Effect of Prayer on Severity of Patients Illness in Intensive Care Units

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Abstract

Introduction: Faith therapy is one of the treatments which connect the patients with power of the Holy God so that the patient seeks healing and cure. This study aimed “to determine the effect of prayer in reducing severity and intensity of the patients’ illness”.

Methods: This was a two-group controlled clinical trial, purposive study with 70 subjects that was done in Intensive Care Units in 2010. The patients with chronic obstructive pulmonary disease and with congestive heart failure investigated. The patients in the intervention group were studied with recorded prayer for 3 days used prayer attributed to Prophet Muhammad (PBUH). No intervention was applied in the control group. To evaluate the severity of the patients’ illness, SOFA (Sequential Organ Failure Assessment) scale and for statistical analysis, parametric and non-parametric test was used through software SPSS 15.

Results: According to Mann-Whitney test, average difference of illness intensity of the patients between the first and the second day in the intervention group was -0.82± 92 (p>0.05) whereas between the first and the third day was -2.08±1.29 (p<0.001) and between the second and the third day was -1.25±0.91.

Conclusion: Prayer therapy had a positive effect on reducing the severity of the patients' illness.

Keywords: Prayer therapy, Severity of the illness, Intensive Care Unit, Complementary medicine, Spirituality.

Introduction

This belief that religious faiths are able to influence physical and emotional improvement is not a new phenomenon. Sincere faith of someone who is suffering from a fetal disease can marvelously rescue him/her from an inevitable death [1]. Prayer is a spiritual activity and for many of the people is a religious activity [2]. As in all the religions, resorting to God along with special prayers and devotions is a common thing, in Islam there is also this belief that praising Divine names, attributes of God and Quranic verses make peace upon the hearts and minds and is effective on treatment of the illnesses; it also should be noted that healing is concerned with Divine fate and degree of devotion and faith [3]. The history of prayer, its indigenous origin and interpreting prayer language indicate the fact that prayer language is a universal and common language among all the human beings which needs no training. Its capacity is equally lies in all the human beings with all different races, locations and times [4]. In Islamic thoughts, authentic narrations and revealed verses, it was proven that the Genesis World is so interconnected that human behavior can have a dramatic effect on the outside world and the nature [5]. God in Ibrahim Surah, the tenth verse and also Noah Surah, the fourth verse introduced himself as the main origin of the changes in deaths such as suspended death i.e. God postpones the suspended death [6]. According to these narrations, it can be concluded that people would suffer from premature death due to sins and leaving their worship and Divine virtue and before their final and definite death; they would be cause of their own deaths [7]. When death prevention is impossible and medical cares are not useful in long term, the nurse would try to provide comfort and peace and relief of the pain and family solace to help the patient to die in peace in last days of the his/her life so that the family spend those days with less suffering as far as possible. Since death is the only inevitable and incontestable phenomenon of the life and also is the only occurrence which we are certainly sure about from its incidence in the future, the nurses are required to recognize death and can create the ability of simultaneous listening and sympathizing without judging and an acceptable performance in them [8]. Nurses in ICUs are faced with highest mortality in the hospital while the most intensive cares and facilities are available in these wards for the patients. More precisely, intensive care simply means taking care of the patients with
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life threatening and acute illness, under the most professional staff observation, along with advanced facilities for reducing mortality of the admitted patients in this ward [9]. An acceptable objective in ICU is survival of the reversible patients' life; because not all the patients admitted to ICU survive or back to the normal and healthy life and some of them would pass away due to the severity of the disease. The mortality rate defined as the recorded clinical death in ICUs. The mortality rate in ICU is very dependent on the severity of illness and patient's health condition. Based on global estimation, the mortality rate in different ICUs in intensive medical care also had been 6-40 percent [10]. When the classic treatments fail or gets intolerable due to side effects, the complementary medicine would be the best alternative [11]. The very prayers and benedictions have been the beginning of a special chapter in culture and human life. The history of prayer is an obvious reason that language of the prayer is the inevitable part of the human life. Even if someone is full of disbelief and is an idolater, yet one day, prayer would start in his/her life. It has been proven that the reality of the creature including humans is not anything but need to Absolute rich and this had not been just a accidental or temporary thing but a intrinsic, eternal and immortal fact [12]. A review on studied researches on prayer therapy indicated its positive effects. In Iran also the effect of prayer on patients’ hemoglobin and ferritin with thalassemia in 2008 had been done by Farzaneh Mafton which its efficacy was proved on reduction of ferritin, increase of hemoglobin and increase in blood sampling intervals [13]. In another study by Dr. Azma et al. (2006), the effect of prayer on the severity of clinical symptoms and diagnostic findings in patients with carpal tunnel syndrome had been studied [14]. The other study by Harris, the effects of remote intercessory prayer on outcome in patients admitted to the coronary care unit was done. 466 patients in the intervention and 524 patients were placed in the control group which all of them had been randomly selected. In the control group, routine cares and in the intervention group, remote intercessory prayer has been done. Three cardiologists and a local physician carried on the scoring. The results of the score significantly were different in both groups and it was recommended that prayer therapy be considered along with other medical facilities [15]. The study of Dr. Fatemi et al. (2006) conducted this to evaluate the effect of prayer for the spiritual health of cancer patients; the patients with cancer referred to the Rasoul-e-Akram Hospital Oncology and 1 and 2 wards of Cancer Institute. 360 patients with cancer aged more than 20 who underwent chemotherapy and were literate entered the study. These patients were aware of their own disease and had conscious desire to participate in the study. Results indicated that total score of the spiritual health of the patients, which had been measured by Spiritual Health Questionnaire of Polzio and Alison, was in a high level as 98.35. The result of this research showed a significant correlation between prayer and spiritual health of the patients (r=0.7; p=0.0013) [16]. In the study of Rezaii which was done on spiritual health of cancer patients receiving chemotherapy (2007), the following results obtained: that was a cross-sectional study. The spiritual health questionnaire of Palozen and Alison (1982) and the prayer questionnaire of Meraviglia (2002) were used. 360 patients with cancer aged more than 20 years old, were literate and were aware of their own disease and had conscious desire to participate in the study entered the study. Sampling was done in continuous method sampling. The collected data were analyzed through Software SPSS version 15. The findings were as the following: the total score of spiritual health and frequency of prayer was (98.35 ± 14.36) and (94.5 ± 12.98) respectively. There was a significant association between frequency of prayer and spiritual frequency (r=0.61; p<0.001). Hence, in care of these patients, praying should be considered as one of the strategies to promote spiritual health [17]. In another study by Shojayian et al. (2002) aimed to determine pray with mental health and performance of
technical employees of Tehran munitions industries, it was indicated that prayer had a significant association with subscales of anxiety and depression of the General Health Questionnaire. In other words, increasing the use of prayer was associated with decreasing the score of anxiety and depression [18]. The present study therefore aimed to determine the effect of prayer on critical illness of the patients.

