# Guided Intervention through Scientific Method of Meditation for Management of Stress and Depression among College Students

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Abstract: <u>Introduction</u>: The study was conducted to explore and manage depression, stress and anxiety among college students by providing guided intervention of scientific spiritual method of AUM meditation. <u>Plan of study</u>: The plan of study included objective mapping of reduction in comprehensive anxiety and enhancement in mental health after intervention with scientific spiritual meditation for 30 days. The compatibility of the meditation for people of different religions, faiths, educational backgrounds, gender, caste, creeds and lifestyle was also mapped. <u>Study population</u>: The study population consisted of 134 college students of age group 18-22 years, selected using probability random sampling technique, out of which 122 students participated in the stress management workshop. <u>Methodology</u>: The mapping of test parameters before intervention (test) and re-test after practicing meditation for 30 days were done through published standardized questionnaire. <u>Result</u>: The overall enhancement in mental health parameter was found to be 91.57%. Overall reduction in comprehensive anxiety was 82.61% and 91.04% responded for AUM meditation. <u>Conclusion</u>: It is concluded that the scientific spiritual method of AUM meditation has explicit effect of enhancing mental health of the practitioners. It is compatible to all and has definite impact on the practitioners in reducing comprehensive anxiety, stress and depression.

Keywords: Stress Management, Meditation, Depression, Mental health, Spiritual

# 1. Introduction

People of modern age are now struggling with a dreadful epidemic called stress which leads to depression and a stream of stress related disorders and lifestyle diseases. As per World Health Organization (WHO), medical institutions, psychologists and researchers stress-related ailments are spreading than cancer. Gravity of the situation is quite evident from worrisome reporting of numerous cases of little children, students, adolescents and young executives suffering from stress related disorders. It steals 'life' from the person severely affecting efficiency and quality of day to day life.

# 2. Background of Study

# 2.1 Indian Model for Stress Management, health and transformation in life style

The Spiritual and scientific method of meditation, propound by Indian Sages, are based on deepest explorations of mindbody system.

It provides a comprehensive system for complete health protection, healing of mind-body system and progressive transformation of consciousness.

The study was conducted with conceptual framework based on the ancient wisdom propounded by Indian sages in integration with modern knowledge of health in medical science.

#### 2.2 Modern Concept of Health

The advancement of modern medical science is now touching the wider dimensions of human existence which is going nearer to the subtle formation of human existence proclaimed by ancient Indian sages. The modern definition of health encompasses all aspects like physical, mental, emotional and spiritual wellbeing. The definition of health by WHO integrates the domains of physical, psychological and social parameters and relates to emotional, attitudinal and perceptional domain of human life.

#### 2.3 Mental Health

According to WHO mental health relates to human feelings, perceptions and emotional stimulations. WHO states that the well being of an individual is encompassed in the realization of their abilities coping with normal stresses of life, productive work and contribution to their community. Mental health also includes subjective well being and selfactualization of one's inherent potentials. It is all about how we perceive stimulations of life environments, behave and respond to these. It refers to soundness of our cognitive and emotional health. Merriam- Webster defines it as, "a state of being in which an individual is able to use his or her cognitive and emotional capabilities, functions in society and meet the ordinary demands of everyday life." On the basis of various revelations made by modern medical sciences establishing interdependence of overall health on emotions, thought patterns, stress and other mental attributes, we are again moving towards the holistic model of life and health, which has been given forth by sacred Vedic philosophy.

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# 3. Significance of Study

# 3.1 Present Scenario

The young generation is reportedly getting into trap of the epidemic called stress, anxiety and depression with a number of lifestyle diseases. The alarming increase in health issues of students are found to be related to mental agonies, psychological disorders, relationship turmoil, stress and degradation of quality of life. Youth of age group between 20-40 years are reportedly getting affected with common symptoms of stress like insomnia, anxiety, depression, functional bowel disturbances, nervous tension, fatigue, etc. ruins and impairs the life and its productivity.

In turn, these conditions may lead to poor performance, higher absenteeism, decreased concentration, poor retaining capacity, low self confidence and demoralization. "If untreated, consistently high stress can become a chronic condition, which can exacerbate existing mental health conditions and chronic physical conditions (diabetes, hypertension, weak immune system).

Other disorders that can be caused or exacerbated by stress include sleep disorders, headache, mood disorders, upset stomach, autoimmune disease, depression, and anxiety.

