VIBRATIONS OF DHIKRULLAH AS A RELAXATION MEDIUM FOR THE BRAIN

Iskandar*, Muhammad Dirhamsyah**, Jasafat***

*Department of Psychology, Faculty of Medicine, Syiah Kuala University, Banda Aceh, Indonesia, isibram@usk.ac.id

**Department of Mechanical Engineering, Faculty of Engineering, Syiah Kuala University, Banda Aceh, Indonesia, mdirhamsyah@usk.ac.id

***Study of Islamic Communication and Broadcasting Program, Faculty of Da‘wah and Communication, State Islamic University Ar-Raniry, Banda Aceh, Indonesia, jasafat@ar-raniry.ac.id

Email Correspondence : mdirhamsyah@usk.ac.id

Received : March 19, 2023    Accepted : December 3, 2023    Published : December 31, 2023

Abstract: Dhikrullah according to the Qur’an is a vibroacoustic phenomenon that affects the human nervous system. Among Muslims, the topic of dhikrullah is a significant issue because it is believed to be a medium that directly connects humans with God. Among spiritual researchers, they are still questioning the role and influence of dhikrullah as a medium for relaxing the brain. This paper discusses the role of dhikrullah vibrations as a medium of relaxation in the brain as the human control center. Studies by Richard Gerber and David R. Hawkins provide significant data on the role of vibration as dhikrullah medicine and relaxation vibrations. To this day, the practice of dhikrullah can still be found widely among Muslim communities. The dhikrullah model was obtained qualitatively from 4 dhikrullah practitioner informants through participant observation and interviews. While brain wave samples were obtained quantitatively from 10 subjects via Electroencephalograph (EEG). From the field research, it was found that the dhikrullah model was found, and from the EEG recording results, it was found that the dhikrullah vibrations affected all subjects, produced a calming effect on all subjects, and were used as a medium for changing consciousness, as a medium for relaxation, and activating relaxation. The novelty of this research lies in the use of EEG to prove the effect of dhikrullah vibrations as a medium for relaxation in the brain. The results of this study make it clear that dhikrullah vibrations can be used by the parties as a medium to permanently increase relaxation in the brain.

Keywords: Vibration; Dhikrullah; Media; Relaxation; Brain


**Keywords:** vibrasi, dhikrullah, media, relaksasi, otak.

**Recommended APA Citation:**

**Introduction**

Dhikrullah, as a sound wave, is an Islamic teaching that has not yet received serious attention from researchers. Scientifically, Dhikrullah is a vibroacoustic phenomenon that falls within the audiosonic frequency range and affects brain relaxation (Gerber, 2001). Dhikrullah has been practiced for hundreds of years among Muslims, yet studies on Dhikrullah as a medium of relaxation (Q.S. Ar-Ra'du 13:28) at the human consciousness center remain incomplete. Dhikrullah waves are one of the variables that can support the presence of electricity in the brain, making it recordable with EEG. Therefore, for the purpose of Dhikrullah as a relaxation medium, researchers utilize Dhikrullah vibrations following vibroacoustic methods to induce beta and alpha waves in the subjects' brains. This study represents an academic response to find a scientific answer to the phenomenon of Dhikrullah as a relaxation medium. The correct vibrations can function as a relaxation medium in the brain as the center of human consciousness (Gerber, 2013).

**Research Method**

The instruments for this research method were designed in two stages according to the direction of experts from Universiti Teknologi Malaysia and under the guidance of neurologists and EEG specialists from Universitas Sumatera Utara to explain the role of Dhikrullah vibrations as a medium of relaxation for the brain. First, the model of Dhikrullah was obtained qualitatively through observation, interviews, and participants involving themselves in a series of activities with four leaders of the Tarekat Mufarridiyah congregation in Medan, North Sumatra, to find the model and meaning of the ritual, also following the respiratory model suggested by Alexa Fleckenstein (Fleckenstein, 2007). Second, to obtain samples of brainwave (Naji et al., 2022) recordings from 10 subjects were done quantitatively.
through Electro Encephalograph (EEG) (Given, 2008). The merging of these two methods is to depict the role of Dhikrullah vibrations based on data and facts.

