


Section: Community Nursing

Dhikr therapy to improve muscles weakness in patient with stroke non haemorrhagic

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Abstract

Stroke is a form of brain tissue damage caused by an abrupt reduction or cessation in the supply of oxygenated blood to the brain, resulting in brain cells that are deprived of oxygen and thus, cease to function properly. Stroke patients often experience neuromuscular issues that can impair their mobility, leading to weakness or even paralysis. Beyond physical challenges, stroke can also profoundly affect patients' psychological and spiritual well-being. Nursing interventions for stroke patients may include therapeutic approaches aimed at improving physical mobility and muscle strength. One such intervention is the practice of dhikr (remembrance) using the knuckles of the palm, which can help to enhance muscle strength and flexibility. The purpose of this research was to evaluate the effectiveness of dhikr therapy in reducing limb weakness among non-hemorrhagic stroke (SNH) patients in Trojayan Hamlet, Paremono Village, Mungkid District, Magelang Regency. This case review was conducted as a staged and systematic treatment case study. Findings from the intervention revealed that dhikr, practiced by flexing and moving the knuckles of the hand, can reduce stiffness in the joints of stroke patients. This approach appears to be effective in addressing limb weakness in stroke patients by supporting muscle flexibility and strength, illustrating that dhikr practiced with hand movements offers both physical and spiritual benefits in stroke rehabilitation.

Keywords: Dhikr therapy; nursing intervention; stroke; community nursing; complementary therapy

Introduction

Stroke is a permanent neurological disorder caused by a sudden and rapid disruption of blood circulation to the brain, which can lead to brain damage and long-term effects, including paralysis (Induruwa, Holland, Gregory, & Khadjooi, 2019). This condition imposes significant limitations on the daily activities of those affected. In addition to physical impairments, stroke patients often experience psychological and spiritual changes. Meeting spiritual needs through practices such as dhikr (remembrance of God) is one approach to addressing these challenges (Li et al., 2024). Dhikr involves verbal or mental recitation, bodily movements, or a combination thereof, which are expressions of gratitude, prayer, and mindfulness, as recommended in Islamic teachings (Anwar et al., 2024). The aim is to cultivate inner peace and strengthen the individual's closeness (taqarrub) to Allah. A non-hemorrhagic stroke results from thrombosis due to the formation of atherosclerotic plaque in blood vessels that supply oxygen to the brain or from an embolism originating outside the brain that becomes lodged in cerebral arteries (Kuriakose & Xiao, 2020). Plaque buildup, or atheroma, typically occurs at artery branches, where platelets and fibrin adhere, gradually enlarging into a thrombus. The presence of thrombi and emboli restricts blood flow to the brain, depriving surrounding brain tissues of necessary nutrients and oxygen, which ultimately leads to cellular damage. This lack of blood flow often leads to muscle weakness, resulting in mobility challenges that limit daily activities. In non-hemorrhagic stroke patients, decreased muscle strength and mobility loss call for rehabilitation strategies, such as early mobilization, to restore motor function (Chugh, 2019).

Stroke often results in muscle weakness due to damage in the brain areas responsible for controlling movement, leading to reduced or impaired function in the affected limbs. When a stroke disrupts blood flow to the brain, the deprived brain cells may die or become damaged, which can cause weakness or paralysis on one side of the body, known as hemiparesis or hemiplegia (Gray, Rice, & Garland, 2012). This muscle weakness impacts the patient's ability to perform daily activities, affecting their independence and quality of life. Immobilization after a stroke can also lead to muscle atrophy, further complicating the recovery process. Rehabilitation programs, including physical therapy, strength training, and exercises to promote range of motion, are essential to help restore function and prevent muscle stiffness (Nozoe et al., 2024). Addressing muscle weakness post-stroke is vital for regaining mobility, as targeted exercises can help stimulate muscle recovery, improve strength, and restore a patient's ability to perform tasks, leading to a better recovery outcome. Early mobilization is critical to preserving muscle strength and flexibility, enabling patients to regain functional independence. Dhikr therapy, specifically using the finger phalanges, can serve

as an independent nursing intervention to enhance hand range of motion (ROM). This technique involves using the thumb as a guide to sequentially flex and extend each joint (or vertebra) of the fingers, starting from the thumb to the little finger. This method can promote both physical rehabilitation and spiritual comfort for stroke patients.

