Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study

By

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Statement of Authorship

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Dedication

Dedication to my parents and all my teachers of life.

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List of Abbreviations

BHPI Bangladesh Health Professions Institute

CI Confidence Interval

CRP Centre for the Rehabilitation of the Paralysed

IQR Inter Quartile Range

IRB Institute Review Board

M Mean

OT Occupational Therapy

SAIL Spiritual Attitude and Involvement List

SD Standard Deviation

SPSS Statistical Package for the Social Science

WHO World Health Organization

Abstract

Background: Spirituality has been widely acknowledged as an important factor in helping individuals cope with long-term illness. For stroke survivors, spiritual beliefs, meaningful activities, and inner reflection often contribute to improved emotional balance, acceptance, and overall well-being. Earlier studies have shown that spirituality can enhance hope, strengthen coping abilities, and provide a sense of purpose during rehabilitation. Considering this, understanding how stroke survivors experience spiritual attitudes and spiritual involvement is essential for supporting holistic recovery.

Aim: The purpose of this study was to identify the level of spiritual attitude and involvement among stroke survivors and to examine how these aspects are associated with their sociodemographic characteristics.

Method: The study used a cross-sectional quantitative design and convenience sampling technique applied to conduct face to face survey. Data were collected from 110 stroke survivors who received rehabilitation services. A structured sociodemographic and the standardised questionnaire Spiritual Attitude and Involvement List (SAIL) were used as measurement tools. The data was analyzed using the SPSS 20 version for analysis.

Results: The findings shows that the majority of participants were male (74.5%), with a median age of 50 years. Among all spiritual domains, connectedness with nature showed the highest mean score (M = 5.48, SD = ±0.53), followed by acceptance (M = 4.87, SD = ±0.63) and caring for Others (M = 4.55, SD = ±0.57). Transcendent Experiences presented the lowest mean (M=3.03, SD=±0.71). Significant associations were observed between

connectedness with nature and age (P = .012), dependency level (P = .001), religion (p = .003), and living area (P = .015). Acceptance and caring for others were also linked with dependency level and marital status, while spiritual activities were associated with treatment duration (P = .012).

Conclusion: Taken together, these results suggest that stroke survivors primarily express spirituality through nature connection, emotional acceptance, caring for others, and regular spiritual activities, whereas deeper transcendental experiences appear less common. It may therefore be concluded that incorporating spiritual components into rehabilitation programs could play a valuable role in enhancing coping, emotional resilience, and overall quality of life among stroke survivors.

Key Words: Spirituality, Occupational Therapy, Stroke survivors

CHAPTER I: INTRODUCTION

1.1 Background

Stroke is a significant neurological disorder, identified as the second leading cause of death globally and a major contributor to disability among survivors (Benamer & Grosset, 2009). It ranks as the second most cause of mortality and the main cause of disability worldwide. The 2022 Global Stroke Factsheet shows that the lifetime likelihood of experiencing a stroke has increased by 50% over the past 17 years, with 1 in 4 people now predicted to have a stroke at some stage in their lives. From 1990 to 2019, there was a 70% rise in stroke incidents, a 43% increase in stroke-related deaths, a 1.02% increase in stroke prevalence, and a 143% rise in Disability Adjusted Life Years (DALY). Notably, the majority of the global burden of stroke falls on lower- and lower-middle-income countries, which account for 86% of stroke-related fatalities and 89% of DALYs. This disproportionate burden on lower- and lower-middle-class populations is significant (World Stroke Day 2022, n.d.). In Bangladesh, stroke presents a serious health concern due to its high prevalence and its effects on morbidity and mortality rates. In fact, the rates of stroke-related morbidity are on the rise in Bangladesh. A recent study reported that the overall prevalence of stroke in Bangladesh is 1.10% (Shuvo et al., 2024). Stroke survivors often face psychosocial challenges such as depression, anxiety, stress, and fatigue. While these issues are often neglected, they can significantly affect the individual's functionality, just as physical impairments do (Zrelak et al., 2024). The mental health of stroke survivors, encompassing symptoms such as anxiety and depression, greatly affects their view of their family’s ability to cope (Mou & Chien, 2024). Spirituality plays a crucial role in improving the quality of

life for stroke survivors by reducing anxiety and depression symptoms, as several studies have shown its beneficial effects (Ambrosca et al., 2024). Spirituality positively impacts psychosocial well-being by promoting coping mechanisms, reducing mental illness, and enhancing mental health status through belief, connectedness, and meaning in life(Poudel, 2020). The term spirituality comes from the Latin word spiritus, meaning breath or life. The word spirit can be a synonym for the living soul(Hemphill, 2015). Spirituality is the aspect of humanity that refers to how individuals express and seek meaning and purpose, as well as how they feel connected to the present, to themselves, to others, to nature, and the significant or sacred(Puchalski et al., 2009). There are two main categories of spirituality. A relationship with God or a higher power is the definition of the first type of religious spirituality, which is commonly practiced by those who participate in organized religious services within a broader community. Existing spirituality, on the other hand, is not associated with any particular house of worship or a collection of universally recognized principles. Instead, it speaks of a viewpoint or worldview where people look for meaning and purpose in their lives and believe they have value(Aktürk & Aktürk, 2020; Puchalski et al., 2009; Whitford & Olver, 2012). Through rituals, beliefs, and practices, religion is an institutionalized manifestation of the spirit that is subjective. While religion may not always be a component of spirituality, spirituality is unquestionably a part of religion. Religion and spirituality are related, although a person can be spiritual without following religious ideology(Hodge, 2001). People with chronic illnesses may anticipate living for years or even decades after the onset of their illness, and they may turn to religion/spirituality for comfort, to give their lives new purpose in light of their newly acquired disabilities, and to aid them in setting new life goals(Aktürk & Aktürk, 2020).

After treatment, it is essential to evaluate the spirituality levels of stroke survivors. There is a research need to examine the needs of stroke survivors from a broader perspective due to the notable lack of scholarly research on their lived experiences in Bangladesh. This research aims to identify the spiritual experiences of stroke survivors who have been discharged from the Centre for the Rehabilitation of the Paralysed (CRP) in Savar. The findings from this study are observed to enhance understanding of neurological disorders in the Bangladeshi context and to promote the development of improved care strategies for those affected by these conditions.

1.2 Justification of the study

Occupational therapy is a holistic approach that enables people to become independent in their activities of daily living in meaningful ways. Spirituality promotes the motivation to take part in the activities and occupations of patients with chronic illnesses and deeply ties to occupational meaning(Mary Ann McColl, 2003).After stroke, stroke survivors become functionally impaired in their community, which leads to psychosocial disturbance (Mimi Wai Man Chan, 2025). Additionally, occupational engagement is often inherently spiritual, as meaningful occupations such as caregiving, art, or prayer allow individuals to reconnect with their values and restore a sense of identity(Maley et al., 2016). According to OTPF-4, spirituality is a client factor (Boop et al., 2020). Canadian Association of Occupational Therapists (CAOT) has included spirituality as one of four aspects of the person besides physical, mental and socio-cultural (Mary Ann McColl, 2003). Occupational therapy plays a crucial role in spiritual rehabilitation by integrating spirituality into practice, addressing diverse beliefs, and ethics, and promoting holistic well-being for clients. Occupational therapists can promote spirituality in therapy sessions by incorporating spiritual concepts

into their interventions for spiritual rehabilitation. They can assess the spiritual needs of their clients and plan treatment accordingly. Encouraging clients to explore their spirituality can enhance their overall well-being and quality of life. By creating a safe and supportive environment, therapists can facilitate discussions on spirituality and its role in the healing process. Integrating spiritual practices, such as mindfulness or meditation, into therapy sessions can also promote spiritual well-being. So, as healthcare professionals, we should incorporate spiritual needs into our profession and encourage patients in spiritual involvement(Hemphill, 2020).

Not much research has been done in Bangladesh among stroke survivors. It is important to know the level of spirituality among stroke survivors after taking rehabilitation services. This is why student researchers feel interested in this area. Moreover, this research will be significant for health professionals to have adequate knowledge about spirituality so that spiritual care can be provided in rehabilitation programs and further research on spirituality and rehabilitation.

1.3 Operational Definition

1.3.1 Spirituality

Spirituality is ‘the aspect of humanity that refers to how individuals express and seek meaning and purpose, as well as how they feel connected to the present, to themselves, to others, to nature, and the significant or sacred’ (Puchalski et al., 2009).

1.3.2 Connectedness

The word connected simply means “joined or linked together”. Thus, one may refer to connectedness as a state of being joined or linked together. The word connectedness is

defined as the Feeling of belongingness, being linked to and related to a network, community, or society in which one is a part of (Development, 2013).