**Determining the Dhikrullah Model**

The dhikrullah model chosen from among the followers of al-mufarridun is considered relevant to the principles of vibroacoustics and Alexa Fleckenstein's respiratory model. The dhikrullah model is a combination of breathing and sound that serves as a reference while performing vocal dhikrullah. The model of respiration and vibration maximizes the supply of oxygen into the body, increasing blood oxygen saturation and reducing anxiety disorders. The process of breathing and vocalizing merges with dhikrullah, focusing on listening to and remembering dhikrullah without visual imagery in the mind. Dhikrullah is performed after obligatory prayers for a duration of 3 to 5 minutes. Dhikrullah consists of a phrase combining four Arabic Hijaiyah letters: A, L, L, and H, forming the word "Allah."

The combination of these four letters creates a unique form of breathing and sound in terms of vibration, frequency, and amplitude. This form of pronunciation, which adheres to the principles of articulation (makhraj), has been proven to produce a respiratory and vibrational model that influences brain waves. The form of inspiration and expiration during vocal dhikrullah is a respiratory model recommended by Alexa Fleckenstein. The pronunciation of the dhikrullah phrase employs abdominal breathing techniques. The singular word "Allah" encapsulates the power of the letters A, L, L, and H, which combine into one with the form of inspiration and expiration in dhikrullah breathing.

Aspects of dhilrullah play an important role in facilitating the formation of states to bring about changes in consciousness in the subject's brain. The tongue controls the vocal pronunciation of the name of God. This sound then produces vibrations that mechanically propagate into the brain. The vibrations of dhikrullah entering the brain act as a stimulus that can activate alpha waves, as seen in EEG recordings. The shift in consciousness from beta to alpha waves induces a relaxation (Nabilah et al., 2021) state in the brain of all subjects. The name of God consists of four letters: A, L, L, and H. These letters combine to form the name "Allah," generating vibrations in the form of interference waves between waves that stimulate the heart and waves that calm the heart. The word "Allah" is unique because it is pronounced without visual representation in the brain.

The utterance of "Allah" easily stimulates the brain's consciousness level to decrease beta activity and move towards alpha. This shift from beta to alpha consciousness significantly aids in relaxing the brain. The letter 'A' is located in the abdomen. The vibrational effect of dhikrullah in the abdomen helps to spread waves around the center, which can improve muscle health quality. The double 'L' (L L) is situated at the tip of the tongue. The first 'L' lifts the tip of the tongue to touch the palate. The second 'L', combined with the 'H' sound (pronounced AH) from the throat's base, returns the tongue tip to its normal position behind the lower teeth. In
the utterance of "Allah," the vibration of 'L' combined with the 'AH' sound produces a very strong vibrational effect.

One breath is taken for each utterance of "Allah." This method maximizes the intake of gases needed by the body, especially oxygen, and the expulsion of useless gases resulting from metabolism that can disrupt bodily health. Humans are highly sensitive to oxygen deficiency as nearly all body parts require oxygen to function. The air inhaled into the body must be completely exhaled along with a push of air from within the chest. This breathing process can bring immediate freshness to each subject. Inspiration and expiration during dhikrullah respiratory activities are not held back. The exchange of gases in and out occurs rapidly. This process allows rapid blood oxygen saturation, reducing anxiety levels in the subject, and helping normalize cortisol hormone levels in the blood sample.

Dhikrullah can function as a positive vibration for the health of the mind and body. Supplying dhikrullah vibrations to the brain activates alpha waves that can influence the level of consciousness and tranquility in the subject. The unique character of dhikrullah vibrations is highly beneficial for both physical and psychological brain health. Harmonizing the body, mind, and emotions to feel more spirited, energized, peaceful, and calm. The body has a direct connection to the mind and emotions because what happens in the body and feelings affect the mind, as seen in brain waves monitored using electrodes from EEG. Maintaining respiratory system health, determining the high and low tones, and practising breathing daily.

The steps of dhikrullah consist of performing ablution (wudu). Wudu water, as a conducting medium, helps stabilize the temperature on the skin, especially the scalp. The act brings together intention, water, and skin. The skin has a close relationship with nerves in the brain. Water has high therapeutic value. The meeting of water with the skin during ablution produces a refreshing effect on the brain. Body parts involved in wudu, where nerves gather from hands to feet, are vulnerable to disease transmission as they come into direct contact with various objects and sunlight during the day and evening. All wudu parts send sensations to the brain stem, which are then conveyed to the thalamus in the brain. Subsequently, memory stores these experiences in the brain to be used to prompt the body to repeat such actions if a similar effect is needed.

