we were able to analyze data at the individual patient level, rather than at the level of the mean response for the treatment groups.
In order to identify studies for inclusion, we searched electronic databases for articles published within the last 30 years that reported the results of randomized clinical trials comparing FDA (U.S. Food and Drug Administration) approved antidepressant medications to placebo in the treatment of adult depression. We identified 23 studies that met these criteria and that did not incorporate a placebo washout period. We acquired individual participant level data from six of these studies. In five of the six studies, patients met DSM-IV criteria for major depressive disorder; in the remaining study, patients met criteria for minor depressive disorder. The total sample consisted of 434 patients who received medications and 284 who received placebo. The range of baseline severity scores, from 10 to 39 on the Hamilton Rating Scale for Depression (HRSD), was substantially larger than that used in the previous studies. In the six studies included in the analysis, the duration of active treatment ranged from six to 11 weeks.

We conducted analyses of covariance (ANCOVA) in which we examined the effect of baseline severity, treatment, and the interaction of the two on symptom change scores during acute treatment. The statistic of interest, i.e., the interaction of baseline severity and treatment assignment, was significant \[F(1,715)=10.09, \ p=0.002\], in a model that predicted depression change scores. Higher baseline severity scores predicted greater symptom reduction for both the medication and the placebo groups. At the lower end of the severity range, the two groups evidenced similar magnitudes of symptom change. It was only at the high end of the symptom severity range that patients given antidepressant medications evidenced greater reductions in symptoms, compared to patients who were given placebo. We obtained these results whether we included only the five studies of patients with major depressive disorder or if we included all six studies.

In order to quantify the level of severity associated with a clinically meaningful benefit of medication over placebo, we employed guidelines established by the National Institute for Clinical Excellence of the National Health Service in Great Britain. Using their criteria of an effect size of 0.50 or drug-placebo differences of three or more points on the HRSD, we identified a cutoff of 25 or greater on the HRSD, using the more liberal of the two criteria, and 27 or higher using the more conservative of the criteria. Using the definitions provided by the American Psychiatric Association (2000), both of these scores fall in the "severe depression" range.

The results of this study indicate that the benefit of antidepressant medications over placebo varies considerably, depending on the severity of the symptoms when treatment is initiated. For patients whose depression falls in the mild or moderate range, there was no evidence in our data to suggest that the active ingredients in the medications provide a specific therapeutic benefit, beyond what is provided by placebo. By contrast, the benefit of medication over placebo was quite large for patients with more severe symptoms. To our knowledge there are no published data that contradict these findings.

We only examined data from studies of major and minor depressive disorders. As such, our findings may not generalize to other similar disorders. Indeed, several studies have demonstrated that medications are superior to placebo in the treatment of dysthymia (e.g., Baldwin et al., 1995; de Lima et al., 1999), a condition defined by less severe but chronic depressive symptoms. It may be the chronic nature of dysthymia that is responsible for the superiority of medications for that condition. Finally, although our search for clinical trials was open to all FDA approved antidepressants, data were available only from studies that included one of two antidepressant medications, paroxetine and imipramine. There are no empirical data that would lead to the suggestion that a different pattern of results would be obtained with medications that were not included in our analyses. Nonetheless, this question should be examined explicitly in future research.

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1 During placebo washouts, patients are administered a pill-placebo in single-blind fashion for a period of several days to two weeks. Any patient who demonstrates an improvement above a preset magnitude is then excluded from the trial before it starts. Although rationales for this approach have been offered, by removing patients who show an initial response to placebo, this procedure limits our ability to estimate the true differences between medications and placebo.
For clinicians who advise or treat depressed patients, the results of our study have several implications. Our findings confirm the well-known fact that antidepressant medications are effective, over and above the placebo effect, for patients with more severe symptoms. However, for patients in the mild to moderate range of symptom severity, the efficacy of placebos and medications appears to be of similar magnitude. It may be that the elements of the placebo effect, which presumably include taking one’s illness seriously, engaging in treatment, and speaking to a mental health professional, may be sufficient for such patients, at least as a starting point.