### 3.2 Stress and its relation to health and diseases

Stressful events affect the metabolic and biological processes negatively by releasing stress hormones which further affects the pathogenesis of physical diseases. The prolonged or chronic stresses have got detrimental effect on the mind-body system which causes dis-ease and disorder in emotional, cognitive, physiological and behavioral responses of the students.

Stressor-elicited endocrine response causes a lot of malfunctioning in the psychobiological system. The hypothalamic-pituitary-adrenocortical axis (HPA) and the sympathetic-adrenal-medullary (SAM) system are particularly affected due to chronic psychological stress. Cortisol, the stress hormone in humans can interfere with the control of other physiological systems, resulting in increased risk for physical and psychiatric disorders.<sup>[1][6]</sup>

Stress has got perilous effect on the regulation of immune and inflammatory processes which may cause depression; infections, autoimmune diseases, and coronary artery disease; and even virally mediated cancers.

Under the sway of stress, depression and anxiety, students often get indulged into drug addiction, cigarette smoking, alcoholism, etc. Many a times students under stress suffer from debilitating conditions like fear-psychosis, dysthymia, suicidal thoughts, escapism, binge eating, body-shame, selfdistortion, arrogance, self-rejection, self-denial, selfdestruction and many other such negative emotions which affect their academics, learning, co-curricular activities and impairs life. Life crippling effects of stress must be managed so that the mind-body-emotions of the students may be healed and rejuvenated.

Negative emotions like depression and anxiety enhance the production of pro-inflammatory cytokines, as do psychological stressors.<sup>[10]</sup> In addition, stress and depression also contribute to a greater risk for infection, prolonged infectious episodes, and delayed wound healing—all of which are processes that can fuel sustained pro-inflammatory cytokine production.<sup>[9]</sup>

Behavioral changes occurring as adaptations or coping responses to stressors such as increased social withdrawal, smoking, decreased exercise and sleep, and poorer adherence to medical regimens provide an important pathway through which stressors influence disease risk.<sup>[7]</sup>

Associations between psychological stress and disease have been established, particularly for depression, CVD, diabetes, cancer, etc. Other areas in which evidence for the role of stress is beginning to emerge include upper respiratory tract infections, asthma, herpes viral infections, autoimmune diseases, and wound healing.

When the body is stressed, muscles tense up. Muscle tension is almost a reflex reaction to stress — the body's way of guarding against injury and pain. With sudden onset stress, the muscles tense up all at once, and then release their tension when the stress passes. Chronic stress causes the muscles in the body to be in a more or less constant state of guardedness. When muscles are taut and tense for long periods of time, this may trigger other reactions of the body and even promote stress-related disorders. For example, both tension-type headache and migraine headache are associated with chronic muscle tension in the area of the shoulders, neck and head.<sup>[8]</sup>

Present days health problems, mental agonies, psychological disorders, relationship turmoil, stress and degradation of quality of life, all are deeply related to multiple of individual issues, which are under crisis in this age. Fibromyalgia, a debilitating neuropsychiatric, mentions that the problem of prolonged stress and un-natural lifestyle is fast spreading among youth. The common symptoms of diseases are insomnia, anxiety, depression, functional bowel disturbances, nervous tension, fatigue, etc., which are severely irritant. It ruins the professional and family life, impairs the life and its productivity. If we list different types of diseases and their symptoms like hypertension, dyslipidemia, ischemic heart diseases, depression, migraine, diabetes etc., the scenario is quite horrifying.

Humanity is suffering, life flow is obstructed and many people never experience the real taste of health, joy and happiness.

According to a survey in India, due to sedentary life style, chaotic work patterns and unrealistic way of perceiving the world, 60-70 percent of persons visiting doctors suffer from hypertension, 50-60 percent of those from insomnia and depression and around 40 percent suffer from hypertriglyceridemia and high cholesterol. They further lead

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to ischemic heart problem, psychological imbalance, stomach problem and poor fertility rates. Studies further reveal that more than 70 percent of male are affected by heart problem and females are more prone to depression and various gynecological problems.<sup>[2]</sup>

# 4. Objective of the Study

The research has been conducted to explore and manage depression, stress and anxiety among college students by providing guided intervention of scientific spiritual method of AUM meditation. The parameters of the study were reduction in comprehensive anxiety and enhancement in mental health.

