

# Systematic Review Of Spiritual Impact Of Recovery Stroke Outcome

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**Abstract** Numerous functional impairments that stroke patients face lead to a decreased quality of life, powerlessness, and suicidal thoughts. Spirituality-based stroke recovery interventions may have mechanisms that aid in the healing process and can help create more thorough and efficient stroke rehabilitation programs.

**Methodology** This study is a review that is systematic. The researchers used Google Scholar databases to look for data sources. The terms "stroke" and "spiritual OR other intervention" are employed, along with "and" recovery results. In the Google Scholar database, 980 journals were located. Just five of the articles overall satisfied the requirements for inclusion. Articles should discuss the effects of any kind of spiritual assistance on stroke sufferers' prognoses. bleeding and ischemic stroke of the older adult variety. Articles must employ RCT, qualitative, experimental, and mixed methods designs. The articles were published in full text and in the English language.

**Result** Increased spirituality, holistic care, improved spiritual health, and higher self-efficacy in self-care were all impacted by the research. Restoring functional independence and faith did not correlate, according to a single study. **Conclusion** This review demonstrates how faith affects stroke survivors' ability to heal. It is suggested that programs for stroke care contain spiritual components.

**Keywords:** Stroke, spiritual, intervention, recovery outcomes

**Abstrak** Berbagai gangguan fungsional yang dihadapi pasien stroke menyebabkan penurunan kualitas hidup, ketidakberdayaan, dan pikiran untuk bunuh diri. Intervensi pemulihan stroke berbasis spiritualitas mungkin memiliki mekanisme yang membantu dalam proses penyembuhan dan dapat membantu menciptakan program rehabilitasi stroke yang lebih menyeluruh dan efisien. **Metodologi** Penelitian ini merupakan tinjauan yang sistematis. Para peneliti menggunakan database Google Scholar untuk mencari sumber data. Istilah "stroke" dan "intervensi spiritual atau intervensi lainnya" digunakan, bersama dengan "dan" hasil pemulihan. Dalam database Google Scholar, ditemukan 980 jurnal. Hanya lima artikel yang secara keseluruhan memenuhi persyaratan untuk dimasukkan. Artikel harus membahas efek dari segala jenis bantuan spiritual terhadap prognosis penderita stroke. perdarahan dan stroke iskemik pada orang dewasa yang lebih tua. Artikel harus menggunakan desain RCT, kualitatif, eksperimental, dan metode campuran. Artikel diterbitkan dalam teks lengkap dan dalam bahasa Inggris.

**Hasil** Peningkatan spiritualitas, perawatan holistik, peningkatan kesehatan spiritual, dan efikasi diri yang lebih tinggi dalam perawatan diri semuanya dipengaruhi oleh penelitian ini. Memulihkan kemandirian fungsional dan iman tidak berkorelasi, menurut satu studi. **Kesimpulan** Ulasan ini menunjukkan bagaimana keyakinan mempengaruhi kemampuan penderita stroke untuk sembuh. Disarankan agar program-program perawatan stroke mengandung komponen spiritual.

**Kata Kunci:** Stroke, spiritual, intervensi, hasil pemulihan

## INTRODUCTION

According to Handoko (2017), frequent issues faced by stroke survivors include motor, sensory, and cognitive impairments. Following a stroke, depressive people experience high morbidity, bad quality of life, and suicidal thoughts (Loubinoux et al, 2012; Quaranta, et al,

2012). Stroke recovery is aided by interventions and rehabilitation programs, and in recent years, there has been a growing body of research on the influence of spirituality on recovery results. Nonetheless, there is a dearth of studies that particularly look at how spirituality affects overall results for stroke rehabilitation. Studying this connection could reveal plausible pathways by which spirituality aids in the healing process and could guide the creation of more thorough and successful stroke recovery plans.

It's been demonstrated that spirituality improves a number of facets of health and wellbeing. Nursing care that incorporates spiritual or Islamic therapies for stroke survivors shows promise for enhancing clinical outcomes (Utami and Handayani, 2021).