Sit on both soles as a support for body weight. During dhikrullah, sitting in a kneeling position is practiced after every obligatory prayer. Before dhikrullah, the body sits straight on both crossed soles to not hinder the upward flow of energy from the spine to the head, with both palms placed between the thighs. Closing the eyes can interrupt the flow of electricity to the brain entering through the eyes. Closing the eyes brings awareness of the soul's structure (because the one engaging in dhikr is the soul) and the implications to be gained from dhikrullah. Bringing awareness of vision (intention) when mentioning the name of Allah. Sitting in a
The kneeling position activates the energy system to achieve maximum vibrational effects. Sitting affects body posture and provides many health benefits. Bring both palms together this helps improve concentration. There is a stronger connection between the brain and the palms compared to other body parts. The palms are an essential part of the human brain because they engage in more activities, including artistic activities. The palms express the creativity of the brain. Bringing both palms together unites two energy centers in the hands for greater focus. The hands also express positive and negative emotions. Bringing both palms together can enhance concentration because the wudu parts prevent receiving stimuli from other objects. There are many nerve points on the palms, making them sensitive. The skin on the wudu parts has a close relationship with the nerves in the brain.

Inhale and exhale through the mouth when mentioning the word Allah automatically. This method refreshes the quality of gases in the blood. There is no breath retention in dhikrullah. Inhalation and exhalation are not held back. Dhikrullah is done in harmony with inhalation and exhalation. One mention involves two activities: inspiration and expiration. When mentioning the name of Allah, also listen. This method aims to cleanse perception from various visual disturbances.

All these aspects synergistically form the dhikrullah model. In theory, specific vibroacoustic sounds can act as stimuli in activating relaxation in the brain. The respiratory pattern accompanying dhikrullah follows the recommendations of Fleckenstein.

**Determining the Research Subject**

The entire subject group has undergone the ethical research process established by the hospital in accordance with medical record number 06/04/2015, sequence number 01.07.01.20150056132.001. The research permit LITBANG/00.63.80.83 has been obtained. Neuroscientists use the term "subjects" to refer to those whose brain waves are recorded (Fundukian, 2008). The recorded EEG results from the subjects are referred to as samples. Subject criteria were selected based on the neurologist's recommendations to identify samples of brain wave patterns.

Five criteria were established for subject selection consisting of age-based selection, the reason for this specific age range is that the research aims to benefit those who are experiencing mental disorders between the ages of 17 and 25 due to disaster-related trauma. The subjects are males. This criterion facilitates easier interaction with the researchers due to considerations of time and gender. Mental health disorder; all subjects have confirmed mental health disorders, identified through interviews and preliminary research. No prior experience with the dhikrullah model; subjects have not previously practiced the dhikrullah model with a single phrase. This condition is set to assess the impact of dhikrullah on the brain...
subjects convincingly. The subjects are willing to be involved in the trial process of the dhikrullah model for data collection until its completion.

**Trial of the Dhikrullah Model**

The Dhikrullah model, before being used in the EEG room, was first tested on 10 subjects to ensure that the model was understood and could be well mastered by the subjects so that good samples could be obtained. The study was conducted openly by providing information to the subjects that the researcher was conducting a study on the method of Dhikrullah (Given, 2007).

**The Recording Phase of Electroencephalography (EEG)**

The recording of EEG samples was assisted by two specialized neurological nurses and one expert in reading the basic rhythms of brain waves. EEG includes a set of computers, photic lights, electrode cables, electrode guides, and electrode adhesives. The recording of brain waves is divided into before, during, and after Dhikrullah.

**Before Recording**

All subjects have been given instructions on the process of recording brain waves in the EEG room. Subjects were connected to the EEG system before sampling. Understanding how EEG works on subjects. The explanation includes the purpose of the study, washing the head, sleeping position, sitting position during recording, hyperventilation, photic stimulation, and the baseline EEG rhythm (Mulert and Lemieux, 2010). Subjects were asked to eat 60 minutes before the EEG process began because, during the EEG process, subjects should not be hungry or thirsty according to neurological guidance.

