

The Effect of Murottal Therapy on the Consciousness of Patients with Decrease of Consciousness: Case Report

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ABSTRACT

Introduction – Patients with decreased consciousness are unable to meet their basic needs, such as biological, psychological, sociological, and spiritual needs. Patients with decreased consciousness who are treated at PKU Muhammadiyah Yogyakarta Hospital are often given nursing care that focuses on illness and basic needs such as personal hygiene and nutrition. Nurses almost never try to provide complementary therapies or help meet the spiritual needs of patients with reduced consciousness. These complementary therapies include dhikr therapy and Al-Qur'an murottal therapy, which can help meet the spiritual needs of patients. Al-Qur'an murottal therapy is a recommended intervention because it is not only providing a therapeutic effect for the physical but also psychological and spiritual.

Purpose – The purpose of this case study is to determine the effectiveness of Al-Qur'an therapy for patients who experience decreased consciousness.

Methodology – The method used in this study is a case report. The author took one suitable patient and managed for approximately one week. The author assessed the patient as a whole, then measured the patient's level of consciousness and before and after the intervention. The intervention was carried out for six days. Each intervention is carried out for about three hours per day with the choice of surah based on the will of the family.

Findings – The results showed that there's no significant changes in the level of consciousness after being given murottal therapy for six days with a total duration of approximately three hours in a day, in a different section. Patient's GCS changed from GCS E1V1M2 to E1V1M3.

Implication – One of the studies showed that after the respondent was given Al-Qur'an stimulation treatment there was a change in the GCS score where the post test results after the 6th treatment were obtained from 10 respondents, nine of whom experienced a change in the level of consciousness.

Keywords: Loss of consciousness, Level of consciousness, Murottal Al-Qur'an therapy.

INTRODUCTION

Consciousness defined as a state of wakefulness depends on the integrity of the ascending reticular activating system (RAS) in the upper brainstem tegmentum (reticular formation) and central thalamus, which promote widespread cortical activation (Li et al., 2020). Patients with decreased consciousness cannot meet their basic needs, such as

biological, psychological, sociological, and spiritual needs. Patients with decreased consciousness who are treated at PKU Muhammadiyah Yogyakarta Hospital are often given nursing care that focuses on illness and basic needs such as personal hygiene and nutrition. Nurses very rarely try to provide complementary therapies or help

meet the spiritual needs of patients with reduced consciousness.

Murottal Al-Quran therapy is a recommended intervention because it not only provides a therapeutic effect for the physical but also psychological and spiritual (Saged et al., 2018). The results of Yusuf and Rahman's research in 2019 showed that after respondents were given Al-Qur'an stimulation treatment there was a change in the GCS score where the post test results after the 6th treatment were obtained from 10 respondents, nine of whom experienced changes in their level of consciousness. At the time of assessing the level of consciousness by the nurse, when a painful stimulus was given to the xiphoid process area, the motor score increased by one to two points, where at first the respondent was only able to perform abnormal flexion and extension movements, then began to try to reach the given pain area.

Research conducted by Gempitasari in 2019 provided interventions in the form of Al-Qur'an murottal therapy and 30-degree head-up positioning. The two interventions were carried out for seven days each for Al-Quran murottal therapy and three days for a 30-degree head-up position. Al-Quran murottal therapy is carried out using cellphone media for 30 minutes per day. Surahs that are played include Ar-Rahman, Yasin, and An-Nisa, according to the wishes of the family. Evaluation was carried out in the form of GCS assessment for seven days of treatment after Al-Quran murottal therapy was carried out. Oxygen saturation assessment was carried out for three days of treatment to adjust the head position head-up 30 degrees before and after the intervention was performed.

The spiritual aspect is aspects that are no less important are needed by patients (A'la Yosep, & Agustina, 2017; Pratiwi et al., 2018). Religious coping is a strategy in search of the highest support and strength from God Almighty who can provide guidance, peace, and happiness for the individual. Patients with positive religious beliefs can reduce psychological stress by the existence of spiritual guidance that

is obtained as a source of coping (Tariq et al., 2017).

Patients with decreased consciousness are usually found in the ICU, inpatient, or emergency department. Patients with decreased consciousness were diagnosed with stroke, head injury, and anorexia. There were about five patients with decreased consciousness in the inpatient room at PKU Muhammadiyah Yogyakarta Hospital in the last one month.

This case study performs a murottal therapy intervention in surah picked according to the wishes of the family for about three hours per day for six days. The author carried out the same evaluation, namely measuring the patient's level of consciousness after the intervention.

This is interesting to study because the author wants to see directly whether there is an effect of murottal Al-Qur'an therapy on the patient's level of consciousness, and how the sound of Al-Qur'an can affect the patient's consciousness. This is also important to us as a muslim nurse to fulfill patient's needs with spiritual approach, because nurses are rarely try the intervention or provide educational therapy related to complementary therapies and often focus on pharmacological therapy and physical needs. The patient also unable to meet his spiritual needs independently.

LITERATURE REVIEW

Sensory stimulation includes kinesthetic, auditory, tactile, and visual interventions. Multimodality stimulation such as auditory and tactile is associated with wake cycles, stimulation of voluntary movements, and increased alertness (Utomo et al., 2018).

