

# INTEGRATIVE MENTAL HEALTH CARE: FROM THEORY TO PRACTICE, PART 2

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Integrative approaches will lead to more accurate and different understandings of mental illness. Beneficial responses to complementary and alternative therapies provide important clues about the phenomenal nature of the human body in space-time and disparate biological, informational, and energetic factors associated with normal and abnormal psychological functioning. The conceptual framework of contemporary Western psychiatry includes multiple theoretical viewpoints, and there is no single *best* explanatory model of mental illness. Future theories of mental illness causation will not depend exclusively on empirical verification of strictly biological processes but will take into account both classically described biological processes and non-classical models, including complexity theory, resulting in more complete explanations of the characteristics and causes of symptoms and mechanisms of action that result in beneficial responses to treatments. Part 1 of this article

examined the limitations of the theory and contemporary clinical methods employed in Western psychiatry and discussed implications of emerging paradigms in physics and the biological sciences for the future of psychiatry. In part 2, a practical methodology, for planning integrative assessment and treatment strategies in mental health care is proposed. Using this methodology the integrative management of moderate and severe psychiatric symptoms is reviewed in detail. As the conceptual framework of Western medicine evolves toward an increasingly integrative perspective, novel understanding of complex relationships between biological, informational, and energetic processes associated with normal psychological functioning and mental illness will lead to more effective integrative assessment and treatment strategies addressing the causes or meanings of symptoms at multiple hierarchic levels of body-brain-mind. (*Altern Ther Health Med.* 2008;14(1):36-42.)

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*Editor's note: The following is part 2 of a 2-part article. Part 1 appeared in the Nov/Dec 2007 issue of Alternative Therapies in Health and Medicine.*

Conventionally trained physicians usually recommend non-conventional approaches only after mainstream approaches have failed. This is regarded as a “conservative” approach from the perspective of Western medicine because it gives precedence to conventional biomedical approaches over non-conventional methods.<sup>1</sup> Whereas some non-conventional approaches are substantiated by compelling research evidence, it is also true that many conventional biomedical approaches remain in use in spite of limited or inconsistent supporting evidence. Substantiated biomedical or non-conventional modalities are not considered in some cases because they are too

expensive for a particular patient or unavailable locally. In the clinical practice of integrative medicine the order of precedence of assessment or treatment recommendations is related to the quality of supporting evidence, constraints on cost and availability, and patient preferences. Mainstream biomedical approaches do not necessarily comprise the most appropriate, cost-effective, or preferred initial management plan. In some cases, using a non-conventional assessment approach together with conventional assessment methods will lead to more accurate and specific information about the causes, conditions, or meanings of cognitive, emotional, and behavioral symptoms. In this way, integrative assessment may enhance the reliability of findings compared with the use of a single conventional or non-conventional approach, yielding a more complete picture of biological, energetic, or informational causes or psychological or spiritual meanings associated with mental illness. Improving the accuracy and reliability of findings also will contribute to the cost-effectiveness of conventional biomedical assessment tools. Using both biomedical and non-conventional assessment approaches will prove useful in complicated cases in which conventional medical-psychiatric assessment approaches, including brain scans, serologic studies, and neuropsychological inventories, result in ambiguous findings. The benefits of integrative approaches in psychiatric assessment include the following:

- An integrative assessment approach will help clarify the medical and psychiatric differential diagnosis when con-

ventional assessment methods have failed to identify the causes, conditions, or meanings associated with a particular symptom or when the patient's medical or psychiatric history is vague or complex. Using conventional assessment methods in conjunction with biological assessment approaches that are not in use but are supported by current medical theory, such as quantitative electroencephalography (QEEG) and urinary or serologic studies of neurotransmitter metabolites and immunologic or endocrinological factors, could result in increased specificity and accuracy of findings when ruling out biological causes or markers of mental illness.

