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Research Article

# THE EFFECT OF HOLY QURAN RECITATION SOUND ON VITAL SIGNS AND ARTERIAL OXYGEN PRESSURE OF UNCONSCIOUS PATIENTS HOSPITALIZED IN ICU

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#### **Abstract:**

**Introduction:** Treatment of diseases may be one of the numerous aspects of the divine verses of Quran. The objective of this study was to investigate the effect of playing holy Quran recitation as a tranquilizer on vital signs and arterial oxygen pressure of unconscious patients hospitalized in ICU.

Materials and methods: This is a quasi-experimental pretest-posttest study conducted on 20 unconscious patients in ICU that were almost homogenous in terms of consciousness level and cause of coma. Participants were divided randomly into case and control groups. For participants in the case group, the Yasin surah with the voice of Al-Menshawi was played every day for 15 minutes by an MP3 player. The vital signs and arterial oxygen pressure of two groups was checked before and after intervention. The collected data was analyzed by means of SPSS 16 software and by paired t-test.

**Results:** Results of this study showed that after intervention, in the case group, the mean systolic [P=0.04] and diastolic [P=0.05] blood pressure, pulse rate [P=0.001] and arterial oxygen pressure [P=0.04] had significant differences in comparison with before intervention. However the difference was not statistically significant about the breath rate and body temperature.

discussion: Playing the holy Quran recitation led to the balance in blood pressure and arterial oxygen pressure of patients. Therefore it is possible to use it as a treatment method in order to make a balance in the vital signs of unconscious patients.

Keywords: Quran incitation, unconscious patients, vital signs, arterial Oxygen pressure, ICU

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#### INTRODUCTION:

Quran is the holy book of Muslims which covers all aspects of human life. Treatment of diseases may be one of the numerous effects of its divine verses and revealing this effect is one of the duties of Muslim physicians [1]. Muslim traditional physicians [Hakim] have been using the divine verses to treat patients and the therapeutic effect of Quran verses has been emphasized in Muslims' religious literatures [2-3].

One of the magical aspects of holy Quran is the explanation of some facts that have not been discovered to scholars at that time and the scientific developments in the next centuries has confirmed them [4]. The holy Quran has many verses in the field of health, treatment and medical sciences and probably in future, some other points will be discovered that we are not aware of them yet [4-6]. Some of Quran verses about medical issues are as follows:

Indicating the importance of eating protein rich foods [Waqea/20-21] and [At-Tur/22], delivery facilitation [Maryam/25], the intensity of feeling pain by skin [An-Nisa/56], the topical cryotherapy of many of the skin diseases [Saad/42], sorrow and its association with blindness [Yousof/84], bed sores related to the inactivity [Kahf/18], the psychological effect of the green color [Al-Rahman/76] [Al-Ensan/21] and [Kahf/31], ablution and cleaning some parts of the body which are more exposed to contaminations [Al-Maeda/6], avoiding overeating [Al-Aaraf/31], sexual relationship during menstruation which is unhealthy [Al-Baqarah/222], amnesia in old ages [An-Nahl/70], the therapeutic effects of honey and its production by female bees [An-Nahl/69] and so on [4, 7].

Investigating the Quran verses indicate that these verses have an accurate numerical system and they include something that we may call it a program or information. This information can communicate with cells. There are some waves that lead to natural, active and positive vibration of cells and increase the positive energy of them.

Quran recitation sound is composed of some waves with specific frequency and wavelength and these waves make some swinging strings that affect brain cells and bring back their balance and harmony. This balance and harmony of brain cells lead to a remarkable increase in its protective ability against diseases [3, 7-9].

One of the non-pharmacological methods of reducing pain is music therapy. Music may be a simulator and cause psychological and physiological responses in listeners [8, 10-12].

Results of a study showed that music therapy is an effective and safe intervention and reduces stress, irritability and loneliness feeling and improves mood

and balances emotions [12]. One of the most beautiful, pleasant, attractive and natural types of music is the music of Ouran recitation sound.

Quran is a panacea that the truth behind it is like an endless ocean and only Imams [prophet's grandchildren] know it comprehensively. About the healing and peace hidden in this divine gift, God says:

"And we send down of the Quran that which is healing and mercy for the believers" [Al-Isra/82] Amir Al-momenin Ali said "Quran is the healing of all pains".

The holy prophet also said: if anybody does not get his healing from Quran, God will not heal him [3].