1.3.3 Transcendent experience

The Latin verb scandere means "to climb", so transcend has the basic meaning of climbing so high that you cross some boundary. A transcendent experience takes you out of yourself and convinces you of a larger life or existence; in this sense, it means something close to "spiritual" (Merriam-Webster, 2023).

1.3.4 Stroke Survivor

A stroke survivor is an individual who has experienced a stroke, which is a sudden disruption of blood flow to the brain, leading to potential brain damage (Denham et al., 2018;Cambridge Dictionary,2025)

1.3.5 Community

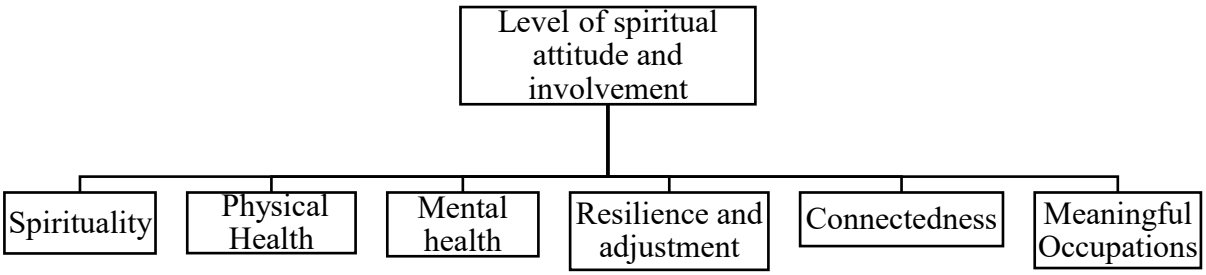
The term "community" refers to a group of people who share common characteristics, interests, values, or goals and interact within a particular geographical location or virtual space. Communities can be based on various factors, including cultural, ethnic, religious, social, or professional affiliations. They often provide a sense of belonging, support, and identity to their members (Johnson & Smith, 2022).

CHAPTER II: LITERATURE REVIEW

This literature review chapter covers on level of spiritual attitude and involvement and its effect on the lives of chronic illnesses like cancer, brain tumors, stroke etc. In terms of spiritual attitude and involvement, this chapter will show how spiritual attitude and involvement affects different aspects of our lives positively. This chapter will demonstrate the good effects of spiritual attitude and involvement on many aspects of our daily lives. It also includes information about mental and physical health, resilience and adjustment, connectedness, and meaningful occupations.

Figure 2.1

Overview of the literature findings



2.1 Spirituality

An article was written based on the literature review and analysis of literature and concepts in 2005 to examine the role of spirituality in living with disabilities. According to this study, spirituality is characterized by meanings, inner strength, peace, and hope, and facilitates self-transformation. A deep spiritual connection may increase self-

transformation, maturity and compassion for people with disability (Zhang & Rusch, 2005a).A cross – sectional study showed that correlation between spirituality and religion where participants number was 4500. The study identifies that spiritual and religious profiles among people with disabilities, revealing that those with hearing, physical, and emotional disabilities are more likely to pray frequently and experience turning points in their religious commitment compared to the general population (Hodge & Reynolds, 2019). A cross-sectional study was carried out in Poland to evaluate the spiritual demands and distress of a group of chronically ill Polish patients. This study concludes that any patient with a serious chronic disease needs basic spiritual care, which includes being treated with compassion(Klimasiński et al., 2022). A descriptive quantitative study was conducted on 83 participants to identify the spiritual needs among post-stroke patients. Participants of the study are all stroke survivors who were full awareness and who took rehabilitation service from Neurological Polyclinic and stroke center in one of the Hospitals in Bandung ,which is a city of Indonesia. The study's findings indicated that stroke survivors feel spiritual needs in all dimensions and high desire for prayer, peace, and forgiveness(Pratiwi et al., 2018). On the contrary, a quantitative study showed that no correlation between spiritual coping and post-stroke depression found. This study conducted in Indonesia among 68 post stroke patients (Handayani, 2019).

2.2 Physical Health

A cross-sectional study of a total of 168 participants surveyed the following medical disorders: Cancer, SCI, Traumatic Brain Injury, and Stroke, plus a healthy sample from a primary care setting in 2008. According to this study, fostering or improving healthy spiritual beliefs has an impact on the physical health of people with a variety of medical

illnesses (Campbell et al., 2010). To examine the connection between spirituality or religion and physical health, a meta-analysis was carried out in 2003. The authors put forth nine theories that suggest a connection between spirituality or religiosity and physical health. The authors used mortality, morbidity, disability, or recovery from illness as indicators of physical health. According to nine hypotheses, spirituality, and religion are preventive elements that lower the risk of sickness in healthy individuals and work as coping mechanisms to lessen the effects of disease slowly (Powell et al., 2003). Another meta-analysis involving cancer patients was carried out in 2015, using data from 101 distinct samples encompassing more than 32,000 people. According to this analysis, improved patient-reported physical health is correlated with higher levels of spirituality and religion. Cancer patients who experience spiritual distress or emotions of rejection by God or their religious group report higher levels of depression and lower compliance with treatment and medical guidance (Jim et al., 2015).

2.3 Mental Health

A systematic review where have 37 studies with involving 6850 stroke survivors. This study highlights the importance of spirituality in mental health after post-stroke. Spirituality significantly improves the quality of life and reduces anxiety and depression among stroke survivors (Ambrosca et al., 2024) .A cross sectional study where 63 participants have 32 individual with stroke and 31 healthy control. This study found that for stroke survivors, higher religious and spiritual coping was significantly correlated with better general mental health ($r = .43$; $p < .05$), suggesting that spiritual beliefs may help protect against emotional distress following a stroke(Johnstone et al., 2008). A cross-sectional analytical study was conducted in Pakistan .In this study have 210 stroke patients,

the study found a strong positive correlation between self-transcendence and spiritual well-being among stroke patients, suggesting that enhancing self-transcendence can improve spiritual well-being, which may boost mental health outcomes for stroke survivors (Suliman et al., 2022).A qualitative study was conducted in northwest of Iran among 15 stroke patient and who had lack of self care, motivation and stress. This study highlights that spirituality enhances motivation for self-care and adaptation among stroke survivors, reducing stress and aiding in the management of their conditions, thereby positively influencing their mental health and overall quality of life post-stroke (Azar et al., 2022). Due to stroke, patients become functionally impaired. This addresses psychological disturbance,low quality of life after stroke. A review article concluded that integrating spirituality and yoga in rehabilitation can address psychological needs, improving overall functional abilities, mental health and quality of life for post-stroke patients (Sanchetee, 2022).

2.4 Resilience and Adjustment

Spirituality can be a very effective and beneficial tool to cope with the difficulties associated with a chronic disease (Hampton & Weinert,2006). According to a cohort study of 253 dialysis and Stage 4 or 5 chronic renal disease patients, spirituality increases psychosocial adjustment to illness and protects and enhances a patient's quality of life (Davison & Jhangri, 2013). Spirituality plays a significant role in the treatment of cancer, according to a qualitative study of ten cancer patients utilizing semi-structured interviews. This study show how spirituality treats cancer should pay special attention to emotion control and allow patients to adjust to their illness (Garssen et al., 2015).An article which is related to geriatric where mentioned that spirituality can influence resilience and

adjustment among stroke survivors by helping them mobilize internal resources, cope with existential crises, and maintain a positive outlook, which are essential for recovery and adaptation to life changes post-stroke (Michael, 2014).A systematic review of qualitative studies which based on community-dwelling stroke survivors in Europe and Anglophone countries.This study reviewed 40 article about this related. The paper highlights that connecting outward, such as to God or others, can enhance resilience and adjustment among stroke survivors. Spirituality may facilitate coping by enhancing social engagement and providing emotional support during the recovery process (Sarre et al., 2014). Another systematic review article of psychosocial spiritual experiences in elderly stroke recovery. Spirituality provides stroke survivors with strength and hope, enhancing resilience during recovery (Lamb et al., 2008) .

