

## **Effects of Holy Quran Listening on Physiological Stress Response in Intensive Care Unit Patients**

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### **ABSTRACT**

**Introduction:** The intensive care unit (ICU) is one of the most stressful environments among various clinical settings. ICU patients are not only compromised by the illness, but they also faced with a wide range of stressors such as pain, unfamiliar environment and loss of interaction with family and friends. Stress and anxiety will increase the sympathetic tone (sympathetic nervous system) and stimulate the hypothalamus-pituitary-adrenal (HPA) axis response. Stressful circumstances as well as chronic diseases may alter the normal cortisol mechanisms resulting in marked increases in plasma levels. Thus, high stress response will lead to delayed healing and prolong stays in ICU. Recitation of Quran by the sick person or for the sick person has shown to have direct healing effect on the sick person. Holy Quran Listening is the most suitable way for the patients in reduces stress responses during ICU stay.

**Objectives:** To examine the effectiveness of Holy Quran Listening (HQL) in reducing stress response among ICU patients.

**Methods:** A randomized controlled clinical trial was conducted in the Intensive Care Unit. Total 94 subjects were recruited and randomly assigned to either Control (n=49) or Holy Quran Listening (n=45) group respectively. The HQL given via headphone for 7 hours while control group given no music. Primary measures include mean blood pressure, heart rate, systolic blood pressure, diastolic blood pressure, serum cortisol level and serum blood sugar. Secondary outcomes include duration of stay in intensive care unit, total usage of insulin and sedation.

**Results:** The HQL group show clinically significant in reducing HR and SBP over time. Serum cortisol level is stable in HQL group. However, there are no significantt reduction in duration of stay, total usage of sedation and insulin.

**Conclusion:** HQL is one of the adjunct methods that can be used to reduce stress response among ICU patients.

**Keywords:** listening, intensive, care, unit, stress, response, physiological.