- Combining conventional assessment methods with emerging approaches that are currently outside of biomedicine will clarify the role of possible energetic or informational causes of mental illness.
- The derivation of integrative assessment approaches and their use in algorithms will address the neurobiological, somatic, mind-body, energetic, or informational causes or conditions underlying mental illness.

Non-conventional assessment approaches can be divided into 4 categories with respect to the conceptual framework or paradigm from which they originate: assays of biological structure or function; measures of bodily structure or function on a gross level (somatic); measuring forms of energy or information validated by Western science; and measuring forms of energy or information that are not validated by Western science. Significant advances in the biological assessment of mental illness are taking place in functional medicine. Emerging technologies including QEEG and heart rate variability are providing useful clinical information about functional dysregulations of the brain and heart that may be related to mental illness. Assessment approaches that purport to detect forms of energy or information that are not validated by Western science also are being used to assess mental health problems. These include applied kinesiology, pulse diagnosis in Chinese, Ayurvedic, and Tibetan medicine, analysis of the vascular autonomic signal, and gas discharge visualization.

#### **FUNCTIONAL MEDICINE WILL SIGNIFICANTLY ENHANCE THE UNDERSTANDING OF MENTAL ILLNESS**

Presently, non-conventional biological assessment methods are more widely accepted compared with somatic or energy-information approaches. Functional medicine uses both emerging and conventional quantitative analysis methods to assess relationships between nutritional status, neurotransmitters, endocrine and immune function, and symptoms of mental illness. Widely used tests include serum and urinary assays of neurotransmitters and their metabolites, vitamins, minerals, amino acids and their metabolites, hormones, fatty acids, pro-inflammatory cytokines (eg, interleukin [IL]-6, IL-8, and IL-1 $\beta$ ), and immunologic factors, as well as blood chemistries. Relationships between immunity and psychiatric symptoms are complex, and the same immunologic dysregulation is sometimes found in patients with very different

psychiatric symptoms. These biological assessment approaches are limited by the fact that proposed immunologic markers of particular psychiatric symptoms are neither specific nor sensitive.<sup>2</sup> For example, in some cases, chronic depressed mood is associated with suppression of certain immunologic factors (eg, lower natural killer cell activity and decreased lymphocyte) and excess activity of others (eg, increased neutrophils and increased haptoglobin levels); however, many depressed individuals have normal levels of these immunologic factors. Furthermore, elevated IL-6 also has been reported in individuals diagnosed with schizophrenia, bipolar disorder, or post-traumatic stress disorder (PTSD).

Horrobin has proposed a membrane phospholipid model of schizophrenia<sup>3,4</sup> that argues that abnormal metabolism of phospholipids resulting from genetic and environmental factors manifests as a chronic severe symptom pattern classified as schizophrenia in Western psychiatry. The finding of deficient levels of certain essential fatty acids in the red blood cells of schizophrenics is consistent with Horrobin's hypothesis.<sup>5</sup> The membrane phospholipid hypothesis may provide a unifying conceptual framework for understanding not only schizophrenia but also bipolar disorder and possibly dyslexia, schizotypal personality disorder, other schizophrenia-like syndromes, and other severe mental illnesses. Horrobin's model suggests that a spectrum of psychiatric disorders is associated with abnormalities at the level of the neuronal membranes and that the nature and severity of symptoms are related to the magnitude and type of metabolic errors leading to abnormal phospholipid metabolism. Severe psychiatric syndromes like schizophrenia develop when genetic errors of metabolism resulting in chronic brain deficiencies of dietary fatty acids are combined with other metabolic abnormalities that result in errors of fatty acid incorporation in phospholipid membranes or abnormally high rates of removal of fatty acids from nerve cell membranes by phospholipases.<sup>4</sup>

