

## Holistic Care by Raj Yoga Meditation Affect Healing in Intensive Care Units

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### Abstract

There is a resurgence of interest by healthcare designers and healthcare providers to provide ambience of healing into the architecture, artwork and philosophy for the patients undergoing treatment in intensive care units. This is considered to be one of the healing strategies for ICU Patients. Reviewing various researches and reports and patient's experience, it is evident that not only the physical environment like natural light, peaceful colors, soothing sounds are the factors affecting patient healing but also the holistic approach by yoga, meditation, and acupressure may help in preventing ICU psychosis. Psychoneuroimmunology research demonstrates the need for mind body interventions like Yoga Meditation for well being and early healing of the patients admitted in ICU.

**Keywords:** Intensive Care Unit; Holistic Care; Raj Yoga Meditation.

### Introduction

Critical care skills, critical care knowledge are not the only factors that result in optimal outcome of patients. The important aspects missed many factors like-

- a) Holistic needs of the patients
- b) Stress of family members
- c) Intensive care environment

Basic design of Intensive care unit is to provide a sterile and cold environment as these patients require special care for preventive infection. The environment of intensive care means a sick human being encircle around him/her are electronic gadgets known as monitors for assessing breathing, blood pressure and ventilators to assist ventilation as and when required. Many biomedical types of equipment like Infusion pumps and bottles hanging with various fluids like blood, plasma being infused, few carts loaded with syringes, drugs, and intravenous lines and fluids and other equipments required in case of emergency.

Try to imagine how much is the anxiety, fear, apprehension or level of stress in patients and their

family members. Keeping in mind that environment plays a critical role in healing of patients. This holistic concepts needs to be highlighted while designing and implementing the care of the patients in intensive care units. Till now the focus has been on medical design of the ICU, convenience of the care provider, architect designing and providing state of art equipment. The family restriction to enter in ICU is for maintaining sterility.

Going into the depth of physiological response of body to environment and psychological stress, it is realized that need for spirituality and spiritual based meditation is one of the important factors affecting the tissue healing and recovery from medical illness and surgical insult. The authors themselves made an attempt to document the need for spiritual empowerment as mind body intervention. In the last one and the half decades the physiological response of the body to the psychological and environmental stresses has been emphasized [1].

*Healing Phenomenon: Physiological and Psychological Human Connections*

The emotions of patients influence immunological functioning to the extent that stress has the negative

impact on the functioning of immune system of the body which can be enhanced or suppressed when the brain reacts to external stimuli even at unconscious level [2]. Thereby the stress and negativity has a physiological effect resulting in inability to heal. A supportive environment created by family members can produce a patient's psychological well-being. This results in positive impact on therapeutic outcome and boosts the morale. Mazer documented the role of five senses evoked physiological and emotional responses of anxiety or serenity [3].

#### *Physical Environment of ICU*

Unnecessary noise is troublesome for patients in ICU. It is one of the stressors to the patients in ICU. Hum of the medical equipments, bubbling of the chest tubes and conversation by staff paging system telephonic conversation frequent opening and closing of doors or cabinets or supply carts. New technologies and movement of the technology carts, monitoring equipments, buzzing and beeping of alarms may be source of noise in most environmental issues.

Auditory stimuli that mean the buzzing and beeping alarms of the monitoring equipment may also be highly disturbing and fearful. These stressful noises can produce physiological manifestation of sleeplessness. This is the most frequently cited complaint by the patients in ICU [1]. Sleep disturbance produces stress and ultimately affects healing. To combat such noises many design elements are now considered such as flooring and door closers acoustic ceilings. The need for Earplugs has been investigated by the author himself and documented better results but acceptance by the patients was a bit controversial [4]. Reducing light and sound on the neonatal intensive care improve patient safety and staff satisfaction.

