The Application of Mindfulness to HIV

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A 37-year-old HIV-positive gay man with a long history of multiple substance abuse and sexual addiction discovers that it is the pain of his family’s rejection that drives his impulsive behavior: “There are times when I just want to be anywhere else but here.” A 42-year-old HIV-positive gay man living with an abusive partner notices that when he comes home, his body becomes tense, he feels anxious, and he is unable to complete basic self-care tasks. A 34-year-old woman with HIV suffers from severe stress and anxiety and realizes her obsessive professional drive comes from a desperate need to “look normal.”

These are all insights achieved through mindfulness, a self-awareness practice based on mindfulness meditation, which is an ancient consciousness discipline. Jon Kabat-Zinn defines mindfulness as paying attention purposely, non-judgmentally, moment to moment. Mindfulness is the heart of the Buddhist tradition of vipassana, translated literally as “clear seeing.” Through the practice of observing the mind’s activity—rather than solely reacting to its content—mindfulness allows people to recognize the previously unconscious forces that influence their behavior, mood, and stress response. Proponents of mindfulness believe this practice reduces suffering, increases insight, and leads to a more direct experience of reality.

Stress and Mindfulness

Common to most definitions of stress is the concept of appraisal. The stress response is triggered when a person appraises a stressor as demanding greater personal—physical or mental—resources than that person can muster.

For example, when a person with chronic lower back pain experiences an episode of pain, his mind almost immediately shifts its attention to higher cognitive and emotive functions in response to the pain. He might imagine a bleak future scenario: “There’s my pain again. It will never go away.” Or the pain might lead to an angry response: “This isn’t fair. I don’t deserve this pain.” Or the pain might provoke him to generalize: “My body just isn’t any good any more.”; catastrophize: “What if this gets worse and I become crippled?”; or personalize: “Why do these terrible things always happen to me?”

In all these cases, the negative emotional reaction triggers a stress response in the body that, when repeated chronically, is deleterious to both mental and physical health. With the awareness that comes from mindfulness practice, however, a person can uncouple the direct experience—physical sensation in the lower back—from the indirect experience—the thoughts and emotions about the pain. This shift can actually alter the individual’s appraisal.

For the person with back pain, the bare truth of the moment is that he felt a physical sensation in his lower back. It had certain qualities, for example, burning or achy—that he experienced directly. His secondary thoughts and emotions, however, are mental events, not incontrovertible truths, and they may actually contribute to his suffering more than the original physical sensation. They represent the activity of the mind in the moment and are separate from the stimulus that provoked them. They too can be fully experienced and observed. By fostering this clarity of what is true in the moment and what is a secondary reaction of the mind, the person can appraise the pain as less threatening. As these reactive, secondary thoughts have less power, their negative emotional consequences diminish, and this reduces the stress response.

Mindful awareness during a stressful event also allows a person more choices of response, leading to more adaptive coping behaviors. As a simple example, if a man is angry at a co-worker but unaware that he is feeling angry, his anger may influence his behavior in ways that are not subject to his
Mindfulness, with its roots in eastern philosophy and religion, has comfortably migrated to western secular practice and become a therapeutic tool. As Kate Kitchen and Bill Gayner suggest in this issue of FOCUS, mindfulness enriches the therapeutic process by heightening awareness of the present moment for both client and therapist, and by highlighting the role of the present in emotional health and adjustment.

It is no surprise that mindfulness should find a welcome reception in the world of HIV, an unknowable and untreatable disease that in the 1980s left “primary care” to those with psychological or spiritual support to offer. The words “talking cure,” as psychotherapy was called in its earliest days, became even more meaningful than Freud might have imagined during a time when medicine could offer little hope. This beginning resulted in a lasting legacy, even as medical options emerged: the traditional doctor-patient relationship shifted to a more active alliance and psychological, social, and spiritual support have remained central in sustaining the health and well-being of people with HIV.