The findings of Mairami & Warren (2021) demonstrate the importance of religion in creating beneficial aspects of rehabilitation. Knowing how religion affects stroke rehabilitation may help create a treatment plan that is well-informed and motivates patients to adhere to prescribed schedules, adopt healthy lifestyles, and use available resources for enhanced coping and overall wellbeing. The stroke survivors' faith gave them the courage and fortitude to deal with their long-term illness (Unantenne et al. 2013).

The positive effects of spiritual practices and beliefs on quality of life, coping strategies, and mental health in many populations have been studied in the past. Religious coping is said by medical professionals to have an impact on post-stroke adaptability.

As per Rankin's (2006) approach, the spiritual experience encompasses multiple essential components. These components include connecting with something bigger than oneself and discovering meaning and purpose in life. practicing self-awareness and self-reflection. developing optimism and hope, as well as feeling harmony and inner tranquility. These facets of spirituality are thought to improve coping strategies, resilience, and overall well-being, all of which are beneficial to stroke recovery results.

Furthermore, the involvement of medical professionals—particularly nurses—is essential in establishing a healing atmosphere that meets the spiritual requirements of stroke victims. According to Rankin, presence is being fully present and engaged in the moment, developing a strong feeling of empathy and compassion, expressing unconditional positive regard, and building a therapeutic and trusting relationship with the client. Better recovery outcomes can result from the nurse's presence, which can foster a healing environment that makes it easier to explore and incorporate spirituality into stroke rehabilitation.

This article will investigate the effects of spirituality on stroke recovery outcomes by analyzing the connection between the components of spiritual experience and the involvement of healthcare professionals, especially nurses, in the rehabilitation process. The analysis will

be based on Rankin's theoretical framework. In order to improve stroke patients' physical, psychological, and social well-being and, ultimately, their overall recovery outcomes, this research attempts to evaluate and synthesize the best available evidence on the spiritual experience of people recovering from stroke.

## **THEORETICAL REVIEW**

The illness known as stroke can result in a number of issues. Stroke patients experience incapacity due to functional impairment, which renders them unproductive. One of the reasons post-stroke patients lack freedom in doing their daily tasks is the functional impairment they endure. Therapy is necessary because a person who has a stroke will depend more and more on others to help them with activities of daily living (ADL). Therapy helps strengthen motor nerves so that patients can do activities of daily living independently or lessen their reliance on others to do so (Karunia, 2016).

Patients who have had a stroke can receive therapy while receiving treatment and recovering at home. Stroke patients may benefit from home-based outpatient therapy that integrates and maintains continuity of care. In addition to reducing functional impairments, rehabilitation also relieves caregivers of their responsibilities and uplifts the spirits of those who have experienced a stroke (Karunia, 2016).

Rehabilitation programs include mirror therapy and proprioceptive neuromuscular facilitation (PNF). By evaluating the Barthel index, rehabilitation programs in conjunction with range of motion (ROM) exercises can enhance active daily living (ADL) skills. An rise in the muscle strength scale is indicative of the effectiveness of the mirror therapy rehabilitation program when paired with range of motion. Following both rehabilitation programs, the ADL ability of the PNF rehabilitation program group increased, and the muscle strength scale of the mirror therapy rehabilitation program group increased as well. A rise in the muscle strength scale in the rehabilitation program group and mirror therapy in the PNF rehabilitation program group (Hapsari, Risnanto, & Supriatun, 2018).

Suzana conducted another study that demonstrated how post-stroke patients' ability to fulfill Activities of Daily Living (ADLs) can be enhanced by active ROM therapy. The development of independence in stroke survivors is crucial for hastening the overall disability recovery process. It can relieve caregivers of household responsibilities and instill a sense of excitement in stroke victims. The patient will adapt to his new independent existence more quickly the earlier the activity is started (Suzana, 2018).

These findings also correspond with the work of Hapsari et al. After engaging in Activity Daily Living exercises, there is a noticeable increase in independence. Prior to performing their regular activities, the patient rested in bed. The family lends a hand with everything. Patients can carry out essential tasks like eating, drinking, tilting left and right, brushing their teeth, cleaning their body parts, getting into and out of a wheelchair, identifying the feeling of urinating and defecating, and maintaining hygiene after completing activities of daily living exercises (Hapsari, et al., 2018).