2.5 Connectedness

A phenomenological qualitative study was done to explore how persons with chronic illnesses use their spirituality as a coping method. The sample included 15 chronically ill individuals with ages ranging from 23 to 80 including 10 men, and 5 women. Leukaemia, Melia fibrosis, bowel cancer, chronic liver disease, Crohn's disease, lung cancer, ulcerative colitis, and melanoma were among the many medical conditions the participants in the study had been diagnosed with. The study concludes that people found a way to connect with God through prayer, meaning and purpose, a strategy of privacy, and a desire to feel connected to others. Additionally, it was stated that while non-religious individuals are connected through family and friends, religious people are connected through God (Narayanasamy et al., 2004). A regression analysis was conducted to understand the relationship between social and spiritual connectedness of older Americans' psychological

health in 2004. The study discovered that spiritual connectedness significantly affects older persons' psychological health, particularly in terms of life satisfaction, hope, and self-esteem. However, since the study only included Christians, future research should also include people of other religions (Lee, 2014)

2.6 Meaningful Occupations

Spirituality is essential in occupational therapy for people who are recovering from a stroke. Participating in meaningful activities that connect with their past experiences and future goals can offer a sense of stability and motivation, which are critical for the recovery journey(Howard & Howard, 1997).A qualitative study conducted in Canada above eight cognitively intact persons were interviewed individually. They were community dwellers. This study shows of giving meaning to occupation involves an intrinsic link between identity and meaningful occupation, with identity being central to the person. Following autonomy loss, a process of adjusting identity, involving social, psychological and spiritual aspects, occurs over time (Griffith et al., 2007).Another interpretive qualitative study using semi-structured interviews was conducted with seven survivors of stroke attending an outpatient peer support group and was conducted in Toronto, Canada. The study highlights that when peer support the stroke survivors then their occupational performance emerged: finding hope to return to meaningful occupation, a place for belonging, problem-solving occupational concerns, and finding purpose beyond oneself (Wijekoon et al., 2020).A qualitative study focuses on the need for early exploration of occupational identity and return-to-work experiences, emphasizing practical skills and confidence rather than spiritual aspects (Martin et al., 2023).

2.7 Key Gaps of the Study

- Studies on spirituality and various medical illnesses are carried out all over the world, but there are few studies on spirituality and among stroke survivors.
- Numerous studies have found that people cope and connect spiritually in difficult moments of their lives very well, but how they connect spiritually to their lives is not well explained.
- Several studies have been conducted in limited geographical areas, especially in Iran, China, Turkey, Australia, United States of America. However, there is a lack of research conducted in South Asia and especially in Bangladesh on this topic.
- There is insufficient explanation of how healthcare providers might include spirituality in their therapy sessions.

CHAPTER III: METHODS

This chapter aims to delineate the methods employed in this research, including the rationale for the research design, ethical considerations, the study setting, the approach to sampling and recruitment data collections, and the data analysis process including the overall aim, the research questions, the rationale for the research design.

3.1: Study question, aim, and objectives

3.1.1: Research Question

What is the spiritual attitude and involvement among Stroke Survivors in the community?

3.1.2: Aim

To identify the level of spiritual attitude and involvement after rehabilitation service among stroke survivors

3.1.3: Objectives

- To identify the level of spiritual attitude among stroke survivors.
- To find out the level of spiritual involvement among stroke survivors
- To identify the association between level of spiritual attitude and involvement with sociodemographic characteristics.

3.2 Study design

3.2.1 Study Method:

In order to the research method was quantitative study investigate the spirituality of stroke survivors, the student researcher chose a quantitative approach. With this strategy, a large portion of the population was covered, numerical data was gathered, and the patients' current conditions were evaluated. Therefore, the best choice for this investigation was quantitative design (Mehrad & Zangeneh,2010).

3.2.2 Study Approach:

The study used a cross-sectional strategy in quantitative research because it is perfect for community studies and helps capture the current situation of a population at a particular point in time. This method offers helpful insights into current conditions but does not prove cause-and-effect linkages between variables. The exposure in this study was stroke, and the results were centered on the spirituality of Stroke Survivors and were back in their community. The student researcher selected this strategy as the study design because it successfully achieved the study's goal (Pandis, 2014).

3.3 Study setting and period

3.3.1 Study setting

The researcher conducted this study in the Community and CRP. Participants remained in their community and the researcher went to their houses for data collection. Besides,the researcher collected data during patients follow up in CRP.

3.3.2 Study period

The study period from 15 June 2025 to 15 December 2025

3.4 Study Participants

3.4.1 Study Population

The study conducted the population consisting of individuals and who received rehabilitation services and came for follow up session at the CRP . To collect data, the researcher visited locations near the CRP and surrounding districts.

3.4.2 Sampling Techniques

Convenience sampling was used to select the participants in this research. The researcher went for data collection where the participants were easily accessible and available. Participants had the right to participate in the study willingly. Even though the researcher must visit the community and conduct in-person interviews to gather data, travel expenses and time are quite significant. For that reason, the researcher went to the location where a high-density population is found at a given time. Convenience sampling was used because the researcher collected data based on the inclusion sample it was the easiest for the researcher to access and collect data. This is why convenience sampling was the best way to sample participants (Etikan,2016).

3.4.3 Inclusion and Exclusion Criteria

Inclusion Criteria

- Participants both men and women aged over 18 years.
- Participants who have been diagnosed before three months.
- Participants who took rehabilitation service from CRP and went to community
- Participants who have come to CRP for follow up after rehabilitation service.

Exclusion Criteria

- Participants who had a significant brain injury or severe and moderate cognitive impairment.
- Participants who did not receive rehabilitation services from CRP.
- Participants who did not receive phone calls.
- Participants who have speech problem

3.4.4 Sample Size

We estimated sample size using the Cochran formula n=$\frac{Z^2pq}{d^2}$ (as the sample population and population portion are unknown).50% prevalence of patient with stroke because researcher had no accurate data about the prevalence of stroke in Bangladesh. The confidence interval was 95% and 5% error level.

Here,

z= 1.96 (confidence interval 95%)

d= 0.05 (error level 5%)

p= 0.5 (50% prevalence)

q= (1-0.5) = 0.5 (1-p)

Sample size, n = $\frac{Z^2pq}{d^2}$

$= \frac{(1.96)^2 x (0.5) x (1-0.5)}{(.05)^2}$

=384.16

≈384

Nonresponse rate 10%

The total sample required 384 to conduct study.

But data was collected from 110 participants.

3.5 Ethical considerations

3.5.1 Ethical Clearance

The ethical clearance sought from the Institutional Review Board (IRB) of Bangladesh Health Professions Institute (BHPI) through the Department of Occupational Therapy.The IRB form number is CRP-BHPI/IRB/07/2025/1107

3.5.2 Informed Consent

As a fundamental ethical and legal necessity, informed consent states that medical operations can only be performed after participants have received comprehensive education about their nature, purpose, potential consequences, and related dangers (Guraya et al., 2014).

3.5.2.1 Participant Explanatory Statement

The participant information sheet provides thorough information on the research study, helps potential participants make informed decisions about taking part, and includes pertinent contact data.

3.5.2.2 Consent form

Researchers note that involvement in research participation should be entirely voluntary and based on knowledge of the problem (NHMRC, 2023).

3.5.2.3 Withdrawal form

Throughout this study individuals are free to choose whether to participate or not. They are also allowed to withdraw participation from the study within 2 weeks from the time of interview.

3.5.3 Unequal Relationship

No one participated in who has an unequal relationship with the researcher.

3.5.4 Risk and Beneficence

Participants told and recorded that this study has no physical, social, or mental risks. They will not receive any direct benefits from the student researcher. However, the researcher will be aware of any possible discomfort and provide help if will be conducted in the community by student researchers. The student researcher visited the participants' homes to gather data while they stayed in their neighborhood (NHRMC, 2023).