The two articles in this issue explore the role of mindfulness as a tool for HIV-related mental health care. Kevin Barrows focuses, in particular, on mindfulness-based stress reduction, a structured program that includes meditation, which has long been prescribed for reducing stress. But meditation in the context of health promotion has come a long way, and Barrows reviews the connection between stress and immunity, stress reduction and mindfulness, and several practical applications of mindfulness.

Kitchen and Gayner examine the capacity of mindfulness to nurture presence and, thus, support the central aspect of the psychotherapeutic relationship. They also focus on the practical applications of mindfulness to psychotherapy—to help clients deal with stress, depression, and other emotional challenges.

Both articles discuss the philosophical aspects of mindfulness. But what is exciting about these discussions are the connections the authors make beyond standardized applications. Even in an age of effective and complex medical treatment, the simple practice of mindful awareness can work its own magic—transforming the quality of the counseling experience for both counselor and client, and transporting the “talking cure” to a deeper level.

The possibility that stress reduction might benefit people with HIV is also consistent with what is known about the physiological effects of stress. Norepinephrine, a hormone released during stress, causes CD4+ cells to increase expression of two surface receptors that are used by HIV to enter and infect cells. By reducing stress, mindfulness might decrease norepinephrine release, thereby decreasing the expression of these receptors and decreasing HIV viral replication and CD4+ cell death.

At the Osher Center for Integrative Medicine at University of California San Francisco, researchers are conducting the largest randomized controlled trial of mindfulness. They are looking at the effects of an eight-week mindfulness-based stress reduction program on a range of outcomes: psychological, including perceived stress, appraisal, depression, anxiety, quality of life; stress physiology outcomes, including autonomic nervous system reactivity, and levels of cortisol, epinephrine, norepinephrine, DHEA, and testosterone; and HIV-related outcomes, including viral load and levels of CD4+ cells, CD8+ cells, cytokines, CD4+ receptor expression, and natural killer cells.

**References**


The Principles and Tools of Mindfulness

Mindfulness was introduced into modern medicine more than 25 years ago by Jon Kabat-Zinn and his colleagues at the University of Massachusetts. Beyond its incorporation into individual psychotherapy, it is currently employed in several different group formats, the original and most studied being mindfulness-based stress reduction. Mindfulness-based stress reduction is an intensive eight-week group program that introduces people to mindfulness practice. Sessions typically last two to three hours, and there is a seven-hour silent retreat held during the sixth week. A single instructor usually leads a group of 15 to 25 participants. Although instructors often have a formal degree in a mental health or medical profession, it is much more important that they have a personal history of mindfulness practice.

Each session has three components: experiential, discussion, and informational. The experiential component includes a formal mindfulness practice such as the body scan (bringing awareness through the body), mindful movement (yoga postures or Chi Gung), or sitting meditation. The group discussion component allows participants to ask questions about the application of mindfulness in their own particular situations and report back about their experiences using mindfulness practice. This process broadens any one individual’s experience; participants hear dozens of other perspectives on and applications of mindfulness.

In addition to experiential and group discussion components in each class, instructors present information about mindfulness, usually when relevant themes emerge from the group discussion. Key themes include being present, understanding how perception influences our health and behavior, working with stress and unpleasant emotions or sensations, communication, and bringing mindfulness into daily life. The instructor’s personal experience with mindfulness practice is invaluable in this role. The instructor also uses poetry to convey important ideas, which is one of the most powerful and popular parts of the program.

When participants raise personal psychological content, instructors respond by emphasizing how mindfulness can be applied to this content rather than by delving into the content as might be done using a psychoanalytic approach. The focus shifts to the ways a participant might simply witness—and directly experience without judgment—the thoughts, emotions, and sensations that arise. This process, in addition to expressing the fundamental teachings of mindfulness, ensures that dialogue with an individual participant is relevant to the whole group.