![Figure 1. Placement of electrodes on a subject performing Zikr in a seated position.](image-url)
Recording Process

The recording duration is typically 3 to 5 minutes for each subject to obtain a single sample. Following the procedure, recording starts with pre-hyperventilation up to Dhikrullah. An important aspect during the recording of Dhikrullah is to ensure that the electrodes remain attached to the scalp of the subject and that the body does not sweat. This is because if the electrodes are loose or detached, artifacts will appear on the EEG monitor. Another consideration is maintaining the temperature in the EEG room to prevent sweat that could disturb the subject. Dhikrullah by vocally mentioning the name of Allah is performed by the subjects alternately with a relaxed sitting position, hands clasped between the thighs, and eyes closed to reduce the influence of light on the brain. Pronouncing "Allah... Allah..." for 3 minutes. This duration is considered by Guyton to have influenced the subjects' amygdala.

Figure 2. Photic Simulation to determine the brain's level of normalcy.

The subject closes their eyes (ocular), does not sweat, does not move the eyes (eye movement), does not move the eyeballs, does not blink (eyelid flutter), avoids reflexive eye movements (nystagmus), does not move muscles, does not move the mouth and tongue. The tongue moves like one pole with the tip of the tongue charged negatively and the base of the tongue positively charged (Hirsch and Brenner, 2010). There is no sobbing, no chewing, no tongue movement against the palate (palatal myoclonus), and no shaking, stay calm when breathing, and do not tighten the face, legs, and hands. Perform Dhikrullah in a relaxed state (extremities). Because all movements can produce artifacts.

After Recording

After the recording process is completed, the researcher ensures that the brain waves have been successfully saved on the EEG by checking the monitor and observing the printed EEG recording results. Ensuring that the data from each
subject corresponds with what is stored on the EEG. After completing the sample recordings from 10 subjects, the researcher observes how the expert reads the EEG rhythms, which can be seen in Figure 3.

Figure 3. Phases for obtaining samples from subjects through EEG.

To obtain EEG results from subjects, the EEG method must be followed (Sanei and Chambers, 2007). EEG calibration phase, electrode placement phase, preliminary recording, hyperventilation, post-hyperventilation, photic stimulation (Kropotov, 2009), and the Dhikrullah phase. The preliminary phase is to understand the state of the subjects' brain waves, the hyperventilation stage is to stimulate the brain by breathing in and out rapidly. The purpose of hyperventilation is to reveal hidden disorders in the brain. Post-hyperventilation is to understand the state of brain waves after receiving a stimulus from hyperventilation. Photic stimulation is the activity of giving intermittent light to the subjects' eyes to stimulate the brain with the goal of generating electrical activity to detect damage to the brain (Hirsch, 2010). The phase of the influence of Dhikrullah waves on the brain. Subjects must perform Dhikrullah according to the model that has been tested.

Data Analysis

Data analysis is conducted by experts by observing the basic rhythm of the waves from the first phase to the last phase. The special analysis is on the Dhikrullah phase. In this phase, the role of alpha waves from the vibration of Dhikrullah as a relaxation medium for the subjects' brains is clearly visible. Thus, the role of Dhikrullah as a relaxation medium for the brain can be understood (Sambarhuna, 2009). The phases compared are the initial phase, hyperventilation, post-hyperventilation, and photic stimulation with the Dhikrullah phase.

Result and Discussion

Based on the findings from the field and EEG recordings of Dhikrullah on ten subjects, the author found:

Dhikrullah Model

Dhikrullah falls under vibrational medicine. Sound wave vibrations are the most commonly known form of mechanical vibration. The only difference between...
these forms of energy is that each oscillates at a specific frequency. Therefore, vibrational medicine refers to a health perspective that takes into account all forms of vibratory energy frequencies contributing to the multidimensional human energy system. From an acoustic perspective, energy, waves, vibrations, amplitude, and resonance are highly influential to the brain. Therefore, the presence of dhikrullah in the field of health has been proven to contribute to healing.

The Dhikrullah model used refers to the pattern recommended by Alexa Fleckenstein. The two primary aspects of the Dhikrullah model are breathing and vocalizing. Both aspects have different functions for the same purpose in activating life functions. The pronunciation and placement of the letters A, L, L, and H in subjects, accompanied by breathing in and out in a state of mind and feeling without visuals, become the unique characteristic of the Dhikrullah model. The effect of combining letters that form the word Allah through synchronized sound will influence the state of the brain and heart.