Health professionals who are advising treatment for patients with mild or moderate cases of depression would do well to compare the expected costs and benefits of the medications against alternative treatments. When considering which treatment option to pursue, it is important to consider other relevant research findings, for example the ability of certain psychotherapies to treat the depression and protect patients from relapse. Finally, patients should be encouraged to reconsider their treatment decisions if they struggle with their symptoms after engaging a treatment and allowing it a reasonable amount of time to provide benefit.

References
Several prognostic and prescriptive variables were identified in this work. Three variables, chronic depression, older age, and lower intelligence, predicted relatively poor response irrespective of the treatment that was provided. The prescriptive indicators showed that CT was more effective than ADM for patients who were married (or cohabitating), unemployed, or experiencing a large number of stressful life events.

Two previous analyses of this dataset had revealed two additional prescriptive indicators: prior medication treatment (Leykin et al., 2007) and the presence of comorbid personality disorders (Fournier et al., 2008). When controlling for all of the variables identified in the present study, these two variables remained significant prescriptive predictors of response. Specifically, patients who previously had received antidepressant medications, as well as patients without a comorbid personality disorder, responded better to CT than to ADM. Conversely, patients with diagnosed personality pathology were more likely to exhibit good response to ADM than to CT.

Thus, several predictors of treatment outcome were identified that could have clear clinical utility for the appropriate matching of treatments to patients. If these findings are replicated, short-term CT could be considered the preferred treatment, relative to ADM, for depressed individuals who are married, unemployed, experiencing a large number of events in their lives, or who do not have a diagnosed personality disorder. Moreover, the three prognostic variables, age, intelligence, and chronicity, could be used to identify those patients for whom a longer duration, higher dose, or alternative treatment strategy will likely be needed to achieve response. If matching strategies like these are successful, such that the most appropriate treatment can be identified for individual patients before their treatment is initiated, the practical efficacy of depression treatment will be improved substantially.

**The prescriptive indicators showed that CT was more effective than ADM for patients who were married, unemployed, or experiencing a large number of stressful life events**

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**REFERENCES**


In order to determine the cost-effectiveness of psychotherapy¹ for a number of different mental disorders, we (see Lazar, 2010a) conducted a series of systematic literature searches and examined all studies from which cost-effectiveness data could be derived. In what follows, studies on the treatment of unipolar depression are briefly summarized (for details see Lazar, 2010b). These studies, which were published between 1984 and 2007, examine the potential cost-effectiveness of a variety of psychotherapeutic approaches for depression by assessing their impact on cost-sensitive outcome measures. While a limited number of studies did not find psychotherapy to be cost-effective in some settings (Bosmans et al., 2007; Petrou et al., 2006), most of the studies demonstrate the efficacy of the psychotherapy interventions and many also illustrate some measure of cost-effectiveness by virtue of decreased disability, significantly greater efficacy and compliance with treatment at similar or small additional cost over other treatment approaches, or a decrease in days spent in the hospital. Other studies demonstrate the cost-effectiveness of psychotherapy according to the older and more stringent standard of cost-offset, in terms of reduction in medications or decreased total health care costs. Savings result from decreased disability, reduced hospitalization and other medical costs.

In a study examining the impact of the treatment of depression on costs, Kamlet et al. (1992) calculated that interpersonal psychotherapy (IPT) leads to improved quality of life and to reduced treatment costs because of fewer depressive episodes. While IPT is expensive when examining direct costs only, including indirect costs such as lost income from work suggests that IPT alone yields a lifetime savings of US$9,000 and a reduction in the lifetime probability of suicide from 8.8% to 4%. Combining IPT with antidepressant medication yields an estimated lifetime savings of US$11,540.

Several studies demonstrate that psychotherapy combined with medication is a cost-effective treatment for depression. In a study by Verbosky et al. (1993), brief psychotherapy with psychotropic medication given to 15 of 18 medical patients with major depression led to a 31.8 day decrease in length of hospital stay compared to untreated depressed medical patients. Rosset and Andreoli (1995) studied 122 subjects with major depression comparing 1) specialized inpatient care for three weeks followed by eight weeks of medication, 2) standard hospital treatment with observation and medication, and 3) specialized crisis intervention with one week of daily supportive psychotherapy and medication followed by approximately eight weeks of clomipramine, two to three psychotherapy sessions per week, and family support. The latter considerably reduced the duration of hospitalization and its associated costs.

