

Effect of Ayurvedic Self-Massage Technique (Abhyanga) with an Ayurvedic herbalized oil on Perceived Stress, Sleep Disturbance, and Overall Quality of Life

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Introduction

Ayurveda is an ancient Indian form of medicine that comprises of herbal therapies, body work, diet and lifestyle approaches, as well as practices such as meditation and yoga. Abhyanga is the Ayurvedic practice of anointing one's own body with oil. The oil type for massage is determined by the individual's body and imbalances, often infused with herbs and usually warm, the oil is massaged into the entire body by the individual before bathing. This can be done by a therapist or by the individual oneself. In Sanskrit, abhyanga means 'massaging the body's limbs' or 'glowing body'. Abhyanga is an integral part of the daily routine recommended in ancient Ayurvedic texts for maintaining overall health and well-being. The traditional benefits of abhyanga according to the classical texts include: to decrease the effects of aging, to relieve tiredness, aches, and pains, to improve vision, to nourish the body tissues, to induce good sleep, to improve skin tone and complexion, and ultimately to maintain good physique. Abhyanga also plays a crucial role in Panchakarma, popularly known as the detoxification and rejuvenation therapy. It is done in the initial stages of the therapy as part of Snehan (internal and external oleation). The benefits behind abhyanga therapy have mostly been anecdotal and are yet to be verified and documented with clinical trials. There have been only a few documented clinical trials on abhyanga. Most of them used sesame oil as the medium for therapy and had a treatment duration of at least 30-minutes for a period of anywhere between 7-30 days.

The objective of this study was to evaluate the effects of abhyanga therapy using an herbal oil blend on the factors that it has been traditionally known for, particularly stress, sleep, and improving quality of life in an individual, in comparison to a professional massage and a control treatment over a period of 2 weeks.

Methodology

Primary measures:

- Perceived Stress Scale by NIH Toolbox
- PROMIS Item Bank v1.0 – Sleep Disturbance
- WHO Quality of Life questionnaire-BREF.

Secondary measures:

- Blood pressure
- Pulse rate
- 'My Ayurvedic Profile' quiz on the Banyan Botanicals website for identifying their constitution and energetic imbalance according to Ayurveda.

DAY 0

- At the initial visit, all participants were briefed with the group they were randomly assigned to and were provided with an instruction sheet on the massage technique to be carried out for the following two weeks.
- Filled out the questionnaires for stress, sleep, overall quality of life, and the Ayurvedic profile quiz.
- Blood pressure and pulse rate were also recorded on their initial visit and two-weeks later on their final visit (visit 2).
- All participants were advised to follow a simple diet and Ayurvedic lifestyle recommendations which included, having warm-cooked meals, avoiding air travel or long-distance trips (no more than 3-4 hours of driving in a day was recommended), avoiding major deadlines or other major stressors during the trial period, and going to bed by 10PM and sleeping for seven to eight hours nightly.
- Forty-nine (49) participants who met the eligibility criteria were enrolled into study.
- Each participant was randomly assigned to one of the three groups: Abhyanga (n = 18), Professional Massage (n = 15), or Control (n = 16). Five (5) participants dropped out due to non-compliance to the instructions (Abhyanga-1, Control-4).
- Banyan Botanicals (Albuquerque, NM) manufactures Daily Massage Oil™, formulated with sesame oil, sunflower oil, and coconut oil, infused with traditional Ayurvedic herbs: Guduchi (*Tinospora cordifolia*), Bala (*Sida cordifolia*), Arjuna (*Terminalia arjuna*), Tulsi (*Ocimum sanctum*), Brahmi/Gotu Kola (*Centella asiatica*), Bhringaraj (*Eclipta alba*), Lemon Verbana (*Aloysia citrodora*), and Lavender (*Lavandula*).