3.5.5 Confidentiality

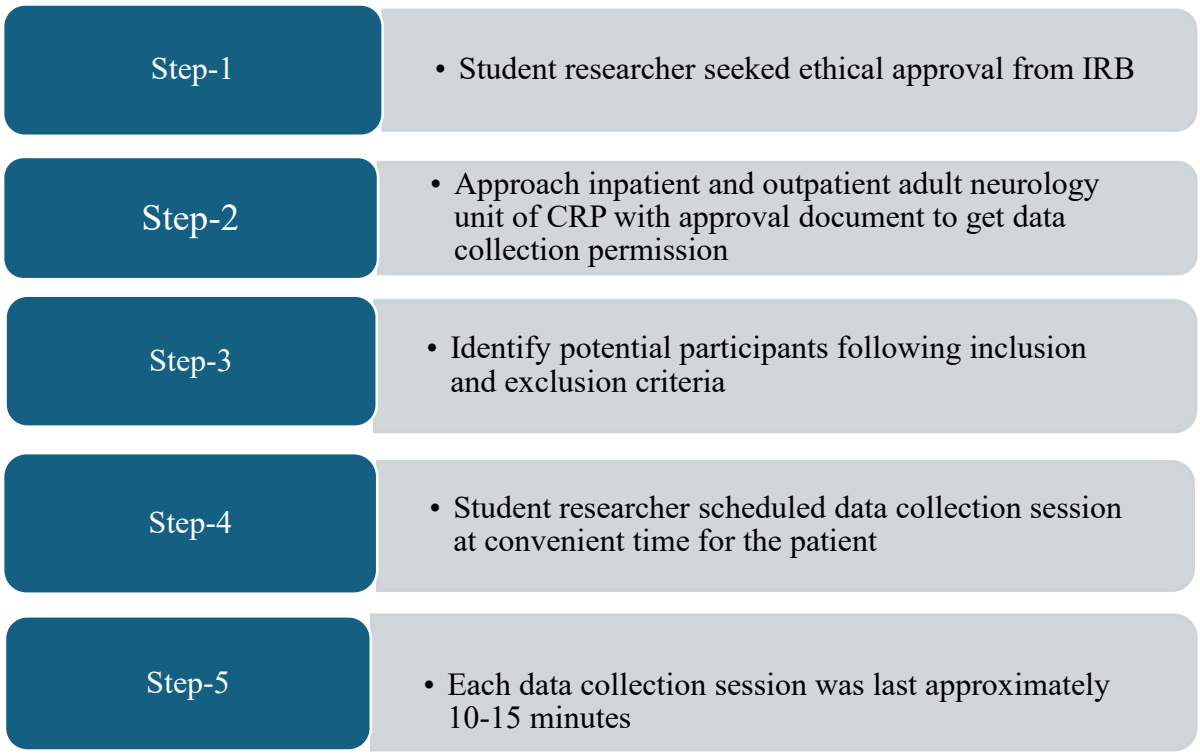
The information provided by the participants remained confidential. Their name and identity were not disclosed to anyone except for the supervisor, and it was stated on the information sheet. The participants were informed that their identity remained confidential for future uses, such as report writing, publications, conferences, or any other written materials and verbal discussion.

3.6 Data Collection

3.6.1 Participant Recruitment Process

Figure 3.1

Overview of participant recruitment process



Note. Participants recruited from the inpatient and outpatient of adult neurology unit, CRP, Savar, Dhaka. With the help of data will be given by the neurology unit, the student researcher contacted the participants over the phone who met inclusion and exclusion criteria and collected their addresses to go there.

3.6.2 Data Collection Instrument

Several instruments are available to assess spirituality, including the Benefit through Religiosity/Spirituality (BENEFIT) scale, the Spiritual Well-Being (SWB) scale, the Spiritual Attitude and Involvement List (SAIL) scale, and the FACIT-SP-12 scale. Because

it examines spirituality in individuals from various religious and non-religious backgrounds and views it as a universal human experience, the SAIL scale considered the most appropriate (de Meezenbroek et al., 2012). Other scales were not appropriate for nonreligious individuals and did not consider spirituality to be a universal human experience, which led to some of their shortcomings. The SAIL scale, on the other hand, consisted of 26 items divided into seven categories: Spiritual Activities, Meaningfulness, Acceptance, Caring for Others, Transcendent Experiences, and Connection with Nature. Questions were graded on a scale of 1 to 6, and the average of the scores was used to get the overall score for each area (de Meezenbroek et al., 2012).

3.6.3 List of variables

3.6.3.1 Demographic variables

Name, age, gender, educational status, financial status, occupation, time since injury, home environment.

3.6.3.2 Measurement variables of data collection tool

Spiritual Attitude and Involvement List (SAIL) scale. Measurement variables are Spiritual Activities, Meaningfulness, Acceptance, Caring for Others, Transcendent Experiences, and Connection with Nature (de Meezenbroek et al., 2012)

3.6.4 Data Collection Method

Face-to-face survey will be used to get the data. The purpose of the student researcher is to ask the questions and provide assistance to the respondents who will have difficulty in understanding or responding. By using this approach, bias will be lessened, and the data will remain accurate. It will be necessary for the surveyor to provide additional

explanations, verify that the responses will match with the questions, and motivate the participants to complete all the questions (Schröder, 2016).

3.6.5 Field Test

The researcher did the pre-test of the survey questionnaire from 2 participants. During data collection, the researcher may encounter difficulties where some participants find certain questions challenging to answer. To address this, the researcher seeked guidance from the research supervisor. Based on the supervisor's suggestions, the researcher revised the wording and structure of the questions to make them easier to understand from the participants' perspectives. After finalizing the improved question format, data collected from all participants using the same standardized pattern.

3.7 Data analysis

All data statistical analysis carried out by using Statistical Package for Social Science (SPSS) version 20. Descriptive and Inferential analysis used to relation with socio-demographic factors like age, gender, type of stroke, occupational status, marital status, educational qualification, living area, duration of receiving and received treatment between spiritual attitude and involvement subscales.

CHAPTER IV: RESULTS

This chapter presents the findings of the study. The study findings are presented in tables in this chapter, with an emphasis on the socio-demographic information and spiritual attitude and involvement.

4. 1 Sociodemographic characteristic

Table 4.1

Distribution of sociodemographic characteristics among stroke survivors

Variable	Category	n=110	Percentage (%)
Sex	Male	82	74.5
	Female	28	25.5
Age	<40 years	12	10.9
	41-50 years	53	48.2
	51-60 years	27	24.5
	>60 years	18	16.4
	Median age = 50 years, IQR= (45-57), Minimum=32, Maximum=80		
Marital status	Married	106	96.4
	Unmarried	3	2.7
	Separate	1	.9
Types of family	Living with extended Family	38	34.5
	Living with nuclear Family	69	62.7
	Staying alone	3	2.7
Number of family members	1-5 Persons	62	56.4
	6-10 persons	43	39.1

	10 persons above	5	4.5
Living area	Rural	69	62.7
	Urban	41	37.3
Highest level of education acquired	Primary education	37	33.6
	Secondary education	34	30.9
	Higher secondary	22	20.0
	Graduate	12	10.9
	Post graduate	5	4.5
Present occupational status	Govt. service holder	4	3.6
	Private service holder	4	3.6
	Business	10	9.1
	Homemaker	12	10.9
	Unemployed	72	65.5
	Others	8	7.3
Type of Stroke	Hemorrhagic Stroke	68	61.8
	Ischemic Stroke	42	38.2
Types of affected side	Right side hemiplegia	50	45.5
	Left side hemiplegia	60	54.5
Level of Dependency	Total Dependence	2	1.8
	Severe Dependence	11	10.0
	Moderate Dependence	46	41.8
	Mild Dependence	37	33.8

	Independent	14	12.7
Religion	Muslim	86	78.2
	Hindu	24	21.8
Duration of receiving treatment	2.5-5.0 months	46	41.8
	5.1-7.5 months	4	3.6
	7.6-10.0 months	3	2.7
Duration of received treatment	3.0-4.5 months	51	46.4
	4.6-6.0 months	6	5.5
	Median =3.000, Interquartile Range (IQR)= (.000-3.00), Minimum=3.0, Maximum=6.0		
Pain	Yes	55	50
	No	55	50

The table 4.1 shows an overview of sociodemographic characteristics have total of 110 participants. The majority were male 74.5%(n=82), while females constituted 25.5%(n=28). Participants ranged in age from 32 to 80 years, with a median age of 50 years (IQR: 45–57). Most respondents were aged 41–50 years 48.2(n=53), followed by 51–60 years 24.5%(n=27) and above 60 years 16.4(18). A large proportion were married 96.4(n=106), whereas only 2.7%(n=3) were unmarried and 0.9(n=1) were separated. Regarding family type, 62.7%(n=69) lived in nuclear families, 34.5(n=38) in extended families, and 2.7%(n=3) lived alone. More than half of the respondents had 1–5 family members 56.4%(n=62), followed by 6–10 members 39.1(n=43). Most participants resided in rural areas 62.7%(n=69), while 37.3(n=41) lived in urban settings. In level of education, primary-level education 33.6%(n=37) was most common, followed by secondary education 30.9 (n=34), higher secondary 20.0%(n=22), graduate 10.9%(n=12), and postgraduate 4.5%(n=5). Regarding occupations, a large proportion were unemployed 65.5%(n=72), while others were homemakers

10.9%(n=12), involved in business 9.1%(n=10), or engaged in other jobs 7.3%(n=8); additionally, government service holders 3.6%(n=4) and private service holders 3.6%(n=4) constituted smaller groups. The majority of respondents were Muslim 78.2%(n=86), while 21.8%(n=24) were Hindu. Regarding majority treatment history, 41.8%(n=46) had receiving treatment for 2.5–5 months on the other hand 46.4%(n=51) had received treatment for 3.0-4.5 months, whereas the duration for others varied; the median treatment duration was 3 months (IQR: 0–3). Half of the participants reported pain 50%(n=55), and the remaining 50%(n=55) reported no pain. Clinically, the majority had hemorrhagic stroke 61.8%(n=68) and ischemic stroke 38.2%(n=42). The affected side was left hemiplegia 54.5%(n=60) in most participants, followed by right hemiplegia 45.5%(n=50). Regarding dependency level, moderate dependence 41.8(n=46) was most common, followed by mild dependence 33.8%(n=37), severe dependence 10.0%(n=11), total dependence 1.8%(n=2), and independence 12.7%(n=14).