In a report of three studies of a brief Problem-Solving Therapy (PST) for depressed patients in a primary care setting, Mynors-Wallis (1996) found PST equally effective as antidepressant medication and superior to placebo. For patients with more broadly defined emotional disorders, many with depressive features, PST was cost-effective due to decreased work absenteeism compared to patients given usual care by a general practitioner.

Two randomized controlled trials (Von Korff et al., 1998) compared Usual Care for depressed patients in primary care settings to Collaborative Care by psychologists with primary care medication management. In the first trial, 217 depressed patients were randomized to medication and brief psychoeducational interventions or to Usual Care. In the second trial, 153 depressed patients received either medication, patient education and brief cognitive-behavioral therapy (CBT), or Usual Care. Cost-offset was defined as mean costs of health care services for intervention patients minus mean costs of services for Usual Care patients. Cost-effectiveness was estimated by dividing the average annual costs of treating depression by the proportion of patients successfully treated. While the cost of Collaborative Care was greater than Usual Care, the cost-effectiveness of Collaborative Care was greater for patients with major depression, although not for minor depression.

276 primary care patients with major depression were randomly assigned to either: 1) pharmacotherapy with nor- triptyline, 2) IPT, or 3) a primary care physician's usual care (Lave et al., 1998). While both medication and psychotherapy treatments were more expensive than usual care by primary physician, they were more cost-effective because of far better outcomes.

Friedli et al. (2000) compared one to 12 weeks of either non-directive psychotherapy or care by a general practitioner, given to 136 patients with emotional problems (mainly depression). Over nine months, psychotherapy was not more effective or expensive than routine care. While patients receiving psychotherapy had higher costs during the first three months, at nine months costs for the two groups reversed due to the routine care group's greater number of outpatient appointments and inpatient stays. A longer follow-up might show an advantage for the psychotherapy group.

Tutty et al. (2000) studied depressed adults in primary care, including 28 patients who received antidepressant medication and telephone psychotherapy, and 94 patients given usual care. The first group who received written educational materials and six weekly CBT sessions by telephone were significantly less depressed than controls both at three and six-month follow-up, twice as likely to adhere to antidepressant medication, and half as likely to have major depression, indicating that the telephone therapy was more cost-effective, yielding a significantly greater improvement of outcome for the same costs.

Two publications (Bower, 2000; King, 2000) describe a study of 464 patients with either depression or mixed anxiety and depression who were randomized to up to 12 sessions of brief non-directive therapy, to CBT, or to routine general practitioner care. At four months, both psychotherapy groups improved significantly compared to usual care and demonstrated superior cost-effectiveness. However, at 12 months, all three groups had similar improvement with no differences in costs. Patients given non-directive therapy were most satisfied.
In a randomized, controlled study of antidepressant drugs vs. couple therapy for 77 depressed patients living with a critical partner, depression improved significantly for both treatment groups (Leff et al., 2000). While cost of the two treatments was similar, the couple therapy was more acceptable to patients, had one-fourth the dropout rate, and had significantly greater improvement both at end of treatment and two years later.

Insurance claims data were examined retrospectively to compare both total and mental health care costs for 9110 depressed patients according to initial treatment choices, which included no therapy, psychotherapy, drug therapy, or a combination (Edgell et al., 2000). Those given medication or combination treatment had a significantly greater total cost compared to those given no therapy or psychotherapy alone. Those initially receiving psychotherapy alone had higher mental health care costs but lower total health care costs, perhaps due to the impact of psychotherapy on comorbid illness and subsequent reduction of total health care costs.

Browne et al. (2002) studied 707 patients with dysthymia and/or major depression who were randomized to six months of sertraline alone, 10 sessions of IPT alone, or to the combination, followed by an additional 18 month follow-up in which effectiveness and costs of all treatment and social services were measured. At two years, there was no significant difference between sertraline alone and sertraline with IPT in symptom reduction and both were more effective than IPT alone, although all three treatments were effective. Patients who received sertraline and IPT had lower health and social service costs compared to sertraline-alone patients over the two years.

