



MEDICAL BENEFITS OF MEDITATION

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ABSTRACT

Meditation seems to be some eastern mumbo jumbo abracadabra new age nonsense peddled by a snake oil salesman. However, meditation has many medical benefits that can be demonstrated. Even if we ignore 'spiritual' benefits of meditation such as peace, morality and love, there are many experimentally verifiable benefits in terms of reduced stress levels. These reduced stress levels can be easily gauged from medical parameters such as cortisol levels, blood pressure reading, heart rate variability, blood sugar, cholesterol and so on. In view of readily demonstrable medical beneficiary effects doctors should strongly recommend Meditation.

KEYWORDS :

INTRODUCTION

Meditation is not considered to be scientific. Meditation is thought to be something that some eastern holy men, with doubtful character and even worse reputation, pretend to indulge in to earn easy money and have many girlfriends.

At any rate at best meditation is considered to be something spiritual, whatever that means. Meditation is certainly not perceived as a good medical intervention to improve health just as exercising is or quitting smoking. But there is enough published literature that proves with data and information that meditation does offer verifiable medical benefits.

This paper is an attempt to demystify meditation and bring down from its hallowed heights to real world where meditation has such huge medical benefits that doctors should start recommending meditation as one of basic changes in lifestyle just as reducing alcohol is being advised.

Meditation

There are many meditation styles depending upon who you learn from. There is of course the Transcendental Meditation popularized by Maharshi Mahesh Yogi. Then there is Mantra Meditation of ISKCON fame. The of course the likes of Osho Bhagwan Rajneesh have popularized many meditations such as Dynamic Meditation and Gibberish Meditation.

However since this is a paper in medical science we will restrict ourselves to a meditation practice that does not depend on faith and belief but relies on science. This paper will confine itself to Mindfulness Meditation practice.

Mindfulness Meditation is simple. You have to sit comfortably and just watch, observe and be aware of flow of breath and thoughts. And as you watch thoughts and breathe, you find that there is peace and joy. It is as simple as that.

Without much ado let us jump on to the medical benefits of Meditation that have been experimentally verified and published in medical journals.

Cortisol

Cortisol is stress hormone and when a person is stressed cortisol levels in blood are high. Cortisol levels in blood vary during the day from morning to noon and evening. Hence if one is to conduct a cortisol test the time of test is important.

Since meditation is supposed to reduce stress level, one expects that meditation will reduce cortisol levels in blood. Hence many studies have been conducted that demonstrate that meditation does indeed reduce cortisol levels in blood.

One study of Meditation Based Stress Reduction found that

after a 8 week course of meditation, cortisol levels in blood reduced among the control group[1]. Another study conducted in Thailand found that after merely 4 day meditation program the cortisol serum levels reduced from nearly 400 nmol/litre to just around 300 nmol/litre[2].

Blood Pressure

We all know about blood pressure and how important blood pressure is to healthy living. It is also known that blood pressure is correlated with stress and anxiety levels. Blood pressure is expected to be low when stress is less and blood pressure is expected to be high when stress is high. We also know about systolic and diastolic blood pressure.

A study found that blood pressure in group receiving mindfulness meditation training for 2 hours a week reduced over an eight week period. 24 hour blood pressure reduced to 124/77 vs 126/80 and night time blood pressure reduced to 108/65 vs 114/69. This is statistically significant reduction in blood pressure levels due to practice of mindfulness meditation [3].

Blood Sugar

Diabetes is a medical condition where body does not generate adequate insulin and hence blood sugar levels are high. If Type II diabetes is characterized by inadequate insulin production and in Type I diabetes no insulin is produced necessitating insulin injections.

To test if meditation has any effect on blood sugar, a study examined blood sugar levels before and after a 6 months meditation course. And very delightfully the study found significant reduction in blood sugar levels. Blood sugar fasting before and after study in yoga group patients was 97.2 ± 11.0 g/dl and 91.9 ± 5.5 g/dl, respectively, which is statistically highly significant with $P = 0.002$. Postprandial blood sugar was 175.63 ± 21.66 g/dl and 167.6 ± 14.5 g/dl before and after study, respectively [4].

Lipid Profile

High Triglycerides levels and High Cholesterol level, especially LDL cholesterol puts at risk for cardiac problems in old age. And considering that heart diseases contribute a significant degree of deaths, and are correlated to stress levels, it would be interesting to see if lipid profile of meditators is different from non-meditators.

A study examined the lipid profile of post meno-pausal women dividing them into meditators and non-meditators. Serum cholesterol and low density lipoprotein-cholesterol were significantly lowered in both short and long term meditators as compared to non-meditators in post-menopausal women[4].

Meditation reduces heart disease risk among post menopausal women[5].

Psoriasis

Psoriasis is a chronic skin disease that is difficult to control. Since psoriasis is linked to stress, it was experimented if meditation helps is control of psoriasis. Thirty-seven patients with psoriasis about to undergo ultraviolet phototherapy (UVB) or photochemotherapy (PUVA) were randomly assigned to one of two conditions: a mindfulness meditation-based stress reduction intervention guided by audiotaped instructions during light treatments, or a control condition consisting of the light treatments alone with no taped instructions. subjects in the tape groups reached the Halfway Point ($p = .013$) and the Clearing Point ($p = .033$) significantly more rapidly than those in the no-tape condition, for both UVB and PUVA treatments.[6]. A brief mindfulness meditation-based stress reduction intervention delivered by audiotape during ultraviolet light therapy can increase the rate of resolution of psoriatic lesions in patients with psoriasis[6].

CONCLUSION

There needs to be far more studies on effects of meditation on various health parameters of nephrology, cardiology, endocrine systems, blood sugar and blood pressure to determine the extent of benefits of meditation on various health parameters.

Available studies do indicate that meditation offers statistically significant medical benefits across various organs of body and hence can and must be used for prevention and treatment of various medical conditions.

Meditation similar to exercise is a medical intervention, rather than a spiritual exercise that brings significant health benefits and must be recommended by medical doctors.

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