Stroke patients' health issues affect both their physical and psychological well-being, which influences their psychosocial circumstances. Stroke patients experience a sense of worthlessness in doing things that endanger their quality of life and can lead to psychological discomfort, including stress, worry, goal loss, social difficulties, and suicidal thoughts. (Yuanita et al, 2015; Karunia, 2016).

Patients will experience both adaptive and maladaptive psychological reactions to physical changes, necessitating the employment of coping methods. Patients can choose from two different types of coping strategies: emotion-focused coping and problem-focused coping. Problem-focused coping involves directing attention toward specific issues in order to develop new coping mechanisms and reduce stress. Reducing emotional reactions to stressful events is the goal of emotion-focused coping (Safaria & Nofrans, 2012; in Nofrans, 2012; in Loupatty, et al., 2019).

When viewed from the perspectives of acceptance, expressiveness, and the respondent's capacity to clarify and validate answers after multiple sessions, motivational interviewing therapies have a positive impact on decreasing depression in stroke patients. Patients exhibit a decision to shift their cognitive functioning in a positive way, which is demonstrated by the positive language they use, their commitment in the form of ability and reasons for need, and their increased activation following motivational interviewing (Apriani, 2018).

According to Suryawantie, there are four main elements that describe how basic spiritual requirements are met in post-stroke acute patients. These are: 1) Drawing nearer to God through practices like five times a day prayer and upholding the standard of worship. 2) Sincerely embracing the disease endured; for example, by believing that God is testing him through trials, he will not subject his people to challenges beyond their capacity. folks. 3) Thinking positively, such as praying to God; 4) having high hopes for healing, such as expecting a miracle from God; 5) no matter how terrible the sickness suffered, there should be no sentiments of despair, not giving up, constantly trying, and praying (Suryawantie, 2019).

Cognitive therapies increase thankfulness for all of God's benefits, which transforms negative ideas that center on one's own shortcomings into positive, upbeat thoughts (Setyowati & Hasanah, 2016). Patients who have had a stroke and have outstanding personal spiritual activities will be able to achieve a state of well-being if their spiritual demands have been addressed. Furthermore, the patient is able to adapt and accept the current circumstances, which helps the patient make peace with God, other people, himself, and the nature of the surrounding environment. The current state of affairs is one of acceptance (Sriyanti, Warjiman, & Basit, 2016).

## **RESEARCH METHODOLOGY**

This research employed a systematic review design, which is a paper that synthesizes data from a collection of papers chosen according to a number of criteria, including keywords and subjects. The researchers used Google Scholar databases to look for data sources. The terms "stroke" and "spiritual OR other intervention" are employed, along with "and" recovery results. The following restrictions were placed on the researchers' search for articles that met the inclusion criteria:

1. Articles should discuss how different spiritual interventions affect stroke patients' prognoses for recovery.
2. Ischemic stroke and hemorrhage in individuals older than eighteen
3. Mixed method, qualitative, experimental, and RCT designs must be used in articles.
4. Articles were published in full text and in the English language.

Nonetheless, the review did not include stroke patients who were incapable of speaking. Selection of papers was done methodically, adhering to the PRISMA guidelines. After that, each manuscript was evaluated or summarized, which involved gathering pertinent data on the research topic, year, location, analysis technique, intervention, outcome measure, tool, and research findings.

