

MEDICAL BENEFITS OF *ANAPANASATI* MEDITATION ON PHYSICAL HEALTH AND STRESS REDUCTION

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Introduction

Meditation or similar practices are described in different religions. Numerous techniques of meditation are described in Buddhist teachings. Those include different types of *Samatha* meditation and *Vipassana* meditation. Practice of meditation provides individuals with many benefits in terms of physical health, psychological aspects and social aspect of the life in addition to the benefits that come in religious teachings. There are different types of meditation described in Hinduism like transcendental meditation. Praying practiced in Islam and Christianity is also considered a kind of *Samatha* meditation.

Anapanasati meditation is considered one of the most important meditation techniques in Buddhism. It involves concentration and mindfulness of the act of breathing - inspiration and expiration. *Anapanasati* is unique in that it is considered as a *Samatha* meditation as well as a *Vipassana* meditation. *Anapanasati* has many advantages. The lord Buddha attained *Buddhahood* while engaged in *Anapanasati* meditation and subsequently going in to higher states of mind. *Anapanasati* can be practiced by individuals of any religion without any conflict with their religious beliefs as there is no promotion of Buddhist religion with practice of *Anapanasati*. The benefits of *Anapanasati* are described in Buddhist literature. It is arguable whether one needs to do scientific research to find out the benefits of meditation. But with scientific research forming the basis of all modern disciplines of study, people tend to doubt any findings without a base of scientific

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evidence. There are many studies done in relation to meditation. Several studies have reported increased theta and alpha activity in electroencephalography(EEG) among meditators(Lazar et al., 2000; Mason et al., 1997).Alpha rhythm is also observed during other relaxation techniques. One limitation for conducting scientific studies on meditation is the absence of an established indicator to confirm whether individual is meditating or not. Perception regarding the amount of work done (i.e. success of meditation) by individuals can be measured using a questionnaire with a Likert scale. A close ended questionnaire with Likert scale can be utilized to quantitatively measure the ability to concentrate on breathing.

Methods

The Department of Physiology, University of Ruhuna has attempted to find out the benefits of the practice of *Anapanasthi* meditation from a medical point of view. There were two studies conducted in the Department of Physiology Faculty of Medicine University of Ruhuna.

Perceived Stress Scale (PSS) is a 10 item questionnaire developed by Dr. Kohen(Cohen et al., 1983). It gives a score from 0 – 40 with lesser scores denoting lower stress. The normal ranges are given. It can vary with several factors but it is usually between 11 and 13. This questionnaire was translated into Sinhala by following the accepted translation methodology before administering it to the subjects.

Results

Study 1 (Oral presentation at the Annual Academic Sessions of the PSSSL 2001)

Title of the study: Perceived Benefits of *Anapanasati* Meditation in Hypertensive Patients

The aim of the study was to find the benefits of *Anapansati* meditation in managing hypertension. The study included 20 subjects and conducted for duration of more than three months. Researches were not

able to demonstrate any reduction of blood pressure with Anapanasathi Meditation, probably contributed by the low number subjects included in the study. Interestingly, this study revealed other benefits of meditation. Those benefits were improved quality of sleep (20%), improved physical fitness (10%), improved mental status (eg: mood) (20%), reduction in night terrors (10%) and reduction in general aches and pains of the body(20%).

Study 2 (Poster Presentation at the Annual Academic Sessions of the GMA2006)

Title of the Study: Perception of Stress in Meditators

There were 91 Participants in this study (13 male, 76 female, 2 not disclosed). Perceived stress was measured using the Sinhala translation of Perceived Stress Scale in meditators who practiced *Anapanasati* meditation in Galle. In addition, the ability to concentration (*Anapanasati*) was recorded by administering a close ended question "How well you were able to concentrate on breathing during *Anapanasathi* meditation?", with the 5 point Likert scale answers ranging from "not at all" through "fully".

There was a significant difference in the stress scores among subjects who were able to meditate with greater mindfulness when compared to meditators with lesser mindfulness by ANOVA(P=0.014).

Discussion

Results of the study 1 indicate certain medical conditions are improved with the regular practice of *Anapanasati* meditation. With *Anapanasati* meditation, study subjects reported improvements in the quality of sleep, physical fitness, mental status (eg: mood), night terrors (a type of sleep disorders) and in general aches and pains of the body. The benefits of *Anapanasati* meditation are well described Buddhist literature. The findings of study 1 also contain benefits similar to what is described in Buddhist literature.

The finding of improved sleep with meditation could be associated with the finding that meditation has an effect on melatonin (sleep

hormone) secretion as demonstrated in previous studies(Nagendra et al., 2012).

Results of the study 2 indicating a reduction of the level of mental stress with successful *Anapanasati* meditation is highly significant in the context of the modern lifestyle which increases the stress.

Conclusion

Anapanasati meditation is associated with certain health benefits related to both physical and psychological health especially in the modern lifestyle associated with high levels of stress. However, more scientific studies are needed to convince scientist and the general public to promote meditation for a better life for them.

Keywords: Meditation, Benefits, Anapanasathi, Stress

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