Diseases are the consequence of lack of harmony in people and Quran, with its magic power can bring back the harmony to one's body and soul and make them healthy [8].

The tremendous effect of this blessing is such that in some Islamic countries and societies, patients have turned to Quran and prayer to heal their physical and spiritual diseases. It has been scientifically proven that listening to the Quran recitation sound can reduce mental stresses [13].

The sedative effect of listening to the Quran recitation sound in nervous and stressful people is such that 97% of their problems will be reduced. Interestingly, most of the people that these effects have been seen among them had not been acquainted with Arabic language and did not know the meaning and concept of the verses and the observed effects have been due to the physiological effects of Quran on nervous system [9, 14-17]. It is proven that human nervous system reacts positively to the sonic stimulants with regular frequencies [8-9].

Quran therapy is a growing phenomenon in different countries especially in recent years [8]. In Quran therapy it is always emphasized on that Quran is very effective in treatment of people with various medical conditions. In this regard, "prayer and spiritualities" have been raised in other countries, such that their therapeutic effects have been investigated in different studies. These studies have been conducted on patients with cardiovascular diseases, Rheumatoid arthritis, brain vascular injuries and so on [10-11, 13-16, 18].

Since among the five senses, listening is the most powerful one and is the last one that stops working in unconscious patients, we decided to investigate the effect of Quran recitation sound on vital signs and arterial oxygen pressure in unconscious patients hospitalized in intensive care unit [ICU].

#### **MATERIALS AND METHODS:**

This is a quasi-experimental pretest-posttest study conducted on 20 unconscious patients hospitalized in

ICUs of two hospitals in Shiraz city. The patients were almost homogenous in terms of consciousness level and cause of coma. The basic information about patients including age, sex, education level, income level, the status of saying prayer and the cause of coma was collected from their hospital profile and via interviewing their families.

The patients were randomly divided into two groups of case and control. For the case group, Yasin surah with Al-Menshawi recitation was played by a headphone PM3 player, 15 minutes per day for 4 weeks. The vital signs including systolic and diastolic blood pressure, breath and pulse rate per minute, body temperature and arterial oxygen pressure were measured in both groups before and after playing Quran recitation. The collected data was analyzed by SPSS 16 software and using paired t-test and Chisquare test.

#### **RESULTS:**

The mean age of participants was 38 years old, most of them were male and their education level was high school diploma. The cause of coma in most of them was head trauma.

Results of this study indicated that after intervention, the mean systolic blood pressure [P=0.04] and

diastolic blood pressure [P=0.05], the pulse rate [P=0.001] and arterial oxygen pressure [P=0.04] were significantly different in case and control groups but this difference was not statistically significant about the breath rate and body temperature [table 1].

The paired t-test showed that there was no significant difference between the mean vital signs including systolic blood pressure [P=0.6], diastolic blood pressure [P=0.4], body temperature [P=0.1], pulse rate [P=0.09], breath rate [P=0.07] and arterial oxygen pressure [P=0.3] in case and control groups before intervention [table 1] but after intervention, this test showed a significant difference between the mean systolic [P=0.04] and diastolic [P=0.05] blood pressure, pulse rate [P=0.001] and arterial oxygen pressure [P=0.04] in case and control groups [table 2].

In investigation of the relationship between some individual and social characteristics, results showed that there was a statistically significant association between gender [P=0.001], education level [P=0.003] and saying prayer status [P=0.000] of the participants and their vital signs and this relationship was not significant about other demographic variables [table 3].

Table 1: comparison between the means of vital signs before listening the Quran recitation sound in case and control groups

		P-value of the			
Vital signs	Case group		Control group		results of paired
	Mean	Standard deviation	Mean	Standard deviation	t-test
Systolic blood pressure	125.5	2.3	120.4	2.1	0.6
Diastolic blood pressure	85.5	2.2	86.4	3.2	0.4
Body temperature	37.3	1.5	37.2	1.3	0.23
Pulse rate per minute	88.9	3.6	86.1	3.1	0.11
Breath rate per minute	16.3	3.4	16.7	3.7	0.86
Arterial oxygen pressure	94.5	1.8	95.9	2.8	0.34

Table 2: comparison between the means of vital signs after listening the Quran recitation sound in case and control group