Dhikr therapy can offer meaningful support for stroke patients experiencing muscle weakness by integrating spiritual and physical practices to promote relaxation, motivation, and mental resilience (Pohan et al., 2024). Dhikr, or the remembrance of God, involves the repetitive recitation of sacred words or phrases and is believed to bring inner peace and reduce stress, which can positively affect physical health. For stroke patients, performing dhikr can serve as a non-pharmacological approach that encourages focus and calm, reducing anxiety often associated with recovery challenges. Using the finger phalanges for counting recitations also provides a subtle way to stimulate hand and finger movement, supporting range-of-motion exercises and muscle activation in a gentle, controlled manner. The repetitive movements involved in counting dhikr on finger joints encourage blood flow and can help maintain some degree of flexibility and mobility in the hands and fingers, which is especially beneficial for patients with reduced motor control (Lawrence et al., 2017). Studies suggest that spiritual practices like dhikr may not only foster hope and mental strength during the lengthy rehabilitation process but also contribute to an overall improvement in quality of life. Dhikr therapy, when combined with conventional rehabilitation, thus has the potential to assist stroke patients in addressing muscle weakness, promoting a more holistic approach to recovery.

Case Description

This study employs a case study approach, with nursing care provided in stages over three 8-hour shifts. The nursing process involves a thorough assessment of the patient's condition, gathering data through interviews with both the patient and family members. After data collection, the information is analyzed to determine a nursing diagnosis based on the observed symptoms, leading to the development of a tailored nursing care plan. The final step is the evaluation of the patient's response to care. In this case study, a 68-year-old male patient with a history of stroke presented with right-sided weakness, reduced muscle strength, high blood pressure, sluggishness, and slurred speech. From the data analysis, a diagnosis was made indicating impaired physical mobility related to neuromuscular weakness and decreased muscle strength. This diagnosis falls under the physiological domain, specifically in the categories of activity and rest, as it pertains to limitations in independent physical movement. The nursing intervention for this patient involves dhikr therapy, which is performed five times a day following prayers. Each session lasts 3–10 minutes, using the knuckles of the palms to facilitate rhythmic movement. This approach not only incorporates the physical benefits of hand exercise to aid in mobility but also leverages the calming, meditative effects of dhikr, potentially enhancing both physical and spiritual well-being. The nursing care plan and evaluation are adapted as needed based on the patient's progress and response to the therapy.

Discussion

The author conducted an assessment of Mr. M on May 21, 2024, noting that the patient had weakness in his right limbs. According to his family, Mr. M was unable to move his right arm and leg and struggled with speech. His right hand and leg were stiff and had limited movement, leaving him dependent on family assistance for daily activities, all of which were carried out in bed. The muscle strength assessment revealed scores of 5 for the left hand and leg, indicating full strength, and scores of 3 for the right hand and leg, indicating moderate weakness. This study identified key signs and symptoms of physical mobility impairment, including limb weakness, difficulty with daily activities, and restricted physical mobility. This aligns with theory that hemiparesis, a common consequence of acute stroke, causes muscle stiffness, paralysis, decreased muscle strength, and limited joint range of motion, affecting activities of daily living (Darak & Karthikbabu, 2020). For patients with impaired physical mobility in the physiological category (activity and rest subcategories), nurses must assess both major and minor symptoms. Major subjective symptoms include difficulty moving limbs, while objective signs include reduced muscle strength and limited range of motion (ROM). Minor symptoms may include pain or reluctance to move, while objective signs encompass stiff joints, uncoordinated movements, limited motion, and general weakness. The nursing diagnosis for Mr. M involves impaired physical mobility related to neuromuscular weakness (reduced muscle strength). The causes can include damaged bone structure integrity, muscle mass reduction, developmental delays, joint stiffness, malnutrition, contractures, and neuromuscular disorders. Additional factors include side effects from medications, inactivity, pain, anxiety, and cognitive or sensory impairments (Chohan, Venkatesh, & How, 2019). Stroke patients commonly experience limb muscle weakness, postural issues, and muscle atrophy, which can lead to joint stiffness and reduced mobility, or what is termed physical immobility. Hemiparesis, or weakness on one side of the body, can cause decreased muscle tone, limiting the ability to move (Azzollini, Dalise, & Chisari, 2021). If untreated, this can lead to complications such as contractures.