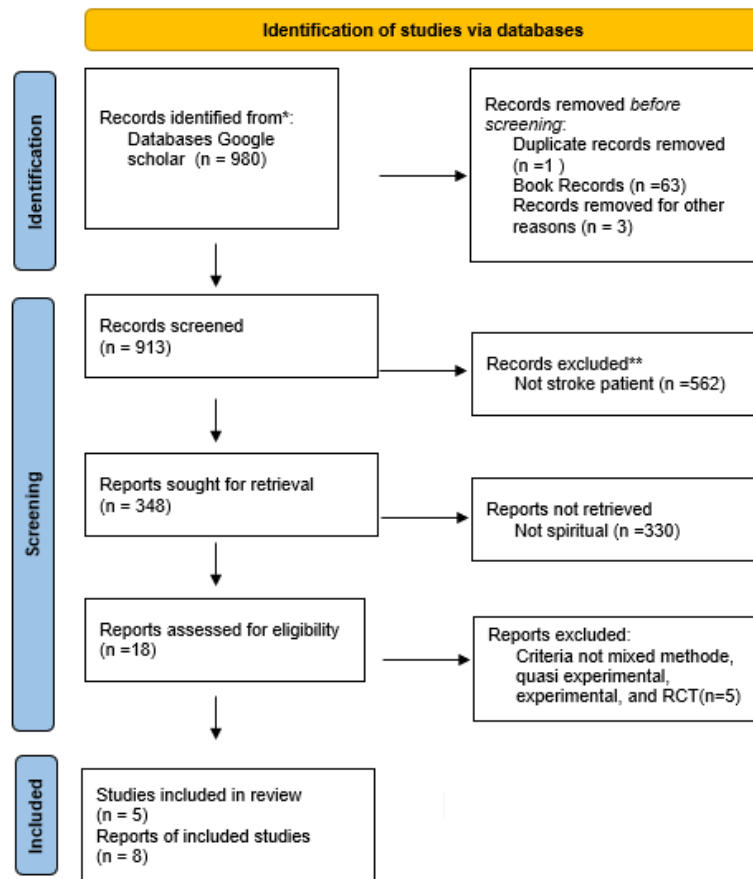


Figure 1. PRISMA Flow For Review Process

## RESEARCH RESULTS AND DISCUSSION

No	Author/Years/ Title	Method	Subject	Intervention	Outcome measure	Tool	Intervention duration	Result
1	Caitlin Kar Pui Chan, Temmy Lee Ting Lo, Adrian Ho Yin Wan, Pamela Pui Yu Leung, Marco Yiu Chung Pang, Rainbow Tin Hung Ho. (2021). A randomised controlled trial of expressive arts-based intervention for young stroke survivors.	RCT	154	The intervention group will receive Expressive Arts-Based Intervention (EABI)  The control group will receive Besides routine healthcare and rehabilitation services, after 8 month from base line will receive an expressive arts-based intervention	Disability, Depression and anxiety, Perceived stress, Perceived social support, Hope, Spiritual well-being, Stroke-specific quality of life, Health-related quality of life, Salivary Cortisol, Blood pressure and heart rate, Demographics, Clinical data Participants' clinical profiles, including types of stroke, time-lapse from the first occurrence, onset and history of psychiatric disturbance,	mRS; The Chinese version of the Hospital Anxiety and Depression Scale; Chinese Perceived Stress Scale; Chinese version of the Multidimensional Scale of Perceived Social Support; The Chinese version of the Adult State Hope Scale	8 weeks	The findings will help stroke survivors and healthcare professionals make better choices in selecting practices that will yield maximum benefits, satisfaction, adherence, and sustainability. In addition, the examination of the relationships between biopsychosocial-spiritual variables will help contribute to the development of holistic care for the survivors

					presence of comorbidity if any (such as physical disabilities, hypertension, diabetes mellitus, or any other form of vascular disease), treatment and medication record, and psychosocial support and/or rehabilitation service			
2	Katharyn Mumby, Hazel Roddam. (2020). Aphasia and Spirituality: the feasibility of assessment and intervention using WELLHEAD and SHALOM	Mixed methods	15	Speech and Language	The study showed WELLHEAD and SHALOM measured participant responses concerning their spirituality whilst exploring how and why they responded according to individual characteristics and circumstances, in the context of how they perceived the narrative process.	WELLHEAD, SHALOM, SWBQ, PROM	18 months	Scores from WELLHEAD and SHALOM were compared and set into the context of wider standardisation of SHALOM, providing the first evidence of spiritual health measures in participants with aphasia.
3	Slamet Purnomo, Ikhlas M Jenie. 2020. The Effect of Reciting the Holy Qur'an to the Speaking Ability and Spirituality Level of Stroke Patient with Motor Aphasia	Experimental	20	The Intervention group try to reciting holy Qur'an surah Al-Fatihah, Al-Ikhlas, Al-Falaq and An-Naas and the other group (control group) receives the regular rehabilitation base on schedule from the hospital.	speaking ability spirituality level	FAST FACIT	2 weeks	The Result was significant improvement of speaking ability in the intervention group with mean difference was mean±SD (1,60±1,075). Post-experimental difference test showed the difference of improvement of speaking ability between two groups, P=0,034. The spirituality level also significantly improved in the intervention group with mean difference was mean±SD (6,80±3,190). Post experimental difference test showed the improvement of spirituality level in both groups with P=0,005.
4	Ariel Gunawan. 2021. Pengaruh Murotal Al Quran terhadap tingkat kecemasan pada stroke infark akut	Experimental	32	Terapi mendengarkan bacaan ayat-ayat Al Quran	Anciety	HARS	5 days	The effect of treatment in the form of Murottal Al Quran that is listened to in acute infarction stroke patients obtained a