Now a day's human behavior is considered as one of the greatest contributors to offensive sounds. By modifying the staff's behavior unnecessary noise can be abated. Hence nursing and medical staff behavior needs to be taken care of. Encouraging behavior which reduces unnecessary noise especially at night, avoiding over the bed conversations, and switch of unused biomedical equipment is one of the highly needed training. Introduction of soothing sounds such as music, some pleasant sounds from nature like rain showers, soft heartbeat sounds can further avoid noxious stimuli of unnecessary sound [5].

Light, like sound can have both positive and negative influence on the human body and mind.

Providing natural light or full spectrum light is the best choice. The critical care unit is typically bright and devoid of full spectrum light, instead featuring primarily harsh artificial lighting. Many ICUs are designed without windows or position the patient's bed in such a manner that it does not allow a view of the window. Artificial lighting is predominately fluorescent and produces visual fatigue and headaches [6]. Although light is a vital element of a healing environment, continuous light disrupts the natural circadian cycle and contributes to drops in melatonin levels. If the light is intense, the person can even experience a total cessation of melatonin production.

Light exposure is another important sleep disruptor. Nocturnal melatonin secretion can be acutely suppressed by light. ICU patients suffer from a severe lack of sleep associated with loss of the nocturnal melatonin secretion pattern during night [7]. Therefore effective interventions like use of eye masks to decrease light exposure and to promote sleep in ICU patients are urgently needed. It appears that simple interventions such as earplugs and eye masks may be a valuable addition to patients attempting to sleep in ICU. Earplugs and eye masks could be used as an acceptable sleep intervention and alternative to sleep medications for patients when appropriate [4].

Many Intensive care clinicians fear that reduced light in the ICU may compromise patients care and induce sleep or laziness in the night among nurses and other care takers. It is well known that light and colour enhances each other lives and energy. The suggested effect of various colours on human response and individual's emotional state is given as below.

- Red Colour symbolizes high energy, excitement and raised blood pressure
- Orange Colour symbolizes warmth and emotional expressions
- Yellow Colour symbolizes mood enhancement, optimism and excitement
- Green Colour symbolizes healing and unconditional love and nurturing

#### *Social Support*

In addition to the effect of physical environment on the healing of the patients in ICU, a good social support is the key to healing. It has been realized that the friends and the family members are the highly influential in providing social and emotional support

and thereby affecting the recovery [6]. However the literature demonstrates just the opposite effect of the family members or friend's presence inside due to increased physiological stress [8].

#### *Musical Sounds in ICU*

Till now the holistic healing measures incorporated in the ICU is music therapy and therapeutic sounds which are soothing and calming and take away the negativity. There are certain rhythmic patterns of music that has an anxiolytic effect on human psychology. This produces relaxation effect on human physiology.

The effect of music on mechanically ventilated patients in ICU is studied by Chlan in 2000 and had shown positive influence on heart rate respiratory rate and anxiety on patients [9]. Another study on Chinese patients in 2001 revealed efficacy of music therapy on reducing anxiety [10]. Reduced pain medication has been documented on 60 female patients on a Swedish hospital [11].

#### *Psychological Aspects*

Treatment within the ICU is stressful for the patients and may cause long term physical and psychological problems [12]. Along with the physical complaints like weakness, fatigue most of the patients have issues like psychological problems, cognitive and social aspects. Acute and chronic cognitive dysfunctions are common problems in the critically ill [13].

There are a number of pathological processes which are thought to underlie critical illness related cognitive dysfunction but according to Milbrandt and Angus the two mechanisms that appear to show most merit are neurotransmitter abnormalities and occult diffuse brain injury. The quality of life is significantly negatively affected after discharge from ICU [14] and [15].

Many institutions have started rehabilitation program with the main theme of

- a) Information and education
- b) Assessment and therapy
- c) Personal support

Most of the participants of rehabilitation program feel that there is a need for information and education for family members and also for some healthcare staff. The weakness and other difficulties, these patients experience when they are discharged from the ICU. The family members are of the opinion that if the staff is sympathetic to the patient it will be a highly

supportive for the faster healing of the patient whether in surgical ICU or medical ICU. The need for holistic care is always felt by the patient, their family members and friends.