Findings from neurotransmitter depletion studies suggest that both norepinephrine and serotonin have important but indirect roles in depressed mood. There is, however, considerable variation in neurotransmitter metabolite serum levels in patients with similar histories and symptoms and thus limited evidence for consistent correlations between a particular symptom and dysregulation at the level of a specific neurotransmitter or its receptor. When already depressed individuals take preparations of amino acids that deplete brain levels of serotonin or norepinephrine, many do not report worsening of mood, suggesting that other neurotransmitters and possibly endocrinologic and immunologic factors also are involved in the pathogenesis of depression.<sup>6</sup> The use and timing of conventional medications or non-conventional treatments, diet, stress, and activity level can influence neurotransmitter levels. Urine specimens collected in the early morning are less likely to be affected by these factors and therefore will more likely show a baseline deficiency or excess of a specific neurotransmitter. Calculating ratios of neurotransmitters to creatinine in the urine compensates for urinary dilution and may provide more accurate indicators of central nervous system levels of specific neurotransmitters compared with measurements of neurotransmitters alone. Emerging

methods will permit clinicians to develop treatments that address unique intracellular nutritional and antioxidant factors associated with the patient's mental health problem.<sup>7</sup>

#### **TOWARD A METHODOLOGY FOR INTEGRATIVE TREATMENT PLANNING: GENERAL CONSIDERATIONS**

The first step in planning integrative treatment involves identifying particular treatments that have been verified as effective with respect to a specified symptom. Professionally trained practitioners of Western biomedicine and certain non-conventional systems of medicine use both objective and subjective criteria when making decisions about treatment. Approaches used to assess outcomes in both conventional Western medicine and many non-conventional systems of medicine are based on different ways of knowing, resulting in the selective exclusion of certain kinds of information describing outcomes. In Western biomedicine, quantitative outcome measures include replicable positive findings of controlled studies, statistically significant effect sizes, and systematic reviews or meta-analyses that confirm claimed treatment effects. Qualitative measures include anecdotal reports claiming desirable outcomes and patient-centered reports of beneficial changes in functioning. Western medicine relies principally on quantitative criteria to support claims that a particular treatment is efficacious. In contrast, efficacy claims of many non-conventional treatments of mental illness are generally based on qualitative or highly subjective criteria.

Determining how to select a particular treatment poses many complex issues. For example, certain treatments can be evaluated empirically, and a mechanism of action or beneficial effect can be verified using contemporary biomedical methods. Many treatment approaches used in Western medicine are widely embraced because of positive outcomes in the absence of verification of a postulated mechanism of action. Still other treatments are employed out of widely shared beliefs that a treatment "works," even when positive outcomes have not been reported and a putative mechanism has not been established.

When several approaches are possible, choosing a particular modality over another is based on considerations of safety and effectiveness, local availability of the treatment (ie, when it is a biological substance) or a practitioner qualified to administer it (ie, when the treatment is a specialized procedure or biological substance that is best given under the supervision of a trained practitioner), patient preferences, and financial constraints. The probability of risk associated with combining 2 or more modalities is generally related to the treatments being considered. Decisions about appropriate combinations of disparate treatments are based on empirical methods and logical inference. When the mechanisms of action of 2 or more treatments are understood, reasonable inferences sometimes can be made about compatibility, even in the absence of compelling evidence for compatibility. In contrast, when the mechanisms of 2 or more modalities are not established or when the mechanism of action of only 1 approach has been clearly defined, compatibility is more difficult to infer, and the practitioner's recommendations are based largely on outcomes

data. In cases where a postulated mechanism of action is poorly understood and there are no known gross biological effects of the treatment (eg, bright light exposure, sound, qigong, yoga), the modality in question can probably be safely combined with other treatments for which there is an established biological mechanism of action. When the respective biological mechanisms of action have been clearly established for 2 or more treatments being considered for use in an integrative treatment plan, however, there may be a risk of unpleasant or harmful effects. The problem of compatibility becomes more complex in cases in which a particular treatment can have different kinds of effects at disparate hierarchic levels in the body-brain, depending on how the treatments are administered in the same patient and the existence of potentially synergistic or interfering influences when 2 or more treatments are used concurrently.