Table 4.2

Frequency distribution of meaningfulness as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
I know what my position is in life.	2.7 (3)	7.3 (8)	39.1(43)	37.3 (41)	11.8 (13)	1.8 (2)
I experience the things I do as meaningful.	0(0)	.9 (1)	17.3(19)	25.5(28)	30.9(34)	25.5(28)
My life has meaning and purpose.	0(0)	5.5(6)	43.6(48)	25.5(28)	18.2(20)	7.3(8)

The table 4.2 displays frequency distribution of the meaningfulness subscale indicates a clearly positive and consistently high level of perceived life meaning among participants.

The item “I know what my position is in life” indicates clarity or orientation was rated most highly by respondents at “Somewhat” 39.1%(n=43) and “To a reasonable degree” 37.3%(n=41), with minimal reports of “Not at all” 2.7%(n=3). The item “I experience the things I do as meaningful” representing engagement or significance showed strong higher level respondents, with “To a high degree” at 30.9%(n=34) and “To a very high degree” at 25.5%(n=28), indicating that meaningful engagement is an important aspect of participants experiences. Similarly, “My life has meaning and purpose” representing as purpose or direction was most frequently respondents at “Somewhat” 43.6%(n=48) and “To a reasonable degree” 25.5%(n=28), “To a high degree” at 18.2%(n=20); at “To a very high degree” at 7.3%(n=8).

Table 4.3

Frequency distribution of trust as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
I approach the world with trust.	.9(1)	0(0)	0(0)	0(0)	12.7(14)	86.4(95)
In difficult times, I maintain my inner peace.	1.8(2)	23.6(26)	46.4(51)	19.1(21)	3.6(4)	5.5(6)
Whatever happens, I am able to cope with life.	0(0)	41.8(46)	42.7(47)	9.1(10)	2.7(3)	3.6(4)
I try to take life as it comes.	0(0)	21.8(24)	32.7(36)	33.6(37)	5.5(6)	6.4(7)

The table 4.3 displays frequency distribution of the trust subscale indicates positive tendency toward psychological stability and adaptive coping. The item “I approach the

world with trust" indicates as openness or confidence was respondents at the higher levels, with 86.4%(n=95) selecting "To a very high degree" and 12.7%(n=14) selecting "To a high degree," while only 0.9%(n=1) reported "Not at all." The item "In difficult times, I maintain my inner peace" reflecting calmness was most frequently respondents at "Somewhat" 46.4%(n=51), followed by "Hardly at all" 23.6%(n=26) and "To a reasonable degree" 19.1%(n=21). Similarly, "Whatever happens, I am able to cope with life" reflects as resilience or adaptability showed mid-range respondents, with 42.7%(n=47) choosing "Somewhat" and 41.8%(n=46) choosing "Hardly at all." Lastly, the item "I try to take life as it comes" represents as acceptance or flexibility was respondents at "Somewhat" 32.7%(n=36) and "To a reasonable degree" 33.6%(n=37).

Table 4.4

Frequency distribution of acceptance as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
I accept that I am not in full control of the course of my life.	0(0)	0(0)	9.1(10)	5.5(6)	23.6(26)	61.8(68)
I accept that I am not able to influence everything.	0(0)	0(0)	3.6(4)	2.7(3)	32.7(36)	60.9(67)
I am aware that each life has its own tragedy.	0(0)	25.5(28)	39.1(43)	17.3(19)	10.0(11)	8.2(9)
I accept that life will inevitably sometimes bring me pain.	0(0)	.9(1)	8.2(9)	8.2(9)	29.1(32)	53.6(59)

The table 4.4 acceptance frequency table demonstrates that a clearly tendency among participants to acknowledge the limits of personal control. The item “I accept that I am not in full control of the course of my life” represents as surrender or realization was strongly respondents, with 23.6%(n=26) selecting “To a high degree” and 61.8%(n=68) selecting “To a very high degree.” The item “I accept that I am not able to influence everything” reflecting acknowledgment or limit-awareness showed similarly high respondents at 32.7% (n=36) and 60.9%(n=67). The item “I am aware that each life has its own tragedy” indicates awareness or insight was most frequently rated “Somewhat” 39.1%(n=43). Finally, “I accept that life will inevitably sometimes bring me pain” representing endurance or acceptance received higher-level responses, with 29.1%(n=32) at “To a high degree” and 53.6%(n=59) at “To a very high degree.”

Table 4.5

Frequency distribution of Caring for others as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
It is important to me that I can do things for others.	.9(1)	.9(1)	6.4(7)	6.4(7)	30.4(34)	54.5(60)
I am receptive to other people's suffering.	0(0)	2.7(3)	13.6(15)	40.0(44)	34.5(38)	9.1(10)
I try to make a meaningful contribution to society.	.9(1)	27.3(30)	30.0(33)	25.5(28)	10.9(12)	5.5(6)
I want to mean something to others.	0(0)	.9(1)	3.6(4)	7.3(8)	45.5(50)	42.5(47)

The table 4.5 displays caring for others subscale reflects the item “It is important to me that I can do things for others” indicates helpfulness or support showed high respondents, with 30.4%(n=34) of “To a high degree” and 54.5%(n=60) of “To a very high degree,”. Similarly, “I am receptive to other people’s suffering” reflecting empathy or sensitivity was largely respondents at the higher levels, with 34.5%(n=38) at “To a high degree” and 9.1%(n=10) at “To a very high degree,” respondents by 40%(n=44) at “To a reasonable degree.” The item “I try to make a meaningful contribution to society” reflecting as contribution or service received its highest responses at “Somewhat” 30%(n=33) and “To a reasonable degree” 25.5%(n=28), with additional higher-level respondents 10.9%(n=12). Finally, “I want to mean something to others” indicates as purposefulness or value was strongly respondents at 45.5%(n=50) for “To a high degree” and 42.5%(n=47) for “To a very high degree.”

Table 4.6

Frequency distribution of Connectedness with Nature as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
The beauty of nature moves me.	0(0)	0 (0)	2.7(3)	2.7(3)	40.0(44)	54.5(60)
When I am in nature, I feel a sense of connection.	0(0)	0 (0)	.9(1)	4.5(5)	37.3(41)	57.3(63)

The table 4.6 connectedness with nature subscale reflects the item “The beauty of nature moves me” reflects appreciation was highly respondents, with 40%(n=44) of “To a high degree” and 54.5%(n=60) of “To a very high degree,”. On the other hand, “When I am in nature, I feel a sense

of connection" indicates as connection or harmony showed respondents, with 37.3%(n=41) at "To a high degree" and 57.3%(n=63) at "To a very high degree," and 9.1%(n=10) at "Somewhat."

Table 4.7

Frequency distribution of Transcendent Experiences as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
I have had experiences during which the nature of reality became apparent to me.	0 (0)	4.5(5)	37.3(41)	40.9(45)	8.2(9)	9.1(10)
I have had experiences in which I seemed to merge with a power or force greater than myself.	20.9(23)	32.7(36)	30.9(34)	7.3(8)	4.5(5)	3.6(4)
I have had experiences in which all things seemed to be part of a greater whole.	20.3(23)	32.7(36)	32.7(36)	6.4(7)	1.8(2)	5.5(6)
I have had experiences where everything seemed perfect.	0 (0)	18.2(20)	60.9(67)	15.5(17)	4.5(5)	.9(1)
I have had experiences where I seemed to rise above myself.	.9(1)	12.7(14)	60.9(67)	17.3(19)	3.6(4)	4.5(5)

The table 4.7 displays transcendent experiences indicates that the item "I have had experiences during which the nature of reality became apparent to me" represents as Insight was most frequently responds at "Somewhat" 37.3%(n=41) and "To a reasonable degree" 40.9%(n=45). The item "I have had experiences in which I seemed to merge with a power or force greater than myself" representing Union or Spirituality was responds at

"Somewhat" 30.9%(34), with responses at "Not at all" 20.9%(n=23) and "Hardly at all" 32.7%(n=36). Similarly, "I have had experiences in which all things seemed to be part of a greater whole"indicates as connectedness was responds at "Somewhat" 32.7%(n=36) and "Hardly at all" 32.7%(n=36). The item "I have had experiences where everything seemed perfect" reflects as clarity received its highest respondents at "Somewhat" 60.9% (n=67). Finally, "I have had experiences where I seemed to rise above myself" represents Growth was also most frequently responds at "Somewhat" 60.9%(n=67), with smaller respondents at "To a reasonable degree" 17.3%(n=19).