Schulberg et al. (2002) reviewed 12 studies of depressed patients seen in primary care settings, and found a depression-specific psychotherapy more effective for major depression than usual primary care and similar in effectiveness to psychotropic medication. For patients with dysthymia, the effectiveness of psychotherapy compared to usual care was more equivocal. While more expensive than usual care, psychotherapy’s greater effectiveness for major depression made it cost-effective.

In a study designed to compare the cost-effectiveness of psychotherapy with antidepressant medication for depressed patients, Miller et al. (2003) found that psychotherapy is a dominant cost-effective strategy for a small proportion of patients with mild to moderate depression. For other patients, antidepressants are the dominant cost-effective strategy.

Pirraglia et al. (2004) examined the nine articles on the cost-utility analysis of depression management from the Harvard Center for Risk Analysis Cost-Effectiveness Registry. Psychotherapy, care management alone and psychotherapy plus care management all had lower costs per quality-adjusted life years than usual care. Cost-utility analysis, a subset of cost-effective analysis, examines effects of interventions on both quantity and quality of life and can compare many interventions for the same condition expressed in ratios of incremental cost to incremental effect. A cost-utility analysis combines and expresses both the quality of life and mortality benefits of an intervention as a quality-adjusted life year (QALY). In this review, psychotherapy alone or as part of a case management effort was superior to usual care per QALY, while maintenance imipramine had a favorable cost per QALY compared to maintenance psychotherapy plus placebo. Psychotherapy had a lower cost per QALY than usual care. Pharmacologic treatment either alone or in combination had a lower cost per QALY than psychotherapy alone.

Two hundred sixty-seven low-income, minority women with major depression were randomly assigned to 1) Pharmacotherapy with either paroxetine or bupropion, 2) CBT, or 3) Community referral (Revicki et al., 2005). Compared to community referral patients, pharmacotherapy patients had significantly improved depression from the third month through the 10th month as did the CBT group from the fifth month through the 10th month. The first two groups also had more depression-free days compared to the third group. The cost per additional depression-free day was $24.65 for pharmacotherapy and $27.04 for CBT. Compared with community referral, interventions 1 and 2 were more cost-effective.
Schoenbaum et al. (2005) compared two approaches to increased effectiveness of depression treatment in primary care settings for 375 male and 981 female patients. Matched primary clinics in the US were randomized to either usual care or to 1) Quality Improvement (QI)-Meds to facilitate medication management, or 2) QI-Therapy from psychotherapists trained to provide eight to 12 sessions of individual and group CBT. For women, QI-Meds and QI-Therapy had comparable positive effects on depression burden and quality of life with QI-Therapy leading to three increased work weeks over two years and demonstrated cost-effectiveness for both interventions within the range for other accepted medical treatments, especially QI-Therapy with its smaller impact on costs. For men, QI-Therapy very significantly increased employment by seven work weeks and reduced depression burden over two years. QI-Meds increased costs over two years but did not improve depression or work productivity and was therefore not effective or cost-effective.

Vos et al. (2005) estimated the potential cost-effectiveness and impact on total expenditures of a range of interventions for depression if recommended mental health interventions for depression were to be implemented in Australia. It was concluded that in the year 2000, providing optimum antidepressant drug treatment and maintenance CBT, both over five years, would reduce the disease burden of depression by approximately 50%.

Smit et al. (2006) examined 363 primary care adult patients with subthreshold depression from 19 general practices in the Netherlands. Patients were assigned to minimal contact CBT from a self-help manual with six short telephone calls, or to usual care. The risk of developing depressive disorder decreased from 18% to 12% in the intervention group who also had lower work-related losses. Assuming the acceptability of the increased costs of the intervention over one year, minimal contact psychotherapy had a 70% probability of being more cost-effective than usual care alone.