Disparate treatment approaches can be regarded as more or less compatible or incompatible when used in combination in relationship to the degree of similarity between their respective mechanisms of action and the strength of evidence for improved outcomes when the modalities are combined. Conventionally trained physicians generally infer the potential compatibility of 2 or more disparate treatments on the basis of a review of the peer-reviewed literature. The same approach can be used when making inferences about the potential compatibility when a non-conventional treatment is combined with a conventional treatment approach. For example, if a particular herbal treatment for depressed mood contains bioactive constituents that function as weak selective serotonin reuptake inhibitors (SSRIs), and studies or anecdotal reports show that the herb is safe when used in combination with conventional SSRIs, there is strong evidence for a high degree of compatibility between the herb and a conventional SSRI antidepressant. In contrast to non-conventional approaches that can be confirmed empirically, there is little or no evidence from biomedical research for "subtle" energy approaches including, for example, qigong, Reiki, and healing touch. Treatment approaches whose postulated mechanisms of action are not susceptible to empirical validation by contemporary Western science cannot be compared using analytical methods because their foundational principles cannot be reduced to empirically verifiable claims. Because the postulated mechanisms of action of non-conventional intuitive healing approaches are not susceptible to empirical analysis, the methodology of Western science cannot determine whether it is beneficial or safe to combine such approaches with disparate treatments. In other words, making clinical judgments about combinations of intuitive approaches, or intuitive and empirically validated approaches, is difficult because of the absence of verifiable empirical evidence for their postulated mechanisms of action. In contrast to integrative treatment considerations, compatibility problems generally do not occur when assessment approaches are combined because, by definition, assessment involves the passive measurement of psychological, physiological, energetic, or informational processes.

No potential contraindications are present when combining self-directed lifestyle changes with formal biological, somatic,

mind-body, or energy-information treatments. Therefore, when the patient is motivated and not profoundly impaired, it is almost always appropriate to recommend self-directed approaches, including improved nutrition, exercise, stress reduction, and others, in combination with other treatments. At the outset of treatment planning, the practitioner and patient should agree on a realistic time frame in which to expect improvements in response to the selected treatment regimen. In cases where the patient does not respond adequately after a reasonable period of time, assuming good compliance, the practitioner should review the evidence for alternative approaches before changing the treatment plan to increase the probability of alleviating the target symptom. This process of optimizing the integrative treatment plan continues in conjunction with ongoing assessment, if needed, until an effective and realistic treatment plan is achieved. Symptom severity, the presence of complex patterns of 2 or more core medical or psychiatric symptoms, and considerations of cost and patient preferences may suggest other integrative regimens when a patient has not benefited from the initial regimen.

When planning integrative mental health care, patient preferences about particular conventional and non-conventional modalities should be addressed and the importance of self-directed approaches, including a healthy diet, regular exercise, and possibly a mind-body practice, should be emphasized. Psychotherapy should be encouraged when there is chronic relationship or work stress. Planning a realistic integrative regimen begins with history taking and an initial formulation and is subsequently modified depending on pertinent new information from history and emerging assessment findings. The optimum integrative approach for one patient with moderately depressed mood may include daily aerobic exercise, a consistent yoga practice, improved nutrition, and folic acid supplementation. Another moderately depressed patient with a different history, different financial resources, and different preferences might benefit most from weekly psychotherapy, meditation, and a conventional antidepressant. The single most important objective of integrative mental health care is to develop an individualized plan that effectively addresses the patient's unique symptoms and that is acceptable to the patient, locally available, and affordable.