Similarly, the instructor can demonstrate mindfulness in action when something unexpected or provocative occurs. For example, if a participant becomes sad, the instructor can guide the participant to examine the present moment experience of sadness. Each time the participant leaves that direct experience and begins thinking, the instructor brings him back with questions about his present moment. “What are you feeling in your body right now?” “How does this sadness feel in your mind?” “What thoughts are you noticing?” The instructor may help label the content that the participant describes, saying, for example, “It sounds like the thought that this might never change really frightens you.” But, the instructor will not enter into discursive dialogue about the content, never asking, for example, “Is it really true that this might never change?”

This is a key distinction between mindfulness and cognitive behavioral therapy and, in fact, between consciousness disciplines from the East and psychological sciences from the West. While both techniques begin with awareness of thoughts and their effect on emotion, cognitive-behavioral therapy will engage with thoughts in an effort to change them. Mindfulness, on the other hand, recognizes that a thought is a mental event like so many that come and go perpetually. It observes the process, rather than examining the content, of thinking. Thoughts are perceived as inevitable, spontaneous products of the mind, not as truths that always require a response. The often-quoted line of mindfulness-based stress reduction instructors is: “Thoughts are not facts. Thoughts are just thoughts.”

Mindfulness and other practices from the East assume that a human being’s identity is more than his or her mind, body, personality, and ego. Eastern approaches assert that there is an awareness that can witness the activity of the mind without identifying with it. A playful quip—“That’s just your mind. . . . Don’t take it personally!”—can lead to profound ramifications—“If I’m not my mind, then who am I?”—resulting not only in mental health benefits but in transformative changes. Finally, unlike other psychological approaches, mindfulness requires training and daily practice.
Efficacy of Mindfulness-Based Stress Reduction

Over the last 25 years, researchers have conducted more than 35 trials of mindfulness-based stress reduction and related programs. They have studied populations including people with chronic pain, fibromyalgia, depression, anxiety disorders, eating disorders, and cancer, as well as general clinical populations, inner-city populations, medical and nursing students, and others. All but one study show mindfulness to be beneficial. These studies consistently demonstrate moderate to large symptom improvement, for example, reduced pain or fewer panic attacks. Also, and more striking, there have been consistent large reductions in psychological symptoms across the studies. Finally, all studies that have included follow-up have shown maintenance of benefits over time.

There are a few studies of particular interest to the application of mindfulness-based stress reduction to HIV. One small study of people with HIV found a significant increase in natural killer cell number and activity. A controlled trial of 25 healthy volunteer subjects demonstrated improved immunity in the form of higher antibody titers to influenza vaccine. Patients with severe psoriasis, a skin condition mediated by T-cells, yielded rapid clearing of plaques. Lastly, several studies have found reductions in depression and anxiety.

What may even be more compelling, however, are the effects of mindfulness that remain unrevealed in the current literature. Virtually all mindfulness-based stress reduction teachers report that many graduates experience profound changes in beliefs, attitudes, and perspectives. A person’s relationship to both the distressing and desirable content of his or her life can shift dramatically. Occasionally, these more profound and abstract effects have been captured using novel measures (for example, measures of spirituality and self-compassion) and qualitative research, but much remains unexplored.

Mindfulness and the Practitioner

Health care practitioners can employ mindfulness in three ways: helping the client practice mindfulness, implicitly bringing mindfulness into the interaction, and explicitly bringing mindfulness into the interaction. First, a practitioner can refer the client to one of the mindfulness-based programs mentioned above. One-on-one training can also be beneficial, especially with participants who already have experience with mindfulness practice, however, it costs more and sacrifices the benefit of a group dynamic.

Second, the personal practice of mindfulness may foster in the therapist concentration, patience, acceptance, and non-striving, all of which can improve the psychotherapeutic process. Mindfulness may also better prepare the therapist to see his or her own thoughts and emotions before these can negatively impact the therapeutic interaction.

Finally, providers can explicitly integrate mindfulness by teaching clients mindfulness techniques (such as awareness of breathing or sitting meditation) and mindfulness principles (such as detached observation of mental activity). This requires time and skillful assessment to determine whether the client is receptive. Practitioners who either explicitly or implicitly employ mindfulness must commit to their own ongoing personal practice.