In a randomized controlled trial, 143 depressed patients age 55 and older from 12 general practices in and around Amsterdam were given 10 sessions of IPT over five months, or Care As Usual (CAU; Bosmans et al., 2007). At six months, 60% of the IPT patients and 42% of the CAU patients had recovered, a difference just short of statistical significance. At 12 months, the recovery rate in both groups was 45%. Total costs were higher in the IPT group but not statistically significantly. Since IPT patients had greater costs at 12 months, IPT had a negative incremental cost-effectiveness ratio and was not cost-effective compared to CAU. In other studies, psychotherapy with more depressed patients evidenced more cost-effectiveness by impacting their higher medical costs. Results may also be different with a longer course of treatment from more experienced therapists and maintenance treatments to sustain gains made in the acute treatment phase.

Dunn et al. (2007) randomly assigned 101 male veterans with comorbid chronic posttraumatic stress disorder and depressive disorder to 14 weeks of 1.5 hour weekly group sessions of either self-management CBT or to a strictly educational intervention. Self-management therapy patients had slightly greater improvement, but this difference disappeared on follow-up. However, these patients also had fewer psychiatric outpatient visits and lower psychiatric and medical/surgical costs during treatment and the year afterward.
Wells et al. (2007) studied a total of 746 primary care patients with 12-month depressive disorder and 502 with subthreshold depression in a randomized controlled trial. Matched clinics were randomly assigned to enhanced usual care or one of two quality improvement interventions that provided education to manage depression over time and resources to facilitate access to medication management or psychotherapy for six to 12 months. The medication quality improvement intervention provided support for medication adherence through monthly visits or telephone contacts for six to 12 months. In the therapy quality improvement intervention, therapists provided individual and group CBT for six months. The costs of the intervention were much smaller for patients with subthreshold depression. All of the interventions were as cost-effective for patients with depressive disorders including subthreshold depression as are many widely used medical therapies.

Conclusion
Psychotherapy is cost-effective for patients with unipolar major depression. But for the many studies of effectiveness and cost-effectiveness summarized and discussed above, it is important to acknowledge the enormous range of study conditions and the inherent difficulties comparing these “apples” and “oranges” to glean conclusions confidently from the large and disparate literature. In looking for evidence of cost-effectiveness of psychotherapy, not only are different kinds and lengths of psychotherapeutic regimens studied in various depressed populations against various alternate treatments and control conditions, it must also be noted that the examination of costs measured varies greatly, generally becoming more sophisticated in more recent research designs. While many of the earlier studies yield a strong indirect suggestion of cost-effectiveness from improved work functioning, lowered hospitalization and medical costs, etc., the more recent studies measure the cost-effectiveness of treatments directly, for example, with a cost-utility analysis that combines the quality of life and mortality benefits of an intervention in the metric of a quality-adjusted life year or QALY. More recent cost-effectiveness literature also uses the much more appropriate standard of acceptable thresholds for effective treatments, in other words, the cost considered acceptable for any medical treatment in terms of QALY value gained. Thus “cost-effective” does not necessarily mean “money saving”; it should signify both the cost and the value of one treatment approach compared to others in lieu of the double standard of “cost-offset”, in which psychotherapy is valued only if it leads to savings in other (presumably more inherently valuable and unchallengeable) medical treatments.
REFERENCES


**DEPRESSION**

An Area of Focus for Psychologists and Researchers in Quebec

Professor **Mario Beauregard** and his team at Université de Montréal conduct research in areas such as the functional neuroanatomy of deficient emotional self-regulation in unipolar major depression.

[www.mapageweb.umontreal.ca/beauregm](http://www.mapageweb.umontreal.ca/beauregm)

Professor and Director of the UQAM Psychology Department, **Louis Brunet** conducts work on change in psychoanalytic psychotherapy and psychoanalysis, the effects of psychoanalytic psychotherapies in children (borderline states, psychoses, ADD) and therapists' functions with an impact on change.

[www.psycho.uqam.ca/NUN/d_pages_profs/d_Brunet](http://www.psycho.uqam.ca/NUN/d_pages_profs/d_Brunet)

Professor **Martin Drapeau** and the team he leads at McGill University, the McGill Psychotherapy Process Research Group, carry out work on psychotherapeutic processes, investigating such areas as what makes psychotherapy effective, in the treatment of depression in particular.