#### **INTEGRATIVE MENTAL HEALTH CARE: HISTORY, ASSESSMENT, FORMULATION, AND TREATMENT PLANNING**

The integrative management of mental health problems begins with a thorough history, including documentation of the severity and course of symptoms, identification of other psychiatric or medical problems, and a review of biological, psychological, cultural, and possibly spiritual causes or meanings associated with symptom(s). In the context of the patient's history, the assessment of probable psychological, biological, or energetic factors leads to a multilevel formulation on which the initial treatment recommendation is based. The most appropriate and realistic integrative regimen then is determined in the context of the patient's history of response to previous conventional or non-conventional treatments, pertinent assessment findings, a review

of evidence for reasonable treatment choices, financial or insurance constraints, availability of a recommended biological treatment or of qualified practitioners of a recommended modality, and the patient's preferences.

The practitioner should encourage the patient to initially use treatments for which there is compelling evidence for the principal symptom(s) being addressed. For example, aerobic exercise and improved sleep should be recommended if a moderately depressed patient is reluctant to take supplements or is not interested in trying a mind-body practice. Conventional drugs and the range of non-conventional treatments should not be regarded as substitutes for psychotherapy. Even in cases in which conventional drugs or non-conventional treatments are successful, important psychodynamic issues often are present. Patients who are motivated and have the capacity for insight should be encouraged to consider psychotherapy. At regular follow-up appointments, the practitioner and patient should review progress and modify the treatment plan if symptoms have not improved significantly within a mutually agreed-upon time frame or when the patient is not interested in using a recommended treatment because of adverse effects or for other reasons. If a symptom of moderate severity worsens or does not improve after an agreed-upon amount of time has passed, biological treatments should be emphasized, including appropriate conventional medications and natural products. When symptoms are severe, weekly follow-up appointments should be scheduled. When serious medical problems have been ruled out as underlying causes of symptoms, the treatment plan should be reviewed and modified as needed during follow-up appointments until an effective and realistic integrative plan is developed.

When symptoms have worsened, changed, or have not responded to treatment after a reasonable period of time, both the medical and psychiatric differential diagnoses should be reviewed. Referrals to Western or non-conventionally trained practitioners help to rule out confounding or undiagnosed problems that may be interfering with treatment response, including, for example, hypothyroidism, other endocrinological or medical disorders, or an energetic imbalance.

Many patients experience gastrointestinal distress or reduced libido when taking SSRI antidepressants and discontinue these in spite of beneficial effects. Others report nervousness or insomnia when taking SAMe or hypersomnolence with 5-HTP. It is important to take this information into account to ensure compliance when formulating a treatment plan.

Following the history and assessment, putting together an effective integrative treatment plan involves the following steps:

- identifying or prioritizing the principal symptom(s) pattern that is being addressed;
- selecting the optimum treatment regimen;
- deciding whether to use 1 treatment or 2 or more treatments in parallel;
- inferring compatibility between the selected treatments (ie, when a parallel treatment strategy is being used);
- determining a realistic integrative treatment plan that takes into account patient preferences, availability of qualified

- practitioners, and financial constraints;
- implementing the treatment plan (including referrals to conventional or non-conventional practitioners) with the patient's informed consent; and
  - following the patient at regular intervals to assess response to treatment and modify the plan if necessary in light of new information from history or assessment.

#### **STARTING AND MAINTAINING AN EFFECTIVE INTEGRATIVE TREATMENT PLAN—BASIC PRINCIPLES**

When evaluating treatment choices, it is prudent to consider substantiated treatments first. In cases in which a highly substantiated treatment was tried previously but was ineffective or poorly tolerated and the patient's history suggests that it was not tried for an adequate duration at an appropriate dose or the treatment was not administered by a qualified practitioner, it is reasonable to recommend retrying the modality with close monitoring to optimize treatment delivery. In cases in which a particular substantiated conventional or non-conventional treatment has been effective previously, it is reasonable to recommend resuming the treatment. Some patients who have benefited from a particular conventional or non-conventional treatment, however, may express ambivalence about resuming the treatment because of concerns about adverse effects. In such cases, the clinician should identify alternative treatments that are substantiated by research evidence.