Conclusion

The ancient practice of mindfulness has proven itself to be an effective medicine in modern times. Scientific research has shown benefits for many physical and mental health conditions. Science also provides compelling evidence to theorize that mindfulness may help people with HIV directly. The ongoing study of mindfulness at places such as the Osher Center for Integrative Medicine offers people with HIV the opportunity to participate in this exciting frontier of research.

Clearinghouse: Mindfulness and Health

References


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The Heart of Mindfulness and Its Role in Psychotherapy
Kate Kitchen, LISW and Bill Gayner, MSW

Jon Kabat-Zinn describes mindfulness as paying attention "on purpose, in the present moment, and nonjudgmentally." Most people have had such moments of absorption. These are times when all attention becomes focused, when a person feels completely connected to life, when he or she does not feel pulled in any direction but experiences the moment fully. Kabat-Zinn suggests that there is a way to invite this mindfulness into daily life.

The concept of presence may help therapists better understand mindfulness. All good clinical work begins with presence, a conscious use of self that involves connecting mind and heart while bringing attention to the moment of the clinical interaction. This provides the foundation for building rapport and therapeutic alliance. Therapeutic interventions are powerful in large part because the healing quality of this presence and its capacity to enable the client to feel seen is itself transformative. Presence is deepened in both therapist and client through the practice of mindfulness.

**References**
4. Schmidt S. Mindfulness and healing interventions: A growing, evidence-based literature suggests that mindfulness has a role in psychotherapy. Most prominently, it is widely used in cognitive-behavioral therapies such as mindfulness-based cognitive therapy, dialectical behavioral therapy, and acceptance and commitment therapy. Mindfulness can also be used as an adjunct technique within a larger psychotherapeutic frame. Mindfulness can be a flexible tool in psychotherapy with people with HIV, for whom anxiety, depression, distress, and trauma may be present. Therapists who use it must engage in their own mindfulness practice in order to be able to explain and teach the required skills and respond effectively to clients’ questions.

Mindfulness often begins with learning concentration techniques that involve focusing attention on a narrow object, most often the sensations associated with the breath in one area of the body: the nostrils, chest, or abdomen. These practices tend to induce what Herbert Benson calls the “relaxation response,” fostering calm and a sense of wholeness. Concentration can be used for emotional regulation in therapy, useful for helping clients cope with overwhelming affect.

But mindfulness is more than a technique for regulating affect by inducing calm, and this is not its true purpose. As the mindfulness researcher, Steven Hayes, has shown, trying to get rid of unwelcome thoughts and emotions may reduce distress in the short term, but in the long term, it can backfire, producing chronic states of anxiety and depression.

Mindfulness involves cultivating acceptance of whatever sensations, emotions, or cognitions arise whether pleasant or unpleasant. As such, it can be an important aid in teaching clients skills fundamental to both accessing and processing negative schemas, that is, the deep meanings...
that inform intense difficult emotions and deeply entrenched behavior.6 Through mindfulness, clients learn to attend to unwelcome thoughts, emotions, sensations, and behaviors without being overwhelmed and immediately trying to get rid of them. Clients learn to befriend themselves in the terrain of their own darkest fears and hurts. In doing so, they discover that attention, informed by openness, kindness, and a nonjudgmental attitude, is healing. Patterns that once were rigid, opaque, and automatic soften and open to new options. For example, a client once complained of a strong pain that he attributed to HIV or HIV antiviral medications. Invited to bring a gentle, nonjudgmental mindfulness to the area of pain—“to dip into the pain directly without trying to change it or make it go away”—the client realized that the experience was more complex. What he had perceived as overwhelming physical pain was actually an attempt to shout down “unbearable” emotional and cognitive content—an implicit fear of humiliation associated with the stigma of living with HIV. Opening into this experience, his physical pain dissolved. Further into the session, mindfulness led to reprocessing memories of childhood abuse.