Table 4.8

Frequency distribution of Spiritual Activities as per SAIL

Items	Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
There is a God or higher power in my life that gives me guidance.	0 (0)	0 (0)	.9(1)	0 (0)	21.8(24)	77.3(85)
I talk about spiritual themes with others (themes such as the meaning in life, death or religion).	0 (0)	10.9(12)	23.6(26)	37.3(41)	17.3(19)	10.9(12)
I meditate or pray, or take time in other ways to find inner peace.	0 (0)	3.6(4)	.9(1)	2.7(3)	46.4(51)	46.4(51)
I attend sessions, workshops, etc. that are focused on spirituality or religion.	10.0(11)	19.1(21)	27.3(30)	15.5(17)	14.5(16)	13.6(15)

The table 4.8 displays spiritual activities subscale item “There is a God or higher power that gives me guidance” represents as guidance was predominantly responds at “To a very high degree” 77.3%(n=85). The item “I talk about spiritual themes with others” representing dialogue was mainly responds at “Somewhat” 23.6%(n=26) and “To a reasonable degree” 37.3%(n=41). The item “I meditate or pray, or take time to find inner peace” represents as Inner calm of strongest responses at both “To a high degree” and “To a very high degree”, each at 46.4%(n=51). Finally, “I attend spiritual or religious sessions or workshops” which represents Participation was most frequently responds at “Somewhat” 27.3%(n=30).

4.2 level of spiritual attitude and involvement list among stroke survivors

Table 4.9

Level of Spiritual attitude and Involvement among stroke survivors

Subscale	Mean (SD)	Level of Spiritual attitude and Involvement among stroke survivors					
		Not at all % (n)	Hardly at all % (n)	Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)
Meaningfulness	3.98(.64)	0 (0)	.9(1)	45.5(50)	41.8(46)	11.8(13)	0 (0)
Trust	3.80(.55)	0 (0)	3.6(4)	51.8(57)	40.0(44)	4.5(5)	0(0)
Acceptance	4.87(.63)	0 (0)	0(0)	8.2(9)	38.2(42)	47.3(52)	6.4(7)
Caring for others	4.55(.57)	0 (0)	.9(1)	6.4(7)	65.5(72)	26.4(29)	.9(1)
Connectedness with Nature	5.48(.53)	0 (0)	0 (0)	0(0)	(9.1(10)	45.5(50)	45.5(50)
Transcendent Experience	3.03(.71)	1.8(2)	48.2(53)	35.5(39)	13.6(15)	.9(1)	0(0)
Spiritual activities	4.61(.68)	0(0)	0(0)	16.4(18)	50.0(55)	28.2(31)	5.5(6)

The table 4.9 displays subscale means a clear idea in how spiritual attitudes and involvement are expressed across different dimensions among participants. Connectedness with Nature was the highest-scoring component (M=5.48, SD =±0.53), strongly suggesting that respondents felt a deep emotional bond and unity with the natural world. Acceptance (M=4.87, SD =±0.63) also scored high, implying a strong ability to acknowledge life's uncertainties and respond to challenges with emotional openness. Similar high engagement was also shown in spiritual activities (M = 4.61, SD =±0.68) and caring for others (M =

4.55, SD = ±0.57), which indicates frequent personal spiritual routines and a high priority given to supporting others. In contrast, meaningfulness (M = 3.98, SD = ±0.64) and trust (M = 3.80, SD = ±0.55) were in the moderate range. Notably, the lowest mean was recorded for Transcendent Experiences (M=3.03, SD = ±0.71), which demonstrates that lower spiritual involvement. Overall, the mean findings suggest that spiritual involvement is most strongly related through a focus on nature-connectedness, acceptance, and everyday spiritual practices, transcendent experiences playing a less role.

4.3 Associations between spiritual attitudes and involvement with sociodemographic

Table 4.10

The association of spiritual attitude and involvement subscale connectedness with nature with socio-demographic factors like age, level of dependency, religion, living area.

Variables		Connectedness with Nature			Fisher's Exact Test	*P* value
		to a reasonable degree % (n)	to a high degree % (n)	to a very high degree % (n)		
Age	<40 years	0(0)	3.6(4)	7.3(8)	Fisher's test=14.953	.012
	41-50 years	1.8(2)	29.1 (32)	17.3(19)		
	51-60 years	3.6(4)	6.4(7)	14.5(16)		
	>60 years	3.6(4)	6.4(7)	6.4(7)		
Level of Dependency	Total Dependence	0(0)	0.9(1)	0.9(1)	Fisher's test=26.471	.001
	Severe Dependence	1.8(2)	1.8(2)	6.4(7)		
	Moderate Dependence	6.4(7)	10.9(12)	24.5(27)		
	Mild Dependence	0(0)	21.8(24)	11.8(13)		
	Independent	0.9(1)	10.0(11)	1.8(2)		
Religion	Muslim	5.5(6)	30.9(34)	41.8(46)		0.003

	Hindu	3.6(4)	14.5(16)	3.6(4)	Fisher's test=11.230	
Living Area	Rural	7.3(8)	21.8(24)	33.6(37)	Fisher's test=8.335	.015
	Urban	1.8(2)	23.6(26)	11.8(13)		

The table 4.10 displays significant associations between connectedness with nature and several sociodemographic variables. Age was significantly related to connectedness with nature (Fisher's test = 14.953, p = .012), with participants aged 41–50 years showing the highest proportions in both the "high" and "very high" categories. Level of dependency demonstrated a strong association (Fisher's test = 26.471, p = .001), where moderately dependent individuals respond greater connectedness compared to those with severe dependence. Religion was also significant (Fisher's test = 11.230, p = .003), with muslim respondents more frequently responding higher levels of connectedness than Hindu participants. Living area showed a meaningful association (Fisher's test = 8.335, p = .015), indicating that rural residents expressed stronger connectedness with nature than those living in urban settings.

Table 4.11

The association of spiritual attitude and involvement subscale acceptance with socio-demographic factor like level of dependency.

Variables		Acceptance				Fisher's Exact Test	*P* value
		Somewhat % (n)	to a reasonable degree % (n)	to a high degree % (n)	to a very high degree % (n)		
Level of Dependency	Total Dependence	0(0)	0(0)	0.9(1)	0.9(1)	Fisher's test=26.857	.002
	Severe Dependence	4.5(5)	0.9(1)	4.5(5)	0(0)		
	Moderate Dependence	2.7(3)	14.5(16)	19.1(21)	5.5(6)		
	Mild Dependence	0.9(1)	17.3(19)	15.5(17)	0(0)		
	Independent	0(0)	5.5(6)	7.3(8)	0(0)		

The table 4.11 displays a significant association between acceptance and the level of dependency. Participants with moderate dependence higher levels of acceptance, indicates through stronger respondents in the “reasonable,” “high,” and “very high” categories. In contrast, individuals with severe dependence showed lower acceptance levels across all categories besides mild dependence also displayed higher acceptance than severely dependent individuals, while fully independent participants showed only few. This overall pattern indicates that acceptance increase as functional capacity improves. The association was statistically significant, as confirmed by Fisher’s Exact Test (= 26.857, p = .002), indicates that dependency level plays an important role in acceptance-related spiritual attitudes and involvement.

Table 4.12

The association of spiritual attitude and involvement subscale caring for others with socio-demographic factors like marital status, level of dependency.

Variable		Caring for others					Fisher's Exact Test	*P* value
		Hardly at all % (n)	Some what % (n)	to a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)		
Marital Status	Married	0(0)	6.4(7)	63.6(70)	26.4(29)	0(0)	Fisher's test=25.707	.003
	Unmarried	0.9(1)	0(0)	0.9(1)	0(0)	0.9(1)		
	Separate	0(0)	0(0)	0.9(1)	0(0)	0(0)		
Level of Dependency	Total Dependence	0(0)	0(0)	0(0)	2(1.8)	0(0)	Fisher's test=26.787	.031
	Severe Dependence	0(0)	2.7(3)	6.4(7)	0.9(1)	0(0)		
	Moderate Dependence	0(0)	0.9(1)	29.1(32)	10.9(12)	0.9(1)		
	Mild Dependence	0(0)	0.9(1)	23.6(26)	9.1(10)	0(0)		
	Independent	0.9(1)	1.8(2)	6.4(7)	3.6(4)	0(0)		

The table 4.11 shows that caring for others was significantly associated with marital status. Married participants respond consistently higher levels of caring attitudes, particularly showing stronger respondents in the “reasonable” and “high” categories, whereas unmarried and separated individuals reported lower levels of caring for others (Fisher’s test = 5.707, *P*=.003). A significant association was also observed with level of dependency. Individuals with moderate dependence displayed the most significant caring for others, while with severe dependence showed higher caring for other levels (Fisher’s test = 6.787, *P* =.031).