#### **INTEGRATIVE MANAGEMENT OF MODERATELY SEVERE SYMPTOMS**

A patient complaining of mild to moderate depressed mood, anxiety, cyclic mood changes, disturbed sleep, diminished wakefulness, or cognitive problems should be regarded as a candidate for non-conventional treatments only after possible medical causes have been excluded by a conventionally trained psychiatrist or primary care physician. Evidence for appropriate conventional and non-conventional approaches should be presented to the patient during the initial consultation. It is preferable to refer the patient to a qualified practitioner of a recommended non-conventional approach unless his or her physician is trained in that approach. For example, a moderately depressed patient who is interested in receiving acupuncture treatment should be informed that controlled studies and extensive case reports suggest that acupuncture probably will be beneficial. A patient who requests acupuncture treatment for severe depressed mood, however, should be advised against acupuncture on the basis of insufficient research findings to support its use for this indication.

The question of combining 2 or more approaches in an initial integrative treatment plan versus successive single treatments should be discussed. If the patient elects to try only 1 approach initially, he or she should be encouraged to explore therapies that are substantiated by the highest level of evidence for the principal symptom pattern. For example, specific nutritional, somatic, or mind-body approaches should be encouraged if the patient is reluctant to take supplements or conventional medications. Conventional and non-conventional biological therapies can be

tried later if mild to moderate symptoms do not improve after a reasonable investment of time and effort. Constraints on availability and affordability of both conventional and non-conventional treatments and patient preferences should always be taken into account. The practitioner and patient should agree on benchmarks for monitoring changes in symptom severity, as well as a reasonable time frame for improvement. Discussing treatment expectations gives the patient and the practitioner a framework in which to develop a collaborative dialogue about perceived progress or delays in treatment response.

Patients who request conventional or natural product-derived treatments for mild to moderate symptoms should be encouraged to initially use self-directed approaches that are substantiated by strong evidence. Depending on the principal symptom being addressed, these may include improved nutrition, lifestyle changes, supplements, and mind-body practices in parallel before using conventional or non-conventional biological treatments. Combining self-directed approaches can be expected to improve symptoms of mild to moderate severity as effectively as conventional medications or natural products while avoiding potential problems of adverse effects and noncompliance associated with conventional drugs. Changes in lifestyle and nutrition often motivate patients to pursue healthy nutritional, exercise, or mind-body practices with demonstrated efficacy for the management of mild to moderate cognitive, emotional, and behavioral symptoms. Furthermore, incompatibility issues resulting in safety problems and noncompliance do not arise when combining lifestyle changes or mind-body practices with biologically active agents because there are no potential contraindications. If the patient elects to start a (conventional or natural product-derived) biological treatment after considering available treatment options for symptoms of mild to moderate severity, he or she should be referred to a psychiatrist, primary care physician, or qualified non-conventional practitioner to discuss the risks and benefits of substantiated treatment choices as well as potential adverse effects and incompatibilities between conventional drugs, natural products, and other biological treatments being used. Informed consent regarding potential risks associated with the selected biological treatment and its concurrent use with other medications, if any, should always be obtained and documented.

In some cases it is appropriate to encourage the patient to engage in regular supportive psychotherapy or cognitive-behavioral therapy directed at reducing the severity of the principal symptom pattern. Cognitive-behavioral therapy often is beneficial for anxiety and depression. Supportive psychotherapy is especially helpful when the patient wants to explore dynamic or interpersonal issues. Journal writing often helps patients monitor the effectiveness of different treatments. The practitioner and patient should review progress and problems with the current treatment plan at regular follow-up appointments and modify the plan if expectations for improvement are not met. Some patients are not motivated to pursue certain treatments because of adverse effects, lack of motivation, or for personal reasons. In cases in which mild or moderate symptoms worsen or remain unimproved after 1 month of consis-