Methods
This was a two-group controlled clinical trial study. In this study, after obtaining the permission from the Ethics Committee of Baghiatallah University of Medical Sciences, registering this trial in Iran clinical trial center and receiving written and implied consent form, the study began in study population who included admitted patients in ICU of Baghiatallah Hospital in Tehran from April to June 2010. The inclusion criteria included patients with COPD, CHF, full awareness with high level of consciousness (GCS=13-15] and patients who had trauma surgical problems, mental problems, taking psychoactive drugs, patients in coma stage, patients with impaired speech and memory due to brain problems also were not included in the study. The sampling method was purposive and non-probable method. The sample size was calculated considering $\alpha=5\%$, $\beta=10\%$ and power of 90% and calculated standard difference from the study of Mafton.13] and using Altman's nomogram, the required samples determined 33 subject for each group. With 10 percent probability of the study loss, the estimated size of each group was 35 and in total 70 subjects had been considered. The data tool collection included SOFA standard scale. This scale first has been described in 1996 by Vincent et al. and in terms of validity has been confirmed in different conditions of ICUs, and it indicated that it had an appropriate correlation to predict the rate and result of the disease [19]. In a study which was done on H1N1 critically ill patients during an influenza pandemic, SOFA score considered as an appropriate index for patients triage and had an acceptable reliability [20]. Many studies have shown the efficiency of SOFA score on reviewing organ dysfunction. In a study in University of Amsterdam, Netherland on reliability and integrity of SOFA, the ICC (intraclass correlation coefficient) rate was calculated 0.889 for the entire tool. The Kappa score level (cooperation of the tool's items for measuring what will be predicted) was obtained for the nervous system by average score of 0.552 and good score of 0.634 for the respiratory systems and very good score more than 0.8 for other systems of the human body. In these studies it was proved that SOFA score was completely reliable and the embedded variables exactly measure what researcher had desired [21]. In this study, the severity of patients' condition was predicted based on SOFA in the first 24 hours and the scores then were measured. Then, this prayer [22] “Thou, O pain, find peace with God’s attributes and peace with the God’s Peace and be stop with Divine hinder and get relief with God’s rest; O human, I protect you from what Great Lord protected his throne and angles from earthquakes and tremors in doomsday” which is attributed to Prophet Muhammad (PBUH) had been given to the patients by Walkman player to listen and pray and repeat that. This intervention was done on the patient bedside once a day for 3 consecutive days from late April to mid June 2010. Thereafter, the severity of the patient's illness was measured after the intervention (conducting prayer therapy on the patient's bedside) and again at the next day of each intervention in both control and intervention group, and statistical difference was done as an average difference and standard deviation before and after the intervention with subsequent days after the intervention. Descriptive statistics (mean and SD) and non-parametric tests including Mann-Whitney test was used for statistical analysis. This statistical analysis was done using Software SPSS version 15.