		D walno of the			
Vital signs	Case group		Control group		P-value of the results of
	Mean	Standard deviation	Mean	Standard deviation	paired t-test
Systolic blood pressure	115.4	2.4	121.4	2.1	0.04
Diastolic blood pressure	70.8	2.2	88.8	1.6	0.05
Body temperature	36.6	1.8	37.4	2.5	0.23
Pulse rate per minute	69.7	3.2	89.6	3.7	0.001
Breath rate per minute	14.7	1.8	17.7	2.1	0.86
Arterial oxygen pressure	97.9	1.7	94.6	1.3	0.04

Table 3: association between the means of vital signs and demographic characteristics

Demographic characteristics	Chi-square test result	P	significance
Age	10.963	0.090	Not significant
Gender	17.347	0.001	Significant *
Education level	5.523	0.003	Significant *
Income level	7.580	0.126	Not significant
Praying status	22.674	0.000	Significant *
Coma cause	0.289	0.687	Not significant

#### **DISCUSSION:**

Many studies have been conducted on the incredible effects of Quran verses on human health and treatment of physical and spiritual disease. Results of this study also showed that listening to the divine Quran recitation is effective in stabilizing vital signs and increasing arterial oxygen pressure in unconscious patients in ICU. In a study, Mirbagher [2011] compared the effect of music and Quran recitation sound on anxiety and vital signs of patients before undertaking abdominal surgery and found that both of them were positively effective in reducing blood pressure, pulse and breath rates and anxiety, but Quran recitation sound was more effective [19] and this result is consistent with the result of the current study. In terms of the effect of music on vital signs, different results are available. Nilson [2008] found that music, stabilizes the vital signs [10]. However Wallace [2001] found no change in blood pressure, pulse and breath rate [11] after listening to music. These differences may be due to cultural and environmental verities and differences in selection of patients. Findings of this study indicates that listening the Ouran recitation sound is effective in reduction of

blood pressure, pulse rate and increase in arterial oxygen pressure of patients. Although the investigations on the effect of Quran recitation sound on vital signs is limited, Majidi [2004] studied its effect on anxiety reduction before and after coronary angiography [6] and Ildarabadi [1998] also investigated its effect on the anxiety before heart surgery [20] and showed that those who had listened to Quran recitation sound experienced less anxiety and had better vital signs in comparison with the control group and these results are consistent with the results of the current study.

Results of Nikbakht's study [1998] on 80 patients before and after diagnostic and therapeutic measures in Esfahan showed that after intervention, the anxiety level in case group was decreased but this reduction was not seen in the control group. The systolic blood pressure and breath rate was also balanced in case group but pulse rate and diastolic blood pressure had not any significant change in comparison with the control group [21]. The difference between results of this study and the current study may be due to the difference in consciousness level of patients and aggressive practices. Evanbagha [1996]

Mirmolaee [1998] in their studies found that Quran recitation sound decreases the pain after surgery, caesarean section and natural delivery [22-23]. Imam Bagher [PBUH] said "the remedy for every pain is in Quran" [3]. The idea of Islamic medicine and considering the role of spirituality in health is growing in other countries. According to the studies conducted by researchers in Harvard University in 2006, spirituality not only has a root in one's beliefs, it has a root in his experience as well. If somebody has only belief and no experience, he will lose many of the physical and mental benefits of spirituality [13].

In a study conducted in ICUs in the United States, after using spirituality as the complementary medicine by a group of nurses who were trained about that, it was observed that the mortality rate after open heart surgery reduced from 9% to 5% [12]. Considering the desire to use non-pharmacological methods to relieve pain and physical problems [24] and the importance of Quran in Iran, it is suggested to conduct more studies on effects of Quran recitation as an available and unexpansive complementary treatment with internal effects on various types of problems and diseases existing in the society. By dissemination of the results of these studies in the world, we can attract more attention to the divine effects of holy Ouran on treatment of diseases.

#### **CONCLUSIONS:**

God has mentioned whatever from the sciences that human needs is in Quran. Some of them are clear and explicit and people understand them and some are just mentioned and people get the effects. Therefore if medical scientists investigate the Quran verses, they may find new things that society needs them and helps to produce science.

Due to its magical expression, the Quran recitation sound as a mystical music, affects mental and spiritual status. Considering the results of this study, Quran recitation sound may be used as a beneficial, non-invasive, available and inexpensive non-pharmacological treatment method to stabilize patients' vital signs. If physicians get acquainted with the efficacy of Quran in patients' improvement process, there will be an evolution in patients' quality of life. In case of providing the needed requirements for extensive use of this type of researches and investigating the efficacy of these therapeutic methods, they may be used in supplementary medical treatments

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