tent efforts including lifestyle changes, improved nutrition, and a regular somatic or mind-body practice, it is appropriate to encourage the patient to consider biological treatment options that are substantiated for the principal symptom pattern, including conventional drugs and natural products. Conversations about conventional medications should always be deferred to a psychiatrist or primary care physician. Considerations of herbals, other natural products, or homeopathic preparations should be referred to qualified naturopathic physicians, herbalists, or homeopathic physicians. In all cases in which biological treatments are being considered, the practitioner's recommendations should be based on a thorough review of the evidence in the context of patient preferences and realistic constraints on availability and cost.

When considering biological treatments, the clinician's recommendations should take into account the patient's history of response to previous conventional and non-conventional biological agents, including reports of side effects when using specific conventional drugs or natural product-derived treatments. For example, some patients experience significant gastrointestinal distress when taking certain conventional drugs and discontinue their use. Others may report agitation after taking even small doses of SAMe or feelings of sedation or lethargy when starting on a trial of 5-HTP. To minimize the risk of an unfavorable outcome or noncompliance, it is important to obtain a history of treatment responses and adverse effects associated with previous biological treatments. After recommendations have been presented to the patient based on the above considerations, the clinician and patient should agree on a treatment plan that does not pose safety or compatibility issues with respect to other therapies that are being used. Many natural products that are beneficial for the treatment of mild to moderate mental or emotional symptoms augment the effectiveness of conventional medications, including, for example, folate, thiamine, vitamin B<sub>12</sub>, 5-HTP, and certain omega-3 fatty acids. Use of natural substances in conjunction with a conventional drug often improves treatment response. In many cases this strategy will allow the patient to reduce the dose of a conventional drug as well as adverse effects but without loss of effectiveness.

#### **INTEGRATIVE MANAGEMENT OF SEVERE SYMPTOMS**

In contrast to mild or moderate symptoms, the preferred initial approach to severe mental or emotional symptoms is built around a core conventional or non-conventional biological treatment that is substantiated for the principal symptom pattern. Depending on the patient's circumstances, motivation, and preferences, it may be appropriate to recommend changes in nutrition, exercise, stress reduction, specific supplements, psychotherapy, or a mind-body practice. Severely impaired individuals, however, often are unmotivated or lack the capacity to exercise regularly or pursue a mind-body practice. During the initial consultation, the practitioner should determine whether there is an urgent or undiagnosed medical problem and refer the patient appropriately. Finding out whether a patient is suicidal, potentially dangerous, or unable to take care of his or her basic needs is the single most important task when evaluating a patient who presents with severe

mental or emotional symptoms. A patient who is homicidal, grossly psychotic, or contemplating suicide should be monitored closely to ensure safety and accompanied to the nearest emergency room or urgent care center for evaluation and possible hospitalization. Patients who complain of psychotic symptoms, severe or rapidly progressing anxiety, depressed mood, cognitive impairment, or disturbed sleep or wakefulness but who do not require hospitalization should promptly be referred to a psychiatrist or primary care physician for evaluation and consideration of conventional medication management.

As in the evaluation of mild to moderate mental or emotional symptoms, the initial consultation with a severely symptomatic patient should include a thorough medical, social (including alcohol and substance abuse), cultural, and psychiatric history and appropriate laboratory tests (eg, thyroid studies, electrolytes, complete blood count) to rule out contributing medical problems. A thorough history will clarify the medical-psychiatric differential diagnosis and establish or exclude a history of mood swings, psychotic symptoms, progressive cognitive decline, or the presence of alcohol or substance abuse or evolving medical or neurologic illness. The psychiatrist or primary care physician should make referrals to appropriate medical specialists when laboratory studies are abnormal. A commonly cited example is the association between abnormal levels of thyroid hormones (elevated thyroid-stimulating hormone or low free T4) and persisting depressed mood. Anemias or other disorders of the blood, electrolyte or metabolic derangements, and other markers of medical illness often are associated with depressed mood. Correcting primary medical problems often results in symptomatic improvement. Evolving neurological symptoms and a history of cancer or heart disease warrant automatic referrals to specialists in these areas of Western medicine before non-conventional treatments are considered. Patients who are abusing alcohol or an illicit substance should be referred to an appropriate rehabilitation program.

