

Massage and Recreation Therapy for Reducing Stress: Rapid Review Response

Question

What are the benefits of massage therapy and recreation therapy for reducing stress for people living with HIV/AIDS?

Key Take Home Messages

- There are few studies on the effects of massage on stress, quality of life or immune measures for people living with HIV/AIDS as two systematic reviews (one completed and one in-progress) and other review papers have identified only four studies each with small sample sizes (1-4)
- Most people living with HIV/AIDS (PHAs) who try massage find it helps relieve stress and decrease anxiety; some people even experience increases in immune cell presence and improved peripheral neuropathy. (5;6)
- Massage therapy can enhance the lives of PHAs in both the physical and psychological realms by providing a personal touch other therapies do not generally provide. (2)
- One study assessed the effects of massage in PHAs with stress levels comparable to people who had just been told they were positive and found that massage considerably decreased stress levels to the level of those who are HIV negative. (7;8)
- Scafidi et al (1996) studied HIV-positive babies and the mother of each child served as the massage therapist. The massaged babies presented with lower stress behaviors and the mothers showed lower stress levels. (2;9)

The Issue and Why It's Important

A significant and growing trend in health care is the integration of many complementary and alternative medicines (CAMs).(10) CAM describes a wide range of medical approaches to maintaining health and treating illness and can include mind/body techniques (i.e. meditation), touch therapies (i.e. massage), physical agents (i.e. aromatherapy), and 'alternatives' to conventional medical treatments offered by doctors and pharmaceutical companies.(5;6) Therapeutic recreation has traditionally provided many CAM approaches embedded in the rubric of stress management.(10)

Many PHAs are drawn to CAMs to improve their general well being as CAMs also incorporate ideas of spiritual, mental, emotional and sexual well being that may help PHAs deal with issues beyond the physical ailments related to HIV disease including stress.(5;6)

Avoiding stress is important to the health of PHAs as even small amounts of stress can potentially have a negative effect on the immune system.(10) Research suggests that PHAs with more than average amounts of stress often become ill two to three times faster than PHAs without excess stress.(10)

What We Found

There are few articles written on massage therapy as a stress reducer for people living with HIV. Two systematic reviews (one completed and one in-progress) and other review papers have identified only four studies each with small sample sizes. (1-4) Several other studies we identified also discuss additional outcomes of massage therapy such as quality of life issues and immune status. One of the systematic reviews we identified is currently only published as a protocol but is undergoing peer review for publication in the Cochrane Library in the near future.(3) We contacted the lead author of this review (Susan L. Hillier, Centre for Allied Health Evidence, School of Health Sciences in Adelaide, Australia) and were provided with articles included in the review.

Stress and Massage

Stress is among the most prevalent and distressing symptom in PHAs.(10) Massage therapy may play an important role in helping patients cope with the various symptoms of HIV/AIDS and boosting the immune system at the same time.(2)

For treatment to be most beneficial, a full-body stress management approach, including pressure strokes, such as acupressure, trigger-point therapy and deep strokes, lasting approximately one hour at least once or twice weekly over an extended period of months, should be used.(2) Massage administered by a different gender may also be more effective.(1)

Effects of Massage on Other Health-related Outcomes

Several studies have also revealed additional benefits of massage therapy for people living with HIV:

- Ironson et al (1996) found a beneficial increase in important immune system indicators (Natural Killer (NK) cell number, NK cell cytotoxicity, soluble CD8, and the cytotoxic subset of CD8+) among HIV-positive men following an intensive one month long massage therapy intervention.(8;11) The improvement in immune system indicators suggest an additional source of immunity that might be enhanced by massage therapy.(11) The positive effects of massage on immune system indicators might be explained by the ability of massage therapy to reduce stress and anxiety, which in turn might help lower cortisol levels resulting in improved immune function.(11)

- In a study of 73 HIV-positive men by Antoni et al. (2006), it was found that cognitive-behavioral stress management (including massage therapy) significantly reduced anxiety, anger, total mood disturbance and perceived stress, and lowered norepinephrine output. Even after six to 12 months, there was a significant improvement in immune system indicators (T-cytotoxic/suppressor (CD4+CD8+) lymphocytes).(2;12)
- Williams et al (2005) conducted a randomized control trial with 58 individuals with late stage AIDS disease and found that a combination of meditation and massage significantly improved overall and spiritual quality of life versus those receiving standard care or either massage or meditation interventions alone. (11)
- In one study, medical care utilization was significantly decreased by PHAs receiving combined massage and stress management.(1)

Factors That May Affect Local Applicability

There are a few key factors to consider when interpreting the evidence in this summary. First, the only completed systematic review addressed CAM for people living with HIV/AIDS and provided only minimal descriptions of the studies related to massage therapy. The single studies we did locate draw on small sample sizes, which limit the amount of confidence that can be placed on their findings. Also, most of the articles reviewed were US-based and none were published within the last five years.

What We Did

We searched Medline and Embase (1996 to 2009 Week 38) using the following terms: (HIV or Acquired Immunodeficiency Syndrome) AND (Massage OR Relaxation Therapy OR Recreation OR Complementary Therapy). We also searched the Cumulative Index to Nursing and Allied Health Literature using the following terms: [(MH "Acquired Immunodeficiency Syndrome") or [(MH "Human Immunodeficiency Virus")]] AND [(MH "Recreational Therapy") or (MH "Alternative Therapies") or (MH "Recreational Therapists") or (MH "Neuromuscular Massage") or (MH "Recreation") or (MH "Massage") or (MH "Massage Therapists")]. From this, 164 abstracts and two HIV/AIDS complementary therapy guides (from AIDS Committee of Toronto and the Canadian AIDS Treatment Information Exchange) were reviewed to identify articles for this summary.

Suggested Citation:

Rapid Response Service. Massage and Recreation Therapy for Reducing Stress for People Living with HIV: Rapid Review Response. Toronto, ON: The Ontario HIV Treatment Network; 2009.

Reference List

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- (12) Antoni MH, Cruess DG, Cruess S, Lutgendorf S, Kumar M, Ironson G, et al. Cognitive-behavioral stress management intervention effects on anxiety, 24-hr urinary norepinephrine output, and T-cytotoxic/suppressor cells over time among symptomatic HIV-infected gay men. *Journal of consulting and clinical psychology* 2000;68(1):31-45.