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								p value of 0.000 <0.05, there is a significant effect.
5	Suzanne M. Robertson,1,2 Cashuna Huddleston,1,3 Ben Porter,1,4 Amber B. Amspoker,1,2 Gina L. Evans-Hudnall1,2,5. 2013. Self-care self-efficacy, religious participation and depression as predictors of poststroke self-care among underserved ethnic minorities	Experimental	52	Participants previously recruited for a culturally tailored secondary stroke prevention selfcare intervention were included. The treatment group received three stroke self-care sessions. The usual care group completed assessments only.	Self-care self-efficacy, Religious participation, Depression	the Chronic Disease Self-Efficacy Scale, the Brief Multidimensional Measures of Religiousness/Spirituality, the Brief Symptom Inventory depression subscale	4 weeks	We can conclude that incorporating depression treatment and techniques to increase self-care self-efficacy, and encouraging religious participation may help to improve stroke self-care behaviors for underserved and low socioeconomic status individuals. Results are discussed in the context of stroke self-management.
6	Faith and Recovery Salvatore Giaquinto, Stefania Sarno, Valentina Dall'Armi, Cristiana Spiridigliozzi. 2010. Religious and Spiritual Beliefs in Stroke Rehabilitation	Experimental	112	Physical and occupational therapy on individual and group basis	religious beliefs, mood improvements, and functional recovery	MMSE, CIRS, FIM, RFI, HADS,	2-month	The relationship between religious beliefs, mood improvements, and functional recovery was explored by means of a multiple linear regression. No association between faith and recovery of functional independence could be verified, neither religiousness as a "coping strategy" was associated with functional recovery in this study. An explorative study of a larger size, which also takes into consideration the cultural background and religious beliefs of all patients, is warranted in the longterm.

A comparison of six research revealed a range of spirituality-related outcomes. These six trials employed the following interventions: EABI, speech and language, self-care, self-recitation of the Holy Qur'an, listening to Quranic verses, physical and occupational therapy. The study designs included both experimental and RCT approaches. The findings supported the growth of spiritual health, holistic care, enhanced spirituality, and higher levels of self-efficacy in self-care. There was only one study that found no connection between restored functional independence and faith.



Spirituality is associated with the transcendent, and it is commonly understood to mean having faith in, honoring, or being devoted to something that exists above the material world. On the other hand, religion refers to a set of shared beliefs, norms, and means of communication among followers of different faiths. (2010) Salvatore. Since spirituality is a characteristic of humans, all analysis is skewed from a human point of view, which is mostly word-based and non-mechanistic and involves understanding, synthesizing, interpreting, and reflexively analyzing the data. Spiritual well-being is about living a life that has meaning and purpose. (Roddam & Mumby, 2020)

The findings imply that biological recovery laws, which are primarily influenced by spiritual factors, govern neuroplasticity and recovery. Compared to other human organs, the nervous system's tissue requires more time and effort to recover. (2010) Salvatore. Murottal Al Quran inhibits the person's sympathetic nervous system and has the impact of activating the parasympathetic nervous system, resulting in a balance between the two autonomic nervous systems—the foundation for the commencement of relaxation (Handayani et al., 2014).