**The Impact of Dhikrullah Vibrations on Subject**

The placement of electrodes on the subjects’ scalp to record electrical activity caused changes in brain waves as seen in the EEG results. The EEG recordings show that Dhikrullah vibrations affected all 10 research subjects as evidenced by the neurological certification sheet.

<table>
<thead>
<tr>
<th>Patient 1</th>
<th>First Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Details</td>
<td>Date of Birth 10/12/1995</td>
<td>Patient ID 63-86-63</td>
</tr>
<tr>
<td>Test Information</td>
<td>Creation Time: 08/04/2015 11:45:43</td>
<td>Physician Anonymous</td>
</tr>
<tr>
<td></td>
<td>Recording Start: 08/04/2015 11:49:31</td>
<td>Recording End: 08/04/2015 12:40:07</td>
</tr>
<tr>
<td></td>
<td>Type Routine EEG</td>
<td>Technology Anonymous</td>
</tr>
<tr>
<td></td>
<td>Medication</td>
<td>--</td>
</tr>
<tr>
<td>Test Notes</td>
<td>Samples for research on the relationship of dhikrullah (mentioning the name of Allah) to brain waves.</td>
<td></td>
</tr>
<tr>
<td>Resume</td>
<td>Recording is done in a conscious state without premedication.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The basic rhythm is of low to medium voltage with a frequency of 8-13 Hz mixed with 15-25 Hz.Tidak ada asimetri atau focalisasi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>During HV (Hyperventilation) and PS (Photic Stimulation), no significant changes occurred.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No changes were found during the recording of the Zikr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impression: EEG within normal limits.</td>
<td></td>
</tr>
</tbody>
</table>
Patient 2

First Name: Zulfahmi
Last Name: Haruni

Date of Birth: 17/02/1994
Patient ID: 63-83-25
Sex: Male
Hand Dominance: R

Test Information
Creation Time: 06/04/2015 10:22:44
Recording Start: 06/04/2015 10:24:13
Type: Routine EEG

Medication: --

Referring Physician: dr. Haflin S Hutagalung
SpS

Test Notes
Sample for research on the relationship of dhikrullah (mentioning the name of Allah) to brain waves.

Resume
The recording was done in a conscious state without premedication. The basic rhythm had low to medium voltage with a frequency of 8-13 Hz mixed with 15-25 Hz. No asymmetry or focal slowing was noted. During HV (Hyperventilation) and PS (Photic Stimulation), no significant changes occurred. No changes were observed in the recordings during Zikr. Impression: EEG is within normal limits.

Patient 3

First Name: Febriansyah
Last Name: Satria

Date of Birth: 21/02/1996
Patient ID: 63-86-203
Sex: Male
Hand Dominance: R

Test Information
Creation Time: 08/04/2015 9:39:25
Recording Start: 08/04/2015 9:39:52
Type: Routine EEG

Medication: --

Referring Physician: dr. Haflin S Hutagalung
SpS

Test Notes
Samples for research on the relationship of dhikrullah (mentioning the name of Allah) to brain waves.

Resume
The recording was conducted in a conscious state without premedication. The baseline rhythm had low to medium voltage with frequencies of 8-13 Hz mixed with 15-25 Hz. No asymmetry or focal slowing was noted. During HV (Hyperventilation) and PS (Photic Stimulation), no significant changes were induced. No changes were observed in the recordings during Zikr. Impression: EEG is within normal limits.
Samples for the study of the relationship between dhikrullah (mentioning the name of Allah) and brain waves

Resume

The recording was performed in a conscious state without premedication. The baseline rhythm was of low to medium voltage with frequencies of 8-13 Hz mixed with 15-25 Hz.

There was no asymmetry or focalization.

During HV (Hyperventilation) and PS (Photic Stimulation), no significant changes were induced.

No changes were observed in the recordings during Zikr.