[www.mpprg.mcgill.ca](http://www.mpprg.mcgill.ca)

Professor **Marc-Simon Drouin** at UQAM is particularly involved in research into the effectiveness of psychotherapy and active ingredients in the therapeutic process; he is also interested in personality disorders and depression.

[www.psycho.uqam.ca](http://www.psycho.uqam.ca)

David Dunkley, Psychologist, from the Jewish General Hospital conducts research into the role of cognitive-personality vulnerability factors, especially perfectionism, in psychopathology, in particular depression.

[http://ladydavisinstitute.org/researchers_profile.php?id=30](http://ladydavisinstitute.org/researchers_profile.php?id=30)

Professor **Marilyn Fitzpatrick** of McGill University and the McGill Psychotherapy Process Research Group is interested in the processes whereby patients are able to better identify, then manage the difficulties they face over the course of therapy, as well as the processes whereby change occurs during treatment among, for example, patients with mild depression.

[www.mpprg.mcgill.ca](http://www.mpprg.mcgill.ca)

The work of Professor **Janie Houle** at UQAM is aimed at developing a better understanding of the environments conducive to health self-management for persons suffering from depressive disorders, with particular attention to gender differences.


Professor **Réal Labelle** and his team at UQAM and the Centre de recherche Fernand-Seguin – Hôpital Rivière-des-Prairies site conduct research into the psychological assessment and treatment of depressive disorders and suicidal behaviours in young people.

[www.psycho.uqam.ca](http://www.psycho.uqam.ca)

[www.hhl.lq.ca/recherche/la-recherche/les-chercheurs/real-labelle.html](http://www.hhl.lq.ca/recherche/la-recherche/les-chercheurs/real-labelle.html)

Professor **Kim Lavoie** of UQAM carries out work in the area of prevalence assessment and the impact of depression on the morbidity and mortality associated with chronic illnesses such as cardiovascular diseases (including assessment of the link between depression and endothelial dysfunction), asthma, and chronic obstructive pulmonary disease (COPD).

[www.psycho.uqam.ca](http://www.psycho.uqam.ca)

Professor **Serge Lecours** of Université de Montréal conducts research in areas such as the role of emotion regulation and mentalization in depression.

[www.psy.umontreal.ca](http://www.psy.umontreal.ca)

Professor **Dominique Lorrain**’s team at Université de Sherbrooke conducts research on the relation between mental health (depression, anxiety, quality of sleep) and psychotropic drug use in seniors and on autobiographic memory in geriatric depression.

[www.usherbrooke.ca/psychologie](http://www.usherbrooke.ca/psychologie)

The work of Professor **Diane Marcotte**’s team at UQAM relates to depression in teenagers, sexual differences in the prevalence of depression during adolescence, and depression treatment programs in a school environment.

[www.experts.uqam.ca/pages/marcotte.diane.htm](http://www.experts.uqam.ca/pages/marcotte.diane.htm)

Professor **Martin Provencher**’s team at Université Laval looks at cognitive behaviour therapy (CBT) for mood and anxiety disorders, particularly factors influencing the therapeutic response.


Pasquale Roberge, Psychologist, of the Research Centre of the Université de Montréal University Hospital Centre and the Institut national de santé publique du Québec, is interested in the use of mental health services and innovation in the organization and delivery of first-line care and services for anxiety and depressive disorders.


[www.qualaxia.org](http://www.qualaxia.org)

Professor **Andrew Ryder**’s Culture, Health, and Personality Lab at Concordia University conducts research that examines the relation between individuals and their cultural context, and the implications of this relation for psychopathology, namely depression.

[www.chp.concordia.ca](http://www.chp.concordia.ca)

Professor **Casten Wrosch**’s Personality, Aging and Health Lab at Concordia University conducts research on how people can adjust to challenging life circumstances and prevent adverse consequences on their psychological, biological, and physical health. The group has examined depression in different age groups.

[http://crdh.concordia.ca/Wrosch_Lab/wroschhomepage.html](http://crdh.concordia.ca/Wrosch_Lab/wroschhomepage.html)

Professor **David Zuroff** from McGill University conducts research into the relations between personality, especially dependency and self-criticism, and psychopathology, especially depression.