Table 4.13

The association of spiritual attitude and involvement subscale transcendent experiences with socio-demographic factor like religion.

Variables		Transcendent experiences					Fisher's Exact Test	*P* value
		not at all % (n)	hardly at all % (n)	Somewhat % (n)	to a reasonable degree % (n)	to a high degree % (n)		
Religion	Muslim	1.8(2)	45.5(50)	22.7(25)	7.3(8)	0.9(1)	Fisher's test= 19.486	0.001
	Hindu	0(0)	2.7(3)	12.7(14)	6.4(7)	0(0)		

The table 4.13 shows transcendent experiences and religion (Fisher's Exact Test = 19.486, p=.001). Muslim participants generally reported higher levels of transcendent spiritual experiences, whereas Hindu participants showed comparatively lower respondents of experiences. This suggests that religious background plays a meaningful role in the level of spiritual attitude and involvement with transcendent experiences.

Table 4.14

The association of spiritual attitude and involvement subscale spiritual activities with socio-demographic factor like duration of receiving treatment.

Variables		Spiritual activities				Fisher's Exact Test	*P* value
		Somewhat % (n)	To a reasonable degree % (n)	To a high degree % (n)	To a very high degree % (n)		
Duration of Receiving treatment	2.5-5.0 months	7.5(4)	35.8(19)	35.8(19)	7.5(4)	Fisher's test=11.757	0.012
	5.1-7.5 months	1.8(2)	1.8(2)	0(0)	0(0)		
	7.6-10.0 months	0(0)	0(0)	0.9(1)	1.8(2)		

The table 4.14 shows that significant association was found between spiritual activities and the duration of receiving treatment (Fisher's Exact Test = 11.757, p = .012). Individuals in the earlier stages of treatment showed higher involvement in spiritual activities, in contrast, undergoing treatment for a longer period reported lower levels of spiritual engagement. This indicates that spiritual activities may reduce as treatment duration increases.

CHAPTER V: DISCUSSION

This study aimed to identify the spiritual attitude and involvement of stroke survivors who took rehabilitation services from the Centre for the Rehabilitation of the Paralysed (CRP) and now live in the community and have come to CRP for follow up after rehabilitation service. It was a face-to-face survey conducted in the CRP and community with 110 persons of stroke survivors. This study showed how an Individual with chronic illness could cope with their illness through spiritual attitude and involvement.

In this study, the median age of the participants was 50.00 years (IQR 45.00 – 57.00) years among the participants 110 and it was not matched with other studies, whereas in other studies, the mean age of participants was 41.2±13.8 years the participants of 204 (Wilson et al., 2017) and 58.23±9.37 years among the participants of 293 (Ginting et al., 2015).

Most studies showed that among the number of participants, men were higher than women (Ginting et al., 2015; Rahnama et al., 2015; Wilson et al., 2017). The percentage of men and women in this study was 74.5% and 25.5%. Here the differences were also seen. In this study, the researcher took participants from various professions. Among all the professions, the rate of unemployment was 65.5% and the occupational status rate (service holders, business, homemaker, and others) was 34.5%. In different studies, it was seen that the unemployment rate was higher than the employment rate. Such as the unemployment rate of 14.1 % and the unemployed rate of 85.9 % among 213 participants (Hajiaghababaei et al., 2018; Rahnama et al., 2015), employment of 5.6 % and unemployed

94.4 % (Aktürk & Aktürk, 2020). A large number of participants (65.5%) were unemployed, which is also similar to earlier findings showing that many stroke survivors lose their ability to work after their illness because of physical and emotional challenges (Hajiaghababaei et al., 2018). Most participants lived in rural areas (62.7%), which may have influenced their lifestyle, environment, and access to spiritual practices.

Among all spiritual domains in this study, Connectedness with Nature showed the highest mean score (M = 5.48, SD = 0.53). More than 94% of participants strongly felt emotionally connected with nature. This result supports the findings of previous result explained that nature helps people with chronic illness feel calmer, more hopeful, and emotionally balanced(Chew et al., 2016). In this study, connectedness with nature was also significantly related to age (p = .012), dependency level (p = .001), religion (p = .003), and living area (p = .015). These findings suggest that spiritual experience is influenced not only by personal beliefs but also by cultural background, physical ability, and the environment people live in. This supports the idea that spirituality grows through daily life experiences and social surroundings.

The acceptance subscale also showed a high mean score (M = 4.87, SD = 0.63). More than half of the participants agreed that life is not fully in their control and that difficulties are part of life. This shows that many stroke survivors are learning to accept their situation emotionally. This supports previous study described that acceptance as an important spiritual response that helps people with long-term illness adjust and regain emotional stability(Underwood & Teresi, 2002). The significant association between acceptance and dependency level (p = .002) suggests that people with moderate functional

ability may cope better because they can still perform some tasks independently while receiving support when needed.

The Caring for Others dimension (M = 4.55, SD = 0.57) showed that many stroke survivors still value empathy, relationships, and contributing to others' well-being. Smillar study but not participants same shows helping others gives person with SCI a sense of purpose and identity during recovery(Aktürk & Aktürk, 2020). The significant association with marital status (p = .003) and dependency level (p = .031) suggests that supportive family relationships and some independence help individuals maintain caring and compassionate attitudes.

The Meaningfulness (M = 3.98, SD = 0.64) and Trust (M = 3.80, SD = 0.55) subscales showed moderate levels. This may mean that survivors are still rebuilding their sense of purpose and confidence after stroke. Interpretation matches the findings of previous study that rebuilding identity and emotional strength often takes time after neurological trauma (Lapadatu & Morris, 2019).

The Transcendent Experiences dimension showed the lowest mean score (M = 3.03, SD = 0.71). Almost half of the participants selected "hardly at all," showing that deep spiritual or mystical experiences were not common. In other studies found that transcendental experiences are less frequent among individuals in rehabilitation, where spirituality mainly supports coping and emotional balance(Underwood & Teresi, 2002). The significant association with religion (p = .001) highlights that cultural and religious background shapes how people understand and experience transcendence.

Finally, the Spiritual Activities dimension (M = 4.61, SD = 0.68) showed strong involvement. Most participants (77.3%) believed strongly in guidance from a higher power, and 92.8% practiced prayer or meditation regularly. All of the results agree with previous study that prayer and meditation provide emotional comfort, strength, and resilience during illness(Chew et al., 2016; Jones et al., 2020). The association with treatment duration (p = .012) suggests that spirituality may be especially important during the early stages of recovery, when individuals face the most uncertainty.

This study only measured the level of spiritual attitude and involvement and different dimensions of the spirituality of among stroke survivors living in the community and follow up after rehabilitation. However, in the other studies that were conducted in a particular region, spirituality was measured along with other variables such as quality of life, mental and physical health, hope, and resilience and adjustment (Bockrath et al., 2014; Dehnavi & Hashemi, 2023; Rabitti et al., 2020; Skarbaliene et al., 2019; Zhang & Rusch, 2005b). The SAIL scale was used to measure spirituality in this study. However, other studies examining spirituality and chronic illnesses, such as SCI, stroke, cancer, and kidney disease, have employed a variety of spirituality scales, including the FACIT-SP-12 scale, the SWB (Spiritual Well-Being) scale, the Brief Multidimensional Measure of Religiousness/Spirituality, and the Benefit through Religiosity/Spirituality Scale (BENEFIT) (Aktürk & Aktürk, 2020; Campbell et al., 2010; Hajiaghababaei et al., 2018; Siddall et al., 2017; Wang et al., 2022; Wilson et al., 2017).

CHAPTER VI: CONCLUSION

6.1 Strengths and Limitations

6.1.1 Strengths

• It was ok to utilize and translate the Spiritual Attitude and Involvement List (SAIL) scale, which had a high degree of validity and reliability

• To ensure the quality of life, five stages of data cycle management had been followed. The data collection from participants and the data entry process was non-biased.