Results
According to the findings, there were 19 males and 16 females in the intervention group and 20 males and 15 females in the control group. Percentage of the participants
included 55.7% males and 44.3% females. In both intervention and control groups, the total number of the participants were 70 subjects which in terms of illness type, 17 subjects had COPD and 18 subjects had CHF in the intervention group, and 17 subjects COPD and 18 subjects CHF in the control group. Percentage of the participant in the COPD group was 48.6% and in the CHF group was 51.4%. In all the cases, there was no significant difference using Fisher's exact test (p > 0.05).

First of all, to assess the distribution method of the data, Kolmogorov-Smirnov test was used which in respect to lack of normal distribution in the two groups, difference mean of the SOFA score was used in different stages of non-parametric tests. Statistically there was no significant difference between SOFA score at the first with the second day of the intervention (p > 0.05), but there was a significant difference between SOFA score at the first with the third day and also the second day with the third day (p<0.001) (Table 1).

### Discussion

In the study of Mafton et al. on thalassemia patients, the effect of prayer therapy was proved on reduction of ferritin, increase of hemoglobin and increase in blood sampling intervals. These patients received prayer in addition to their routine care. The findings of this study indicated that prayer had effect on the mentioned items (their values had changed in comparison with before the intervention which was significant) [13]. In another study by Azma et al. (2006) the effect of prayer on the severity of clinical symptoms and diagnostic findings in patients with carpal tunnel syndrome had been reviewed. Statistical assessment was done with confidence coefficient 95%. In this study, 12 patients with carpal tunnel syndrome were studied. Six weeks after the end of prayer therapy, statistically there was a significant difference between clinical symptoms (based on visual analogue criteria), Phalen’s test, examination the reverse Phalen’s test and findings of electrodiagnosis before and after the prayer therapy [14]. In another study by Harris which was done in CCU, the results of this scoring had been significantly different in the two groups and it was recommended that prayer therapy be considered along with other medical facilities. The results of the above mentioned study was in accordance with the results of the present study and supported them [15]. In studying the efficacy of prayer on the treatment results of the patients admitted to CCU which was done in intervention and control group, prayer was emphasized and used as an affective factor along with standard medical care [23]. In the study of Lebovici (2001), there was not any significant effect in severity rate of the patients and mortality of them which was not in accordance with the present study [24].

<table>
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<th>Variables</th>
<th>Mean difference of SOFA; 1&lt;sup&gt;st&lt;/sup&gt; day with 2&lt;sup&gt;nd&lt;/sup&gt; day</th>
<th>Mean difference of SOFA; 1&lt;sup&gt;st&lt;/sup&gt; day with 3&lt;sup&gt;rd&lt;/sup&gt; day</th>
<th>Mean difference of SOFA; 2&lt;sup&gt;nd&lt;/sup&gt; day with 3&lt;sup&gt;rd&lt;/sup&gt; day</th>
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<tr>
<td>Intervention</td>
<td>-0.82 ± 0.92</td>
<td>-2.08 ± 1.29</td>
<td>-1.25 ± 0.91</td>
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<tr>
<td>Control</td>
<td>-0.54 ± 0.61</td>
<td>0.14 ± 6.8</td>
<td>0.68 ± 6.6</td>
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<tr>
<td>Mann-Whitney and significant level</td>
<td>P &gt; 0.05</td>
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results of the study of Rafiee et al. on effect of salavat before induction of anesthesia on hemodynamic changes induced by laryngoscopy and endotracheal intubation in patients showed that increase in heart rate and arterial blood pressure and pressure-rate index in the case group was lower than control group (p<0.05) and the following results had been reported: psychological relaxation by invocation salavat to Imams (PBUH) before induction of anesthesia could modify hemodynamic changes induced by laryngoscopy and endotracheal intubation [25]. The results of the present study confirmed that prayer therapy had positive effects on physiological symptoms of the patients and reduced the SOFA scores. This indicated the reduction of severity of their illnesses; because reduction in the scores indicated the reduction of their critical health condition and therefore, prayer therapy caused reduction in their severity of the illnesses.

Conclusion
As in the study, prayer therapy had a positive effect on the severity of the patient's illnesses. This effect can be considered as an introduction for treatment of the patients. Reducing the intensity of patients' illness in ICUs, other new patients can replaced with these patients which subsequently would cause reduction of enormous medical costs for insurer organizations and public health services of our country.

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