

The Influence of Murottal Therapy on the Decrease of Blood Pressure on Puerperal and Preeclampsia Women: Literature Review

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Abstract— Mortality and morbidity on pregnant, giving birth, and postpartum women is the biggest problem in developing country. The high of maternal mortality rate is related to many factors, one of them is severe preeclampsia. One of the healing methods is by listening to Al-Qur'an recitation (murottal). The purpose of this research was to determine the effects of listening to murottal on the decrease of blood pressure of postpartum women with severe preeclampsia. This research was a literature review that explored information related to the effects of murottal therapy on the decrease of blood pressure of postpartum women with severe preeclampsia. The sources to do the literature review included a systematic search study of computerized databases from Google Scholar totalling 6 national journals and 1 international journal for the period 2009-2019. The instrument used in this research was questionnaire and the type of the research was quantitative research. The result showed that there was an effect of listening to murottal on the decrease of blood pressure of women with preeclampsia.

Keywords— Murottal, blood pressure, preeclampsia

I. INTRODUCTION

The puerperium is a critical time for mother and baby so that an obstetric care is needed during this time. After the birth process occurs, it does not mean that the mother is free from danger or complications. There are mothers who pass the puerperium period normally, but there are also mothers who pass this period poorly. Various complications may be experienced by postpartum mothers, and if it is not handled properly, it will have a major impact on the high rate of maternal mortality.

World Health Organization (WHO) showed that the Maternal Mortality Rate (MMR) in the world was 295.000 in 2017. This rate has been decreased for 38% since 2000, and the average of annual decrease was only under 3%. The causes of maternal mortality were previous conditions (28%), bleeding (27%), high blood pressure on the pregnancy (14%) (preeclampsia and eclampsia), infection (11%), labour and others (8%), and blood clotting or embolism (3%) (WHO, 2017). One of the causes of Maternal

Mortality Rate (MMR) is preeclampsia that its clinical symptoms can be divided into mild preeclampsia and severe preeclampsia. Mild preeclampsia is the increase of systolic blood pressure ≥ 140 mmHg and diastolic ≥ 90 mmHg, which is obtained from urine and protein urine examination ≥ 300 mg / 24 jam or ≥ 1 dipstick. Meanwhile, severe preeclampsia is preeclampsia with systolic blood pressure >160 mmHg and diastolic blood pressure > 110 mmHg with protein urine more than 5g/ 24 hours.

The Result of Indonesia Demographic Health Survey (IDHS) in 2017 showed that the Maternal Mortality Rate (MMR) was 1.712 per 100.000 live birth. To realize healthy Indonesian family, the Ministry of Health has conducted many programs during the last two years, such as the achievements in the scope of Public Health program including the decrease of Baby Mortality Rate (BMR) and Maternal Mortality Rate (MMR) (Health Ministry of Republic Indonesia, 2017). The Maternal Mortality Rate (MMR) in Central Java Province in 2017 was 475 cases, it was lower than that in 2016 which was 602 cases. Therefore, the Maternal Mortality Rate (MMR) in Central Java Province also decreased from 109,65 per 100.000 live birth in 2016 to 88,58 per 100.000 live birth in 2017. The causes of maternal mortality in Central Java Province in 2017 were preeclampsia (32,97%), bleeding (30,37%), bleeding system disorders (12,36%), infections (4,34%), and metabolism disorders (0,87%) [7]. This background encouraged the researchers to do a research on the effect of murottal therapy on the decrease of blood pressure of postpartum women with preeclampsia.

II. METHOD

This research was a literature review aimed to find the information related to the effects of murottal therapy on the decrease of blood pressure of puerperal women with preeclampsia. The data searching was conducted on the articles published on electronic database which is google scholar. The first keywords used were "murottal, anxiety, blood pressure, and preeclampsia", but the result obtained

was inadequate. Then, the researcher enlarged the searching by using keywords “pregnant, maternity, puerperal, pregnancy, and postpartum”, because on that period preeclampsia occurs. For keywords “murottal, blood pressure, and preeclampsia” the word “preeclampsia” was replaced by “hypertension”. From those keywords, it was obtained 2 articles about pregnancy and maternity article, there was not result on puerperal article. So, the total articles on this research were 5.