Most of the patients need to have a mechanism to allow an emotional outlet for themselves and their family members because it is recognized that a patient in ICU with a critical illness is an emotional burden on the whole family therefore individual counseling for both the patient and family is recommended. The author's own experience in Cardio-Thoracic centre of AIIMS New Delhi has revealed a very positive results if the patient and the family are given holistic treatment in the form of Raj Yoga Meditation training. An eleven years old girl suffering from congenital heart disease with total anomalous pulmonary venous circulation (TAPVC) repair under cardio-pulmonary bypass showed prolonged QT Interval in ECG. Patients with long QT interval have high risk of ventricular arrhythmias secondary to sympathetic over activity due to anxiety or tension. This patient was enrolled for preoperative holistic preparation program in which child and the parents were given training in autogenic relaxation by Raj Yoga Meditation by Raj Yoga teacher from Medical Wing of Raj Yoga education & research foundation of Brahma Kumaris World Spiritual University. The child and family's acceptance to this raj yoga meditation therapy in the preoperative period was excellent. The child continued the same spiritual exercises and Raj Yoga Meditation practice in the Post-Surgical Cardio Thoracic Vascular Surgery ICU. This child's preoperative preparation with relaxation therapy by Raj Yoga, assurance, explanation of the whole procedure and control of pain relief by patient control analgesia was highly appreciated by the child and this helped in alleviating child's fear and anxiety related to surgery, injection as well and also during the ICU stay. No arrhythmias occurred in preoperative and postoperative period [16].

It is well documented that communicating personal positive events has an impact on the person, for increasing daily positive effects and well being. Self focus on positive self-aspects and following positive events were related to lower negative effects.

Raj yoga meditation as taught by Brahma Kumaris World Spiritual University (also known as Prajapita Brahmakumaris Ishwariya VishwaVidyalaya) is a behavioral intervention with scientific, psychological, intellectual and spiritual process. It aims at establishing balance in head, heart and hand. It is the science and art of harmonizing spiritual, mental and physical energy through the connection with the ultimate source of spiritual energy, the

Supreme Soul for enjoying ever healthy, ever-wealthy and ever-happy life [17].

Over the last two decades, mind-body medicine has been used as complimentary to the modern medicine based on the strong connection between thoughts, feelings and emotions and their impact on neurological and immune system. Mind-body interventions in the form of meditation are the focus of research at many institutes. Meditation invokes a state of autonomic nervous system that is correlated with a reduction in stress reactivity. There is strong evidence that stress reduction is essential for the successful outcome of Coronary Artery Bypass Surgery. When practiced during preoperative period and regularly followed in the post surgical intensive care unit.

Meditation as a part of cardiac rehabilitation is ideally offered the day a person is diagnosed to have Coronary Artery Disease. Studies have demonstrated positive effects of complementary therapies given in preoperative period to surgical patients [18].

Meditation, a condensed course in the form of relaxation therapy, spiritual exercises and gear up self healing should be a part of preoperative preparation programme for the patients scheduled for cardiovascular surgery and be continued in the postoperative period. These definitely improve recovery after surgery; reduce postoperative pain and suffering and lower ICU stay, hospital stay and costs. This modality focuses on spiritual, emotional and psychological needs as well as fulfils physiological needs too.

In the past ICU'S were very much a physical place where patients requiring extra or closure monitoring or specialist therapies, such as mechanical ventilation, were gathered into one place. In an attempt to standardize care among staff and in the hospital the concept of protocols were introduced considering various local, national and international aspects of patient's management like sepsis, and weaning from mechanical ventilation. These protocols improve the quality of care; however holistic approach considering the spiritual aspect of mind, body and medicine has not been included. It is recommended that incorporating yoga meditation for patient's their family members, friends, care takers and ICU staff should be a part of the protocols for patients under critical care for their faster healing and earlier recovery.

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