

each of three cages and sent Reiki to the pair of rats inside each cage for 15 minutes every day for five days. Reiki significantly decreased the mean heart rate of the stressed rats by 6% on average, and sham Reiki had no effect. Neither Reiki nor sham Reiki reduced blood pressure. One reason that Reiki reduced heart rate but not blood pressure could be that blood pressure depends on multiple factors, including heart rate, force of contraction of the heart, and the degree of contraction or relaxation of the blood vessels, so Reiki would have to affect all these factors in order for blood pressure to be reduced. It is possible that longer sessions of Reiki may be required to achieve these changes.

In the other study, Baldwin et al (2006), showed that the rats stressed by their noisy environment also had damaged blood vessels in the mesentery, the sheet of tissue that holds the intestine together. The damaged regions in these tiny blood vessels were leaky to a large protein, albumin, in the blood. Normally, albumin is contained in these blood vessels and does not leak out into the tissue. This condition is necessary in order for the correct balance to be obtained between water in the blood and water in the tissue. It is not known exactly how stress causes damage to blood vessels but it is probably linked to activation of nerves in the intestine, leading to release of neurotransmitters that may stimulate immune cells to release toxins. When four rats were given Reiki for 15 minutes a day for three weeks most of the leaks disappeared. Four rats that received sham Reiki also showed some reduction in the number and size of vascular leaks but it was not statistically significant. The experiment was repeated on two other groups of rats and a similar result was obtained. These experiments show that Reiki can work on animals, even rats, to reduce their stress and to heal the cellular damage mediated by the stress.

Another frequently reported benefit of Reiki is that it reduces pain. Vitale

and O'Connor (2006) showed that Reiki significantly improved preoperative relaxation and reduced postoperative pain in women undergoing hysterectomies. The 12 women in the Reiki group received a 30-minute treatment immediately before surgery and 24 hours and 48 hours post surgery. The 10 women in the control group received standard care only. There was no sham Reiki group. Data were collected using the State component of the State-Trait Anxiety Inventory and a visual analog scale for pain measurement. The Reiki group reported significantly less anxiety pre-surgery and significantly less pain 24 hours post-surgery than the control group. Interestingly, the time duration of the surgery was shorter on average for the Reiki group (59 minutes) than the control group (72 minutes).

Chronically ill patients often not only feel pain, but also get depressed. Dressin and Singg (1998) demonstrated a significant reduction in the pain, depression, and anxiety experienced by chronically ill patients with a range of medical conditions who received Reiki compared to sham Reiki (two sessions per week for five weeks). In these experiments there were 12 men and 18 women per group. The men experienced a significantly greater reduction in depression than the women. These beneficial effects were still seen three months after completion of the Reiki treatments. Shore (2004) showed that 30 people needing treatment for mild depression or stress, and who received hands-on Reiki or distance Reiki once a week for six weeks, experienced significant reduction of mild depression and stress and the beneficial effects lasted for at least one year following treatment. The measures used in this experiment were the Beck Depression Inventory, the Beck Hopelessness Scale, and the Perceived Stress Scale. The 15 patients in the sham distance Reiki group who were told they would receive distance Reiki but actually did not,

reported no significant change in their depression or stress.

Finally, people who regularly use Reiki often find it helps them think more clearly and improves their problem-solving capabilities. Although no research has yet been published confirming these benefits in healthy people, Crawford et al (2006) demonstrated that four 30-minute Reiki treatments, once a week, significantly improved cognition skills in 12 elderly patients with mild Alzheimer's disease or mild cognitive impairment compared to the 12 patients who received no treatment. The measures used in this study were the Annotated Mini-Mental State Examination and the Revised Memory and Behavior Problems Checklist. Once again, the study did not include a sham Reiki group, and so we do not know the role that touch and personal attention played in helping the patients regain some of their cognitive skills.

Overall, although the studies are small and some of them do not address the question of Reiki versus touch, there is preliminary scientific evidence that Reiki reduces stress, pain, depression and anxiety, and can help mild Alzheimer's patients to overcome their cognitive impairment to some degree. To find out more about these studies, and others, you can visit the CRR website, www.centerforreikiresearch.org, or read our review, *The Touchstone Process. An Ongoing Critical Review of Reiki in the Scientific Literature* (Baldwin et al, 2010).



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References

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