Impression: EEG within normal limits.
Dhikrullah Vibrations Produce a Calming Effect on Subjects

Sound waves, whether during speaking or laughing, are expressions of emotions from the amygdala. dhikrullah is capable of influencing the brain and feelings. A special aspect of the human voice is its cathartic function, meaning it can eliminate various influences on the mind that can cause emotional disturbances. Therefore, scientific methods applied to dhikrullah have been proven to activate alpha waves (Toscani et al., 2010) which can produce a calming effect on all subjects. The supportive recording was done in a conscious state without premedication, showing a baseline rhythm of low to medium voltage with a frequency of 8-13 spd.

Dhikrullah as a Medium of Consciousness Change

Sound has been proven to function as a medium for transmitting sound waves to the brain. Vibrational stimuli influence neuron activity in the brain. Changes in neuron states affect brain waves. Changes in brain waves are manifestations of changes in consciousness that affect perception, hallucination, illusion, and delusion (Hasanain et al., 2016). Therefore, dhikrullah as a sound has the ability to influence changes in consciousness. The shift from beta to alpha indicates a change in the level of consciousness.

Dhikrullah Vibrations as a Medium for Relaxation

Practitioners of dhikrullah are directed to listen to the vibrations without visuals. The state of dhikrullah vibrations without visuals aids the mind in reaching potential conditions. Therefore, dhikrullah vibrations can act as a relaxation medium for the brain. Kamiya (1960) developed biofeedback for therapeutic techniques by controlling the alpha rhythm to demonstrate that the brain can produce alpha waves. Kamiya controlled states of consciousness through vibrational stimulus. Hink & Hillyard (1976) found that the brain tends to adjust its frequency to match the frequency of vibrational stimulation. Auditory stimulus experiences, as described by science, concretely prove that stimuli affect human behavior (Quine, 1998). Maquet discussed the function of sound as a stimulus to the brainstem, forebrain, and the state of the brain during sleep. Both negative and positive emotional content can be caused by certain tonal stimuli (Maquet, 2003).

James D'Angelo studied the power of the letters contained in the phrase Allah. The word Allah consists of only four letters, yet there is a vast meaning and secret of vibration in this word. In the word Allah, there are two unique sounds associated with divinity. The sound of L and the sound of AH. The sound of L in the word Allah is highly vibratory (D'Angelo, 2005). The sound AH in many religions refers to divinity. The consonant L produces a unique vibration. Angelo suggests that the sound L be pronounced in a specific format, emphasizing the sounds AL and AH. The pronunciation of the name Allah is related to breath and its articulation uses a
melody. Pronouncing it loudly in accordance with the rhythm of AL for one beat and LAH for two beats (D'Angelo, 2005).

**Dhikrullah vibrations activate relaxation.**

Dhikrullah is performed for a duration of 3 to 5 minutes, as shown in the EEG recordings, which can increase concentration. Dhikrullah vibrations can function as therapy because they can change consciousness from beta to alpha frequency. This change causes physically, cells, glands, organs, and the circulatory system to work more optimally. The nervous system will function with lower stress levels and as a result, the whole body will be in a relaxed state. Mentally, a harmonious psychological balance will be achieved. Such a mental state will free emotions from feeling pressured. Spiritually, there will be a sense of boundless freedom and happiness. Dhikrullah can influence the formation of a calm human emotion as shown by neurological validation and the Quran (QS. Ar-Ra'du. a: 28).

**Conclusion**

Dhikrullah is still believed to be a primary form of worship among Muslims. The existence of dhikrullah as a vibroacoustic phenomenon has been scientifically proven today, directly affecting the human nervous system. The study shows that dhikrullah influences all subjects, producing a calming effect, serving as a medium for consciousness change, relaxation, and activating relaxation in the brain. This influence provides positive implications for activating the subjects' relaxation function. In the future, the significant role of dhikrullah can be further developed to neutralize vibrational disturbances to the brain that constantly interact with various waves and frequencies that cause damage. Dhikrullah is proven in subjects to induce relaxation by changing beta waves to alpha waves.

**Acknowledgements**

Dr. KH Mif Rohim Syarkun, Vice-Rector III, Universitas KH Hasyim Asyari (UNHASY); Faculty of Islamic Civilization Universiti Teknologi Malaysia (UTM); Haflin Soraya Hutagalung, Staff of the Department of Neurology, Faculty of Medicine, Universitas Sumatera Utara (USU); Ministry of Religious Affairs (Kemenag) Republic of Indonesia.

**Reference**