Sound impulses or stimuli will be received by the reader's ears. Then the ear begins the listening process. Physiologically, hearing is the process by which the ear receives sound waves, distinguishes frequencies and sends information to the central nervous system. Every sound produced by a sound source or air vibration will be received by the ear. These vibrations are converted into mechanical impulses in the middle ear and converted into electrical impulses in the inner ear which are transmitted through the auditory nerve to the auditory cortex in the brain. Besides receiving signals from the thalamus (Septiany, 2019).

The amygdala also receives signals from all parts of the limbic (emotional/behavioral) cortex as well as the neocortex of the temporal lobe (the cortex or layer of the brain that is only present in humans), parietal (part of the midbrain) and occipital (brain behind) especially in the auditory association area and visual association area (Septiany, 2019).

The mechanism of the auditory is the brain stem will be active when there is an auditory stimulus for the state of being awake and awake, then the medial genetic nucleus of the thalamus sorts and transmits signals to the cortex, especially to the left and right temporalis, the auditory cortex (temporal lobe) will perceive sound, while the auditory cortex others will integrate various sounds into a more meaningful pattern, this mechanism allows auditory stimulation reaching the

brainstem and cortex to be activated even though the clinical condition at that time was decreasing consciousness (Safri et al., 2018).

The function of administering therapy to patient with decrease consciousness are as a neuroprotector. The purpose of neuroprotector's administration is to rescue ischemic tissue, limiting the infarcted area so that doesn't expand, lengthens the window time, and minimize reperfusion injury (Faradina, 2017).

The provision of Al-Qur'an stimulation through the auditory system is not only a form of psychological support and has spiritual value, but also acts as a neuroprotective brain (Yusuf & Rahman, 2019).

METHOD

The method used is a case study. The author determines the respondents by selecting one respondent randomly according to predetermined criteria related to the topic. The subject used in this case study is Mr. K with a medical diagnosis of cerebral infarction with decreased consciousness. This case study was conducted in the inpatient room of PKU Muhammadiyah Yogyakarta Hospital for six days, from February 8 to February 11, and to be continued on February 14 to February 15 in 2022. The author also involves the family in the intervention during the case study.

RESULT AND DISCUSSION

Nursing Assessment

The patient on behalf of Mr. K, 62 years old, is being treated for shortness of breath. Mr. K was diagnosed with a suspected cerebral infarction. The patient has decreased consciousness. When found that the patient does not respond to sound, the GCS score is E1V1M2. Mr. K has a history of hypertension, recurrent stroke, and VP shunt. The patient received pharmacological therapy Citicoline 500 mg, Mannitol 125 cc, and Levofloxacin 750 ml.

The result of this case study is that there are no significant changes in effect of murottal Al-Qur'an therapy on the patient's level of consciousness within six days with a total duration of approximately three hours in a day, in a different section. The patient's GCS score before the intervention was E1V1M2, after the intervention for six days, the GCS score became E1V1M3.

This result is in accordance with earlier research which stated that there was no a significant changes in patient after given a murottal therapy, but still there was an increase in the GCS value from before the intervention with a minimum GCS value of 3 and a maximum of 14, to a minimum of 3 and a maximum of 15 after the intervention (Aripriatiwi, Sutawardana, & Hakam, 2020).

Another study explained that the stimulus in the form of sound can affect the GCS value of stroke patients who experience decreased consciousness. nursing actions for murottal Al-Qur'an therapy for six consecutive days, so that in one day therapy was carried out for 30 minute, and there

was an increase in the score GCS score, from the initial score of GCS 6 E2V1M3 to GCS 8 E3V1M4 (Ainy & Nurlaily, 2021).

According to Yusuf and Rahman research in 2019, after being given treatment the stimulation of the Qur'an changes GCS where in the post test that obtained after the 6th treatment, there is a change on the level of consciousness with nine from 10 respondents.

In that case, on average each respondent experienced increase in the value of GCS motor. After being given an intervention in the form of stimulation of the Qur'an 6 times treatment, when assessed level of awareness by nurses, when given pain stimulation in the area processus xiphoideus slowly scores motor increase 1-2 points where the respondent was only able perform flexion and extension movements abnormal, the respondent begins to try to reach the given pain area even though it didn't reach the target given pain stimulation (Yusuf & Rahman, 2019).

Not only on motor, there are respondents who experience improvement in the eye where the eye used to be only responds to pain, respondents start trying to do the opening eyes when his name is called or when given orders to open eyes although not fully open. One respondent in this study for example, there is an increase in the value of GCS 4 numbers where the addition of this GCS score is found in motor and eye of the respondents (Yusuf & Rahman, 2019).

Another research with dhikr therapy intervention proves that there is a significant effect on the level of consciousness of patients who experience decreased consciousness. Dhikr can cause a relaxation response and the serenity that will bring influence on stimulation on the system autonomic nerves that have an impact on the body's physiological responses such as blood pressure, pulse, respiration, EEG, and ECG (Lukman, Putra, & Aguscik, 2020).

CONCLUSION AND RECOMMENDATION

The conclusion of this case study is that there was not a significant change in the level of consciousness of patients who were given murottal therapy intervention for six days. It is hoped that case studies and further research can be carried out more optimally with a minimum of seven days of intervention, in accordance with several previous studies.

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