DAYS 1 - 14

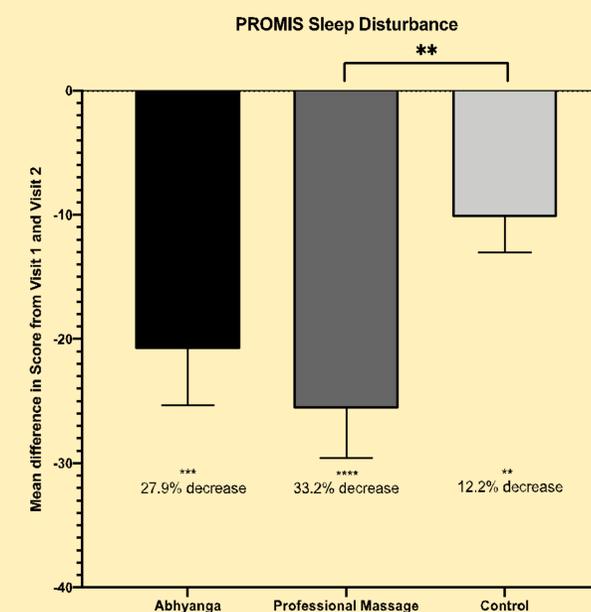
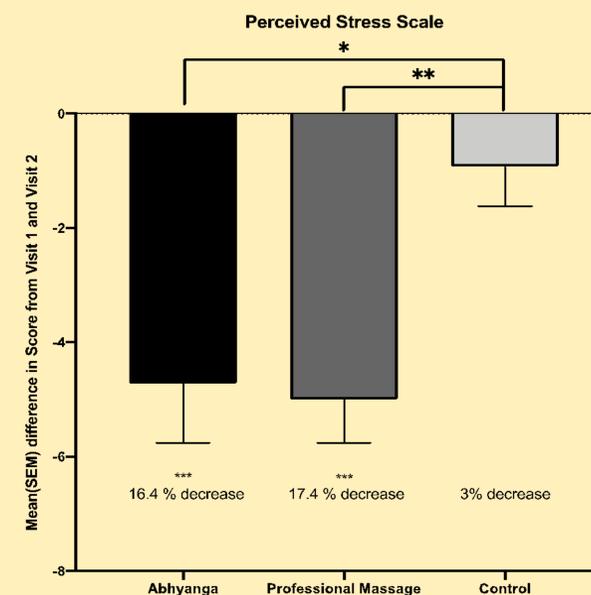
- Abhyanga Group - provided with 34 Fl oz of Daily Massage Oil™ each. The participants were advised to warm up the oil before using and were given specific instructions on performing the technique on themselves. The technique involves mainly hand strokes in circular clockwise motions starting from the extremities (hands and feet) and moving toward the abdomen with the use of warm oil. The participants were recommended to have a shower after performing the technique to cleanse off the oil. For participants in the
- Professional Massage group - licensed massage therapists (LMTs) were assigned to perform the massage therapy using Daily Massage Oil™.
- Control Group - were asked to perform abhyanga massage technique, as described above, but without using oil for 30-minutes every day.

DAY 15

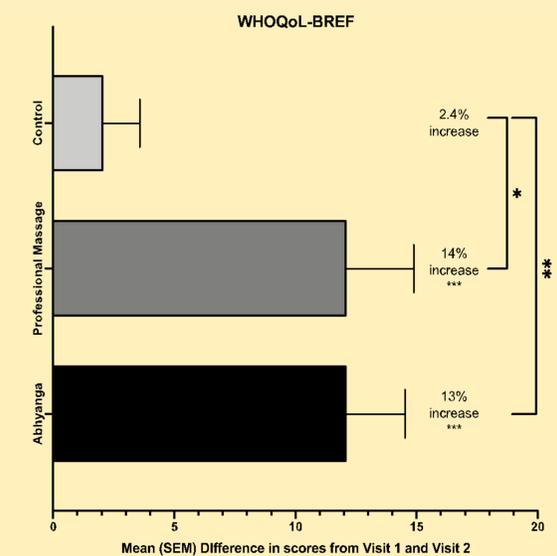
- On the last day of the 2 week trial, all participants came back to the Banyan Botanicals Operation Facility in Albuquerque, NM to meet with the researcher and were asked to complete the three questionnaires once again and recorded for blood pressure and pulse rate.

Results

Results showed statistically significant decrease in scores for Perceived Stress scale (Abhyanga: 16% ,p=0.0002;ProfessionalMassage:17%,p=0.0002;Control:3% , p=0.242) and PROMIS Sleep Disturbance scale (Abhyanga:27.9%,p=0.0002;ProfessionalMassage:33.2%, p<0.0001; Control:12.2%, p=0.0039) when compared to the control group.



WHOQoL-BREF also showed significant increase in the overall quality of life in Abhyanga(13%,p=0.0002) and Professional Massage(14%,p=0.0003) groups whereas not so in the Control group(2.4%,p=0.3123). No significant difference was observed in blood pressure and pulse rate in any of the three groups.



Conclusion

Based on the results, this pilot study indicates promising potential effects of the Abhyanga self-massage technique in decreasing perceived stress levels, improving sleep quality, and improving overall quality of life. To the best of our knowledge and resources, this is the first controlled clinical trial to evaluate the effects of Abhyanga on various factors, and to compare it with professional massage therapy.

Additionally, in this study, the results inferred that performing abhyanga every day for 30 minutes yields positive effects similar to those observed by having massage therapy twice a week.

In order to better evaluate efficacy, using biochemical markers to understand biological mechanism behind Abhyanga therapy can be a great tool for future study assessments.

Acknowledgements

The authors acknowledge the support from Massage Therapists: Bernadette LMT (Studio Soothe, Albuquerque, NM), Jolene Spencer LMT, and Shawna Tucker LMT (SaLT of the Earth Massage therapy, Albuquerque, NM). Koen De Lombaert and team from StudyPages by Yuzu Labs for recruiting participants.