Assuming that medical causes and substance abuse have been excluded, follow-up appointments should be scheduled in 1-to-2-week intervals. The patient should be given clear written instructions to contact the nearest emergency room or call 911 in the event of worsening psychotic symptoms or homicidal or suicidal thoughts. When 2 or more principal symptom patterns are present, the clinician and patient must consider whether to treat them simultaneously or sequentially. In most cases, a core symptom will probably constitute the focus of clinical attention at any time during treatment, and a treatment plan will be directed at that principal symptom pattern. When 2 principal symptoms are being addressed at the same time, it may be necessary to combine disparate treatment approaches, especially when no single approach is efficacious for both principal symptoms. The patient should be encouraged to first try only conventional, non-conventional, or integrative approaches that have been proven effective for the principal symptom(s). In cases in which most substantiated approaches have been tried with little benefit, it is reasonable to consider combinations of 2 or more substantiated approaches or combinations of substantiated and potentially effective treatments. This

approach is analogous to “augmentation” strategies in conventional psychiatry and should continue until an effective integrative plan is achieved or all reasonable treatment combinations have been exhausted and the patient has not improved. Reasonable integrative strategies will vary based on the principal symptom pattern being treated, as well as patient preferences and constraints. The practitioner who is managing the patient’s care should obtain the patient’s written consent to exchange information with other practitioners who are seeing the patient. The treatment plan should be reviewed carefully and modified at follow-up appointments until the most effective combination of conventional and non-conventional treatments is identified.

In cases in which severe mental or emotional symptoms fail to respond after a reasonable period of time or the patient is non-compliant with treatment because of adverse effects or lack of motivation, it is appropriate to review the medical and psychiatric history. In such cases it may be helpful to refer the patient to a Western medical specialist or non-conventional practitioner to rule out the possibility of undiagnosed psychological, medical, or energetic causes or meanings of symptoms that are not being addressed adequately. These may include, for example, self-defeating psychological defense patterns, hypothyroidism, other endocrinological disorders, degenerative neurological disorders, and cancer, as well as energetic imbalances or spiritual problems as described in Chinese medicine or Ayurveda. It is important to invite the severely symptomatic patient to take an active role in all treatment decisions to improve the clinician-patient alliance, improve patient autonomy and motivation, and enhance compliance.

#### **INTEGRATIVE MEDICINE—IMPLICATIONS FOR THE FUTURE OF MENTAL HEALTH CARE**

Western medicine will become more integrative as clinicians and patients increasingly use approaches from disparate systems of medicine. Novel understandings of complex relationships between biological, energetic, and informational processes associated with mental illness will lead to more effective integrative assessment and treatment strategies addressing the causes or meanings of symptoms at hierarchic levels of the body-brain-mind. This process will result in an increasingly integrative perspective in Western medicine and novel explanatory models of illness and healing that address the empirical and metaphysical assumptions underlying contemporary Western science and medicine. This trend will accelerate in response to the growing intellectual openness in Western culture to non-conventional systems of medicine, resulting in the evolution of conventional Western psychiatry toward an integrative model of mental health care incorporating both scientific and intuitive understandings of normal psychological functioning and mental illness. The integrative mental health practitioner of the 21st century will rely on history and conventional psychological and biological assessment findings together with information describing the patient’s energetic balance to plan individualized multilevel treatment strategies. Future integrative approaches addressing psychological or spiritual meanings and

biological or energetic causes of symptoms will lead to more accurate and deeper understandings of mental illness, and by extension, more effective treatments.

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