III. RESULT AND DISCUSSION

Murottal therapy is classified as non-pharmacology therapy, that is complementary therapy. Surah Ar-Rahman Murottal therapy is one of the safest therapies, with no side effects, cheap and easy to do. Murottal therapy is an alternative relaxation method for pregnant, giving birth, and puerperal women with preeclampsia. Murottal therapy is not a medical therapy to treat preeclampsia but it can make the mother relax and calm, so that it decreases the anxiety toward her condition. Long term anxiety may be dangerous for postpartum women with preeclampsia, including blood pressure, increase of organ disorders or even eclampsia and mortality. This is in accordance with the result of a research that there is decrease on blood pressure before and after the murottal therapy. Erlina [9] in her article entitled “the Effect of Giving Murottal Al-Qur’an and Classical Music on the Decrease of Blood Pressure on pre-operation patients” states that there is a difference on the systolic and diastolic blood pressure before and after Surah Ar-Rahman Murottal therapy given toward hypertension patients.

Some research reporting the decrease of blood pressure after murottal therapy show that murottal therapy is effective to decrease blood pressure and can be used as complementary medical treatment. This is very good if it can be widely applied, including postpartum mothers with preeclampsia, considering that they are prone to anxiety and the incidence of preeclampsia is increasing from year to year, even it is becoming one of the dominant causes of maternal death.

Al-Qur’an as medication has been used and proven. People reading or listening Al-Qur’an will have changes in electric current on the muscles, changes in blood circulation, changes in heartbeat, and changes in skin blood level. Reading or listening Al-Qur’an has relaxation effects causing the decrease of arterial and heartbeat [10]. When Al-Qur’an therapy is given to the patients, it will bring sound wave and stimulate the brain to produce chemical substance namely neuropeptide. This molecule will influence receptor inside the body so that the body feels relax.

The decrease of pain intensity and blood pressure in this research were caused by the relaxation effects from murottal therapy. Based on Alkahel [10], Al-Qur’an played will have relaxation effects as much as 65%. Reading Al-Qur’an therapy has been proven to activate body cells by changing the sound vibrations to be the wave that can be accepted by the body, reducing the receptor’s pain stimulation, and stimulating the brain to release natural endogenous opioid analgesic. This opioid is permanent to block the pain’s nociceptor. Reading Al-Qur’an also gives effects on disorders and relaxation of patients with post-operation pain in Caesar operation.

This is in line with research conducted by Yuliani [1] that there is a difference on the decrease of average of pain intensity before and after murottal therapy. Siswantinah [3] also states that pain intensity after the murottal therapy has interval with pain scale 2-8, lower than the interval before the therapy. Al-Qur’an chanting can reduce stress hormone, activate natural endorphin, increase relaxed feeling, distract from fear, anxiety and tension, increase the body chemical system that decrease blood pressure and reduce breathing, heartbeat, pulse activity and brain waves. Deep and slow breathing pattern is very good because it causes calm, emotional control, deeper thought, and better metabolism.

Surah Al-Qur’an played in this research is Surah Rahman which is one of the Surah in Al-Qur’an consisting of 78 verses. All verses in Surah Rahman are short so that these verses are comfortable to listen to and have relaxing effects for the audience. Surah As-Rahman has characteristics of repeating verse as many as 31 verses are repeated in this Surah. The repetition of these verses is to emphasize very strong belief [2]. The repetition of these verses is also a form of meditation focusing the mind on the object that is done with full awareness, how this process has effects on human body so that it has relaxation and healing effects on the body. Listening to Al-Qur’an will have relaxation effects on the human body because it has elements of meditation, suggestion, and relaxation that give relaxation on the body. This feeling will give emotional responses toward positive response that influences and creates positive perception [4]. The emerged perception will stimulate hypothalamus to reduce stress hormone and activate endorphin so that it can increase relax feeling and alter the attention from fear, anxiety, tension, and repair the body chemical system that slow the breathing down, heartbeat, pulsation, activate brain waves and decrease blood pressure [6].

IV. CONCLUSION

The result of this research was in accordance with Pratiwi’s research [4] entitled “the Effects of Benson Relaxation Technique and Al-Qur’an Murottal on the Blood Pressure of Primary Hypertension Patients”, in which it was found that Al-Qur’an murottal gave effects on the decrease of blood pressure of primary hypertension patients.

Based on the explanation above, the researchers concluded that Al-Qur’an murottal technique is proven in giving calm and relaxation effects because it will give positive perception response that in advance it can stimulate the hypothalamus to release endorphin, a hormone that makes people feel happy so that it decreases blood pressure.

ACKNOWLEDGMENT

The researcher would like to express her gratitude to her supervisors and all academic community of Universitas Harapan Bangsa, and also Universitas Aisyiyah Yogyakarta as the host of this webinar.

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