#### 4.1 Parameters of the research study

The conceptual base for this research was to explore for objective and definite way of managing psycho-perception and response system of a person to enable him to maintain biological and rhythmic balance of stressed-tranquilization process within mind-body system. Mere counseling and taking medication has not been found giving relief from long lasting detrimental effects of stress and related impacts of stress due to stress hormone release. Following two parameters have been taken for study with intervention through guided scientific spiritual AUM meditation.

#### 4.1.1 Mental Health Parameter test

"The preamble of the World Health Organization's charter defined health as a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity." <sup>[11]</sup>

Mental health is the most basic and important aspect of all dimensions of human health parameters. The modern science has now concluded through numerous researches and studies that, root of all illness lies in 'dis-ease' at mental-emotional level of human existence.

To measure the parameters of mental health, the test questionnaire has been taken from the published manual of mental health inventory.

# 4.1.2 Comprehensive Anxiety Test

The anxiety, depression and stress have emerged as devastating enemy of human life quality and health. The art and science of stress management need to be incorporated in day to day way of living so that the system of stimulation for managing stress elements and further acquiring the state of tranquilization and gaining healthy state of mind-body system naturally.

To measure the comprehensive anxiety and stress elements, the test questionnaire has been taken from the published manual of mental health inventory.

# 5. Plan of Study

During the study for evaluation and management of stress and depression among college students, a comprehensive module consisting of scientific knowledge about stress, its detrimental effects as well as release of stress hormones were discussed along with intervention through scientific relaxation meditation of AUM Sadhana. Students participating in the study were guided and trained in explicit method of meditation of 'AUM Sadhana' to stimulate tranquilization in the mind-body system.

The study population consisted of 134 college students of age group 18-22 years, selected using probability random sampling technique, out of which 122 students communicated acceptance to imbibe and participate in the stress management workshop. The 122 students were given intervention in the stress management workshop and underwent tests for mapping comprehensive anxiety and mental health. Further, out of 122 students 105 students responded after practicing guided AUM meditation for 30 days who were put into re-test.

The objective measurement (test and re-test) of reduction in comprehensive anxiety as well as increase in mental health was done through published standardized tool (questionnaire). The scope of the study also included study regarding acceptance of AUM Sadhana by people of different religions, faiths, educational backgrounds, gender, caste, creeds and lifestyle. The students were made aware and educated regarding distinct role of individual's thought pattern in creating and shaping of one's own life pattern.

# 6. Result

The study findings revealed that there were definite positive transformations in the practitioners/study population after practicing the scientific spiritual method of AUM meditation.

# 6.1 Acceptance of AUM meditation

It was also revealed that out of 134 selected population, 122 responded for workshop i,e 91.04% responded for AUM meditation indicating that the spiritual scientific method of meditation is compatible to people from all walks of life, caste, creed, religion, faith, gender and all ages. (Refer Figure 1)

#### 6.2 Overall Percentage change in Mental Health Parameters and Comprehensive Anxiety Before and After Intervention with AUM meditation

The overall/final enhancement in mental health parameter was found to be 91.57%, increased from 12.1 to 23.18. Further final/overall reduction in comprehensive anxiety was 82.61%, reduced from 82.85 to 19.55. (Refer Figure 2)

#### 6.3 Percentage change in Number of Student's in Mental Health Parameters Before and After Intervention with AUM meditation

It was found that 62.7% of the students were in very low to low state, whereas 19.8% were indicating the mental health in medium state and only 17.5% in the high state of mental health before intervention of the guided meditation. After practicing AUM meditation for 30 days, the score indicated amazing definite transformation. 83.7% students scored in the test indicating in the high and very high state of mental health. 10.6% students were in medium state of mind and only 5.7% in low state of mental health. (Refer Figure 3)

# 6.4 Percentage change in Comprehensive Anxiety Before and After Intervention with AUM meditation

In comprehensive anxiety test parameters, before intervention 86.4% of the students indicated very high to very high state of comprehensive anxiety.