The first intervention focuses on spiritual needs by incorporating dhikr using prayer beads. This technique, which includes bending and straightening the elbows, grasping and releasing, and bringing fingers together, aims to stimulate hand and finger muscles, potentially increasing muscle strength with just 3–10 minutes of daily activity. ROM exercises are essential in stroke patients to maintain joint flexibility and muscle strength. Dhikr therapy, combined with

ROM exercises, can be an effective way to enhance motor strength, with patients often experiencing improvements in movement after performing these exercises post-prayer (Ada, Canning, & Low, 2003). This study found partial achievement of the goal, with increased muscle strength in Mr. M's right-hand extremity. By the second day of therapy, the patient exhibited stronger hand grips, and finger movement began to improve. Mr. M reported reduced stiffness in his fingers, indicating that the therapy was effective in increasing muscle strength and improving movement flexibility.

In managing mobility impairments in stroke patients, nurses play a crucial role in incorporating dhikr therapy as part of holistic care. Dhikr therapy, which involves reciting phrases or prayers, is a non-pharmacological approach that can aid in reducing psychological stress, promoting calmness, and potentially enhancing physical strength by engaging muscle activity. Nurses guide patients through dhikr practices that involve hand movements, such as using the finger joints or knuckles, which can stimulate muscle activity and maintain flexibility in immobilized limbs. This process resembles gentle range of motion (ROM) exercises, targeting muscle groups in weakened or paralyzed limbs and thus supporting physical rehabilitation (Hosseini, Peyrovi, & Gohari, 2019). Nurses also assess each patient's comfort level, spiritual preferences, and ability to perform dhikr movements, ensuring that the therapy is suitable and adapted to their unique needs. For example, they may encourage using knuckle movements along with recitation, which not only supports the patient's spiritual well-being but also helps in gradually improving hand mobility. Additionally, by educating family members on how to assist with dhikr movements, nurses enable ongoing support, even beyond formal care sessions. Through dhikr therapy, nurses contribute to a holistic approach to stroke recovery that addresses both spiritual and physical aspects, encouraging patients to engage in self-directed care while potentially enhancing their muscle strength and mobility over time (Mohamed, Nelson, Wood, & Moss, 2015). This integrative method helps stroke patients regain a sense of control, reduce stress, and increase motivation, all of which are valuable for long-term rehabilitation outcomes.

Conclusion

Dhikr therapy emerges as a valuable non-pharmacological intervention for reducing pain in patients with gout arthritis. The practice, rooted in spiritual mindfulness and reflection, not only facilitates a sense of calm and emotional well-being but also has demonstrated potential in alleviating physical discomfort associated with gout flare-ups. As evidenced by various studies, including the experiences of patients undergoing dhikr therapy, significant reductions in pain levels have been observed, enhancing patients' quality of life and functional capabilities. This holistic approach, which integrates the spiritual, psychological, and physical aspects of health, underscores the importance of addressing the multifaceted nature of pain management in gout arthritis. Incorporating dhikr therapy into nursing care plans offer a more comprehensive and patient-centered approach, empowering individuals to actively engage in their healing process while fostering resilience against the challenges posed by chronic pain. Ultimately, dhikr therapy represents not just a means of pain relief, but also a pathway to greater peace and emotional harmony for those living with gout arthritis.

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