Mindfulness-based stress reduction for HIV-positive men - a randomized trial

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HIV infection carries many burdens, including unexpected health challenges, stigma and the demands of living with a chronic, serious health condition. Researchers have found that these burdens, if not managed, can decrease “emotional well-being and quality of life” and can increase some HIV-positive people’s susceptibility to mental health issues, including anxiety and depression.

The World Health Organization (WHO) recommends that psychosocial treatments that reduce stress and emotional distress and improve psychological functioning should be routinely offered as part of standard care for HIV-positive people.

A team of researchers at Mount Sinai Hospital in Toronto has conducted a randomized controlled trial of eight weeks of mindfulness-based stress reduction therapy (MBSR, an explanation of this form of therapy appears later in this CATIE News bulletin) versus no MBSR among HIV-positive men to assess its impact on improving quality of life and symptoms of distress. The men in the study were monitored for up to six months. The team found that MBSR increased positive psychological functioning and reduced unhelpful ways of coping with stress compared to men in the study who did not received MBSR. Overall, these benefits were sustained for up to six months. However, participants who did not receive MBSR also showed improvements in anxiety and depression.

About MBSR

According to Canadian psychologist Scott Bishop, PhD, MBSR was “adapted from traditional mindfulness meditation practices” originating from Buddhism. In MBSR, he says, therapists teach participants to become more aware of “thoughts and feelings and to change their relationship with them.” Dr. Bishop adds: “Mindfulness allows the participants to step back from thoughts and feelings during stressful situations rather than engaging in anxious worry or other negative thinking patterns that might otherwise escalate a cycle of stress reactivity and contribute to heightened emotional distress.”

During MBSR, participants learn a variety of meditation practices, including seated and walking meditations, a body scan that is done lying down and yoga. Many practices begin with focusing attention on breathing. As their attention wanders, participants are encouraged to accept and acknowledge their thoughts and feelings and redirect their attention back to their breathing. As the course progresses, participants develop a more direct exploration of difficult sensations, feelings and thoughts.

Typically, MBSR consists of eight to 10 weekly sessions, during which participants are guided through a meditation practice. Participants are taught about the effects of stress and emotions on their mind and body and how to handle stressful situations using mindfulness. They also practice meditating at home each day using CDs that help guide them. There is more than an hour of practice and homework each day.

According to Dr. Bishop, MBSR “involves a reflective, warm, accepting and contemplative approach to situations, open-mindedness and a tendency towards curious introspection.”

Some health conditions and MBSR

MBSR has been adapted to help people with serious health conditions, particularly cancer. According to Dr. Bishop,
evaluation of several studies of MBSR in people with cancer suggests that “it can help some people get relief from anxiety, stress and fatigue.” Some research teams have found that MBSR may be helpful in relieving feelings of distress in people who have anxiety or fibromyalgia or in women undergoing menopause. A recent analysis of many clinical trials of MBSR found that this approach is a promising treatment for anxiety and mood disorder, particularly in people who are already receiving counselling for such issues.

**MBSR, HIV and the immune system**

Two studies with HIV-positive people conducted in the U.S. suggest the possibility that this intervention may, for a few months, help delay the decline in CD4+ cell counts or improve the functioning of natural killer (NK) cells (part of the immune system that can have anti-HIV and anti-tumour activity). However, both of these studies were not designed to measure (and therefore did not) if the apparent improvements in CD4+ cell counts or NK cells resulted in enhanced resistance to infections or improved survival. HIV infection initiates and results in complex changes that slowly degrade the immune system and other parts of the body. Certainly stress plays a role in adding to the burden of HIV’s effects. But MBSR, by itself, is unlikely to result in the dramatic improvement seen with many people who use potent anti-HIV therapy, commonly called ART or HAART.

**The Toronto MBSR studies**

Several years ago researchers at Mount Sinai Hospital in Toronto conducted a pilot study of MBSR and found that it had beneficial effects on the emotional health of participants. Spurred by these results, they recruited participants for a larger study, also in HIV-positive gay men. For this larger study, participants were randomly assigned to be in one of the following two groups, where the following happened:

- MBSR – this was done for eight consecutive weeks with 78 men
- Treatment as usual – this was done for eight consecutive weeks with 39 men who acted as the comparison or control group. Treatment as usual didn’t mean that these 39 people specifically received treatment as part of the study. Rather, if they were currently receiving psychological or other therapies outside of the study, they continued to do so.

Participants varied in age from 25 to 64 (with an average of 44 years) and had been living with HIV for at least a decade. On average, they had similar educational, income and marital status. About half of the men were receiving psychotherapy or counselling when they were recruited for the study and about 90% were taking ART.

People who had severe untreated depression or untreated substance abuse were not enrolled, as researchers were concerned that they would be unable to benefit from MBSR. People who had been treated for at least two months for depression or anxiety could enroll in the study and were asked to not change their medication or counselling while in the study.

As part of the screening process for the study, participants underwent psychological evaluations. The researchers commented that “this was a sample of individuals with moderate to severe distress and who are clearly struggling with coping with HIV.”

Although the controlled, randomized aspect of the study lasted for eight weeks, participants were regularly monitored and evaluated for a total of six months.

**Results**

Overall, participants from both groups showed a general improvement in psychological functioning. At the end of the study (month six), there were almost no differences in assessments of depression or anxiety between participants in the two groups.

This lack of differences between the groups could be due to the relatively small scale of the trial or that people in the control group improved as a result of being in a study with repeated assessments. Since half of the people in the control group were receiving counselling independently of the trial, their improvement could have been due to counselling.

Using a mindfulness questionnaire, the Toronto team found that mindfulness improved among participants who received MBSR. In previous studies, such a change has been linked to improved ways of coping with distress.
However, in previous assessments of MBSR studies, Dr. Bishop has indicated that MBSR may increase feelings of social support because it takes place in a group setting. The Toronto research team expressed cautious optimism with its findings about MBSR, as it seems that the “increased mindfulness ability [seen in the present study] may be associated with enhanced psychological functioning.” The researchers note that “within the context of the array of services provided by a psychiatric clinic and its referral network, MBSR has a significant role to play in the overall treatment of gay men living with HIV.”

In the future, the Toronto team hopes to continue research with MBSR to study and help meet the “unique psychosocial needs of [HIV-positive people] using briefer, more cost-effective formats where possible.” Such trials should encompass other groups of people who might benefit from MBSR (as part of a comprehensive approach to improving mental wellness), including HIV-positive women, Aboriginal people and new Canadians.

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—Sean R. Hosein

REFERENCES:

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