After intervention 83.4% of the students scored for being in very low to low state of comprehensive anxiety, again indicating definite transformation and rejuvenation. (Refer Figure 4 and Figure 5)

# 7. Figures for graphical representation of Study data

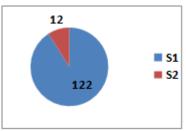


Figure 1: Acceptance of AUM meditation S1- Number of students accepting S2 –Number of students not responding

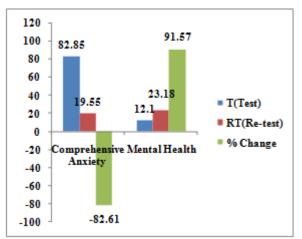
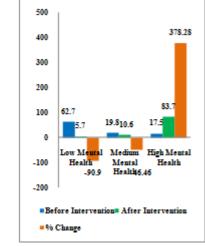
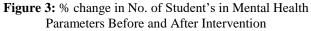


Figure 2: Overall Percentage change in Mental Health Parameters and Comprehensive Anxiety Before and After Intervention with AUM meditation





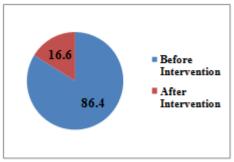


Figure 4: Overall change in Comprehensive Anxiety Before and After Intervention with AUM meditation

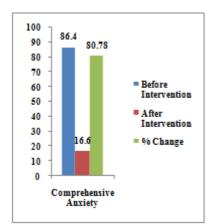


Figure 5: Percentage change in Comprehensive Anxiety Before and After Intervention

# 8. Conclusion

- From the study and analysis of result it is concluded that the scientific spiritual method of AUM meditation is compatible to all and has definite positive impact on the practitioners in reducing comprehensive anxiety, stress and depression.
- It also has explicit effect of enhancing mental health of the practitioners. It can be easily correlated that the overall quality of life and efficacy is improved.

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# 9. Future Prospects of the Study

- The entire young generation including students of all streams of education may be sensitized about detrimental effect of stress and they may be trained and empowered with specific method of AUM meditation which shall enable them to manage stress, distress, anxiety and depression aiding in their academic performance and achievements. It shall shape them up with enhanced mental health, stamina and inner-strength.
- The same empowerment with AUM meditation may be done for entire mankind.
- The study can be conducted in large number of study population.

# 10. Limitations of the Study

- Perception, sensitivity and regularity of practicing meditation vary from person to person and its standardization is difficult.
- Some of the participants were reserved in their response.

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# **Author Profile**



**Dr. Manoj Kumar Bimal,** Spiritual guide and Counselor, Meditation Therapist, Lifestyle guide, Motivational Speaker, Inspirational writer, Reiki Grand Master and Teacher. He is a graduate in Civil Engineering. He has done Master of Business Administration and Ph.D. He is working as Airport Director, Airports Authority of India, Juhu Airport. He is accredited International Airport Professional through a Global AMPAP program of Airports Council International (ACI) and International Civil Aviation Organization (ICAO). He conducted several workshops/seminars for imparting training in the art & science of Stress Management and ethico-moral values for reducing comprehensive anxieties, attaining natural health which enhances quality of life and optimizing managerial productivity. Over 25,000 people are attuned by him on scientific method of meditation and have been immensely benefitted. More than 100 Stress Management sessions have been conducted by him for Hospitals, educational institutions, Central Bureau of Investigation (CBI), Airports Authority on India, PSUs, State and Central government organizations etc. He has worked in collaboration with Cambridge University, Wolfson College, Cambridge and BDA (British Dietetic Association), UK. He provided his expertise on Lifestyle Management (Stress Management, Leadership Management) and acted as the resource person for providing intervention on Lifestyle Management (Stress Management, Leadership Management) under the banner NNEdPro. He has presented paper "Reiki in Palliative Care" in the training program of Man Power Development on "Palliative Care" under World Health Organization (WHO) Biennium; this program was sponsored by Director General of Health Services (DGHS), Govt. of India and coordinated by All India Institute of Medical Science (AIIMS).

Dr. Utpal Kumar Vimal, M.B.B.S, M.D.(General Medicine) is a dedicated health professional, carrying out various health promotion and disease prevention activities in south west part of national capital Delhi. After completing his post graduation he underwent 3 year training program (senior residency) in department of cardiology. He has vast experience of working in department of internal medicine in various corporate hospitals (Jaipur Golden hospital/ Fortis Escorts hospital) in NCR & Delhi. For last 10 yrs he has been providing healthcare in sub urban area of southwest Delhi. He is working in the field of stress management through certain meditation methods in last few years. His multifaceted activist's personality can be well judged by the fact of his long and happening association with various organizations like Divya Jyoti Sansthan Patna, Vishwa Jagriti Mission Delhi , lions club active Bahadurgarh (Haryana) and Happy Life Foundation Charitable trust Pune.

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