It is reasonable to assume that spirituality can be used to aid in post-stroke rehabilitation based on the evidence gathered for this research. Patients who have had strokes can benefit from spirituality in many ways, including improved spiritual health and self-efficacy in self-care.

## **Conclusion**

This review demonstrates how faith affects stroke survivors' ability to heal. The development of holistic care in community health services can benefit from spirituality. It is suggested that programs for stroke care contain spiritual components.

## **REFERENCES**

- Apriani, B. N., Hadi, I., Warongan, A. W., & Supriyat na, N. The Effectiveness of Counseling with Motivational Interviewing Approach to Reduce Depression in Post Stroke Depression Patients. *Holistic Nursing and Health Science*, 2018. 1(2), 55- 67
- Fatima Fanna Mairami<sup>1</sup> - Narelle Warren<sup>2</sup>. 2021, Stroke recovery in rural Malaysia: the role of the Islamic faith Received: November 27, 2020 / Accepted: April 30, 2021 © The Author(s), under exclusive license to Springer Nature Switzerland AG 2021. <https://doi.org/10.1007/s43545-021-00155-0>

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- Handoko, K. Design of mobile application for stroke rehabilitation guide at home (Doctoral dissertation, Universitas Multimedia Nusantara). 2017.
- Hapsari, W., Risnanto, R., & Supriatun, E. Effectiveness of Activity Daily Living Exercise in Improving Independence in Non Hemorrhagic Stroke Patients at RSUD Dr. Soeselo Slawi. *Journal of Health Sciences (JIK) Bhamada*, 2018. 9(2), 9-9.
- Karunia, E. The relationship between family support and independence of post-stroke activities of daily living. *Journal of Epidemiology*, 2016. 4(2), 213-224.
- Loubinoux, G. Kronenberg, M. Endres et al., "Post-stroke depression: mechanisms, translation and therapy," *Journal of Cellular and Molecular Medicine*, vol.16, no.9, pp.1961-1969, 2012.
- Loupatty, S. N., Ranimpi, Y. Y., & Rayanti, R. E. Psychosocial Responses and Coping Strategies of Stroke Patients in the Context of Ambon Culture. *Journal of Health*, 2019. 10(3), 480-488.
- Omu, O., Al-Obaidi, S., & Reynolds, F. (2014). Religious faith and psychosocial adaptation among stroke patients in Kuwait: a mixed method study. *Journal of religion and health*, 53(2), 538-551. <https://doi.org/10.1007/s10943-012-9662-1>
- Quaranta, D., Marra, C., and Gainotti, G. "Post-stroke depression: main phenomenological clusters and their relationships with clinical measures," *Behavioural Neurology*, vol.25, no.4, pp.303-310, 2012.
- Rankin EA. 2006. Finding spirituality and nursing presence. *Journal of Holistic Nursing*. 2006;24(4):286.
- Sriyanti, N. P., Warjiman, W., & Basit, M. The relationship between spiritual well-being and quality of life of post-stroke patients. *Journal of Nursing Suaka Insan (JKSI)* 2016. 1(2), 1-8.
- Suryawantie, T. Fulfillment of Basic Spiritu al Needs in Post Acute Stroke Patients in the Cempaka Room of Rsud Dr. Slamet Garut in 2019. *Jur nal Keperawatan Dirgahayu (JKD).*, 2019. 1(2), 26-31.
- Suryawantie, T. Fulfillment of Basic Spiritu al Needs in Post Acute Stroke Patients in the Ce Room
- Unantenne N, Warren N, Canaway R, Manderson L (2013) The strength to cope: spirituality and faith in chronic disease. *J Relig Health* 52:1147-1161
- Utami, ST, & Handayani, F. (2021). Literature Review: Islamic Religious Intervention and its Impact on Stroke Patients. *Holistic Nursing and Health Sciences*, 4 (2), 116-125. <https://doi.org/10.14710/hnhs.4.2.2021.116-125>
- Yuanita S, Ratna, Sutriningsih, Ani, Chess A W.R. Family Coping Mechanisms to Reduce the Anxiety Level of Stroke Patients' Families. *Journal of Care*, 2015. 3(2), 18-25