**Mindfulness-Based Cognitive Therapy**

Mindfulness may be a powerful tool for responding to the potential for relapse in major depression. Zindel Segal and his colleagues theorize that vulnerability to depressive relapse arises from fear that experiencing depressive associations will kindle a major depressive relapse, and that it is the avoidance of these associations that actually leads to the vulnerability to relapse.7 Their approach—mindfulness-based cognitive therapy—teaches people who are in remission from major depression to attend to difficult emotions in a new way, intentionally and non-judgmentally. It has been shown to be successful in preventing depressive relapse in patients with more than two major depressive episodes.8 A major theme of the approach is “stepping out of automatic pilot.” This involves learning how to “decenter from cognitions” (avoid viewing thoughts as facts) and how to “disidentify from cognitions” (avoid equating one’s thoughts with one’s identity). Mindfulness-based cognitive therapy provides a road map for understanding the illness of depression, a language clients can use to name what they are experiencing, and techniques for responding more actively to depression in their everyday lives.9

In addition to the meditation practices taught in mindfulness-based stress reduction for HIV-positive men.

**Comments and Submissions**

We invite readers to send letters responding to articles published in *FOCUS* or dealing with current AIDS research and counseling issues. We also encourage readers to submit article proposals. Send correspondence to rob.marks@ucsf.edu or to Editor, *FOCUS*, UCSF AIDS Health Project, Box 0884, San Francisco, CA 94143-0884.
Recent Reports

Mantram Use and Mental and Spiritual Health

In his overview article, Kevin Barrows discusses the connections between mindfulness, stress, and the human immune system, and explores the ways that these connections influence the physical and mental health of people with HIV. This San Diego Veteran’s Administration study looked at the effect of mantram (another word for "mantra") repetition on HIV-positive participants’ psychological and spiritual well-being. The following summary was adapted from the article and its abstract:

The silent repetition of a mantram—a word or phrase with spiritual associations repeated throughout the day—improved the well-being of 46 HIV-positive subjects when compared to 47 control group subjects.

Researchers examined the effect of mantram repetition in three areas: psychological distress (intrusive thoughts, stress, anxiety, anger, depression), quality of life enjoyment and satisfaction, and existential spiritual well-being. Subjects, randomly assigned to the intervention or to an HIV information and discussion control group, were evaluated at four time points: pre-intervention (week 1 of the study), mid-intervention (week 5), post-intervention (week 10), and follow-up (week 22).

Compared to control group participants, mantram group participants—who received instruction, participated in discussions about mindfulness, and undertook meditation practice—showed significantly greater improvements in reducing anger and increasing spiritual faith and spiritual connectedness. Actual mantram practice, measured daily and weekly by wrist counters, was inversely associated with non-HIV-related intrusive thoughts and positively associated with quality of life, total existential spiritual well-being, meaning/peace, and spiritual faith. Researchers concluded that a mantram group intervention and the actual mantram practice each make unique contributions for managing psychological distress and enhancing existential spiritual well-being.

The Effect of Meditation on Cancer Patients
Ott MJ, Norris RL, Bauer-Wu SM. Mindfulness meditation for oncology patients: A discussion and critical review. Integrative Cancer Therapies. 2006; 5(2): 98–108. (Dana-Farber Cancer Institute, Boston, Massachusetts; Harvard Medical School, Boston, Massachusetts.)

Barrows notes in his article that researchers have studied mindfulness and its effects on physical illness for at least 25 years, with populations including people with chronic pain, fibromyalgia, and cancer. The Dana-Farber Cancer Institute and Harvard Medical School study below supports the efficacy of mindfulness meditation in improving the psychological well-being of people with cancer. The following summary was adapted from the article’s abstract:

A review of the literature found consistent benefits associated with mindfulness interventions in populations of people with cancer. Researchers systematically critiqued articles found through MEDLINE, PsycINFO, Ovid, and published conference abstracts, assessing the purpose statement, study design, sample size, characteristics of subjects, characteristics of mindfulness intervention, outcomes, and results.

The search produced nine research articles published in the past five years and five conference abstracts published in 2004. Most studies were conducted with breast cancer and prostate cancer patients and were performed in a clinic-based group setting. Participants experienced consistent benefits, including improved psychological functioning, reduced stress symptoms, and enhanced coping and well-being.

The small number of positive studies reviewed suggest the need for more research, using randomized, controlled designs, and including different cancer diagnoses and treatment settings. Future studies might also expand outcomes to include quality of life and health-related outcomes, explore mediating factors, and discern dose effects and optimal frequency and length of home meditation practice.

Meditation and Anxiety

In their article, Kate Kitchen and Bill Gayner note that mindfulness can be used as a psy-
chotherapeutic intervention with HIV-positive clients who experience anxiety. This Cochrane Collaborative study provides some support for the use of meditation as a tool for patients with anxiety disorders. The following summary was adapted from the article’s abstract:

Two randomized clinical trials found that meditation interventions were comparable in efficacy to other kinds of relaxation therapies in reducing anxiety.

Investigators searched electronic databases, conference proceedings, and book chapters, and contacted study authors and experts, identifying only two studies that met their criteria for analysis. These studies sought to test a concentrative meditation or mindfulness meditation intervention and included patients with anxiety disorder diagnoses, with or without another additional psychiatric conditions. Both studies were of moderate methodological quality and compared the target intervention with active controls, including another type of meditation, relaxation, or biofeedback, or “conventional treatment,” defined as anti-anxiety drug treatment. The trials lasted from 12 weeks to 18 weeks.

In one study, transcendental meditation showed a reduction in anxiety symptoms. The second study, which compared kundalini yoga with relaxation/mindfulness meditation, found no statistically significant difference in Yale-Brown Obsessive Compulsive Scale scores between groups. The overall dropout rate in both studies was high (33 percent to 44 percent). Further, the small number of studies included in this review do not permit broad conclusions.

Applying Mindfulness in Primary Care Settings

Kitchen and Gayner note that mindfulness has shown promise as a tool to prevent relapse in major depression. This small University of Glasgow study suggests mindfulness-based cognitive therapy may be effective in primary care settings for treating patients who experience anxiety alone or the combination of anxiety and depression. The following summary was adapted from the article’s abstract:

A small study of 13 patients with recurrent depression or recurrent depression with anxiety concluded that mindfulness-based cognitive therapy may have a role in treating active depression and anxiety in primary care.

Researchers conducted semi-structured qualitative interviews with participants three months after participants completed an eight-week intervention that integrated mindfulness meditation practices and cognitive theory. They administered Beck Depression Inventories and Beck Anxiety Inventories before the intervention and at the follow-up interview.

The majority of participants found mindfulness training both acceptable and beneficial. For many of the participants, being in a group was an important normalizing and validating experience. However, most of the group believed the course was too short and thought that some form of follow-up to the group course was essential. More than half the participants continued to apply mindfulness techniques three months after the course had ended.

There were statistically significant reductions in mean depression and anxiety scores at the three-month follow-up. The mean pre-course depression score was 36 and the mean post-course score was 18. Participants with anxiety experienced similar reductions, with a mean pre-course anxiety score of 32 and mean post-course score of 21. Overall, 72 percent of participants showed improvements in Beck Depression scores and 63 percent showed improvements in Beck Anxiety scores. A minority of participants continued to experience significant levels of psychological distress, particularly anxiety.

Next Issue
HIV presents young people with different challenges from the ones it poses to their adult counterparts. In the August issue of FOCUS, Lori Wiener, PhD, DCSW, Coordinator of the Pediatric Psychosocial Support and Research Program, and Emilie Steffen-Smith, Clinical Research Fellow, both of the Pediatric Oncology Branch at the U.S. National Cancer Institute, discuss the developmental and psychosocial challenges of youth infected with HIV in utero or in childhood as these individuals transition to adulthood.

Also in the August issue, behavioral scientist Jennifer S. Galbraith, PhD, a Behavioral Scientist in the Division of HIV/AIDS Prevention at U.S. Centers for Disease Control and Prevention, describes the populations of youth currently at greatest risk for becoming infected with HIV.
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