• Data was collected in the face-to-face survey method and stored in the cloud system with strong password-protected goggle security.

• There was no unauthorized access without the student researcher and the responsible supervisor. All data was used as it is. No modifications or exploitation was done.

• Studies conducted in communities and rehabilitation centre were uncommon; hospitals hosted the majority of the research on spirituality and stroke was done earlier. Therefore, what spiritual attitudes and involvement of stroke survivors had when they returned to the community was now known.

6.1.2 Limitation

• There was a small group of participants

• It was unable to include a large number of stroke survivors, due to the short time frame for data collecting.

• There were lots of invalid phone numbers which restricted the to reach the overall phone calls

6.2 Practice Implication

6.2.1 Recommendation for Future Practice

• In this study, health professionals will have a better understanding of the spiritual attitude and involvement of stroke survivors living in the community, as well as knowing the dimensions of spirituality. This result's results indicate the level of spiritual attitude and involvement of people is pretty good. Many stroke survivors suffer from depression and anxiety, and many of them commit suicide and make suicidal attempts at the time of their admission to the hospital because of a lack of finding meaning and purpose in their lives and disappointment. Like other rehabilitation programs of stroke survivors Such as community reintegration programs and vocational training programs, a spiritual rehabilitation program should be addressed in rehabilitation-based institutions.

• Therefore, occupational therapists should incorporate spirituality into rehabilitation in light of the evidence showing that higher levels of spiritual well-being, including a sense of meaning and purpose, are "protective" against increased psychological distress. So, it is the responsibility of occupational therapists to integrate spiritual well-being assessments into standard clinical evaluation procedures. Occupational therapists should develop treatment plans that address spiritual meaning and purpose concerns. During early rehabilitation, it will help stroke survivors develop resilience and adjust to the existence of their disability.

• Social workers, policymakers, community people, and local leaders should make an accessible environment for religious and spiritual practice and spiritual care programs for stroke survivors to cope with their illness and support their family members.

• There is a lot of research being done in numerous regions of the world, but not many studies have been found that address spirituality and stroke survivors in South Asia. Thus, this research will aid in the researcher's comprehension of the spiritual outlook and engagement of Bangladeshi community members suffering from long-term conditions like stroke. Additionally, the future researcher will understand the components of spirituality as well as its deeper meaning.

6.2.2 Recommendations for Future Research

• Explore further research on spirituality in a Qualitative approach

• A study can be done to identify the association between resilience and spirituality after a chronic trauma or illness

• A study can be conducted about the strategy and technique to increase spiritual belief and health in rehabilitation service

• Another study can be carried out about the healthcare perspective of how spirituality can be used in rehabilitation services.

6.3 Conclusion

The purpose of the study is to identify the spiritual attitude and involvement among stroke survivors . This study shows how an individual with a chronic illness like stroke to find meaning and purpose can cope with their illness through spiritual attitude and involvement.

In this research, it measures various dimensions of spirituality. Among those aspects of spirituality, the Acceptance and connectedness with nature subscales have the highest score, and spiritual activities subscales have the lowest score. In research findings, it is seen that more than half of the population have a higher level of spiritual attitude and involvement and least have moderate and lower levels of spiritual attitude and involvement. Healthcare professionals should incorporate spirituality into their rehabilitation program by assessing spiritual distress and strength through evaluation procedures, planning treatment approaches, and therefore organizing a spiritual care training program before returning to the community after taking rehabilitation services. Because of the disability and environmental barrier, stroke survivors could not participate in spiritual activities. It is therefore important for community members, social workers, and family members to consider and take the required actions to engage in spiritual activities for stroke survivors after their return to the community.

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APPENDICES

Appendix A: Ethical Approval Letter

বাংলাদেশ হেলথ্ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

Ref: CRP-BHPI/IRB/07/2025/1107 Date: 21.07.2025

To
Abubakar Siddique
4th Year B.Sc. in Occupational Therapy
Session: 2020-2021 Student ID: **122200400**

Subject: Approval of the thesis proposal **Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study** by ethics committee.

Dear Abubakar Siddique,
Congratulations.
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned dissertation, with yourself, as the principal investigator and Md. Saddam Hossain, Assistant Professor, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP as thesis supervisor. The Following documents have been reviewed and approved:

SL No.	Name of the Documents
1	Research Proposal
2	Standard Questionnaire (English & Bangla)
3	Information sheet & consent form.

The purpose of the study is to identify the level of spiritual attitude and involvement after rehabilitation service among stroke survivors. The study involves use of a Standard Questionnaire to assess level of spiritual attitude and involvement after rehabilitation service among stroke survivors that may take 10 to 15 minutes to answer the questionnaire and there is no likelihood of any harm to the participants. There is no benefit to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 8:30 AM on 17 June, 2025 at BHPI (50th IRB Meeting).

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

Muhammad Millat Hossain
Associate Professor, Project and Course Coordinator, MRS
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ। ফোন: +৮৮ ০২ ২২৪৪৪৫৪৬৪-৫, +৮৮ ০২ ২২৪৪৪১৪০৪, মোবাইল: +৮৮ ০১৭৩০ ০৫৯৬৪৭
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E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd

Appendix B: Information Sheet , Consent Form & Withdrawal form

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)

Department of Occupational Therapy CRP-Chapain, Savar, Dhaka-1343, Tel- 02-7745464, Fax: 02-7745069

Information Sheet (English Version)

Research Title: Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study

Name of researcher: Abubakar Siddique, 4th year, B.Sc. in Occupational Therapy,

Roll: 21.

Supervisor:

Md. Saddam Hossain
Assistant Professor
Department Of Occupational Therapy
BHPI, CRP,Savar, Dhaka-1343.
E-mail: saddamot6@gmail.com

I am Abubakar Siddique , and I want to invite you to participate in the research. Before making the decision, you must know why this research is being done and how you relate to it. Please take time to read the information given. If you face any problem after reading or need more information, you can ask me.

What is the purpose of this research?

Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study Study is to identify spirituality of stroke survivors in community. The study aims to find out the level of spirituality after rehabilitation service among stroke survivors. By focusing on the community and environmental aspects, the research seeks to provide insights that

can contribute to the development of strategies and interventions aimed at improving spirituality and wellbeing of own self.

What does the research involve?

Participants are invited to face to face survey with a student investigator, scheduled in advance and lasting 8 minutes. The survey will be on questionnaires which are related to spirituality. Further details or inquiries can be contacted via the phone number provided or email addresses.

Why were you chosen for this research?

Your participation is valued because you have firsthand experience dealing with spiritual occupation and psychosocial well-being after stroke.

Source of funding

The research has been carried out on a self-funded basis.

Consenting to participate in the project and withdrawing from the research

The research requires your approval through a consent form, which you must sign and submit Garing the interview. Your participation is voluntary and there is no obligation to grant consent. If you withdraw before the data analysis phase, there will be no negative consequences. Your decision to refrain from answering specific questions will also have no adverse effects. Your comfort and autonomy are our top priorities throughout the process,

Possible benefits and risks to participants

Participation in this research may not yield direct benefits, but the information gathered will enhance rehabilitation services for stroke survivors. The research is designed with low

risk, but potential psychological discomfort may occur due to sharing experiences. If it arises during the survey, the student researcher will minimize it in the following ways:

- You will be given a reminder that participation is voluntary, you can withdraw from it anytime you want.
- The researcher will offer break during survey if the discomfort impacts the face-to-face survey. Additionally, the researcher will discuss re-scheduling the face-to-face survey if you prefer to continue later.

Confidentiality

The study will maintain confidentiality of all participants' details, with their name not disclosed in any published documentation. A unique code will be used for de-identification after survey, ensuring anonymous data analysis. The original survey form, featuring the participant's name, will only be accessible to the researchers, ensuring high privacy and security.

Storage of data

The data collected will be stored in a password-protected computer and cloud system, accessible only to the researchers, and physical copies will be kept in locked filing cabinets at the Centre for the Rehabilitation of the Paralysed (CRP) for strict confidentiality.

Results

This research will combine survey form and data from survey to create a comprehensive descriptive report. Highlights may be published in scholarly journals or conference proceedings. For a concise summary, contact project investigators using provided contact details. The study's outcomes may also be featured in conference proceedings.

Complaints

If you have any concerns or complaints about the research's conduct, you are welcome to contact the supervisor.

Researcher

Abubakar Siddique

Bangladesh Health Professions Institute (BHPI)

B.Sc. in Occupational Therapy,

Department of Occupational Therapy

Session: 2020-21

CRP, Savar, Dhaka-1343.

E-mail: abubakarsiddique.ot24@gmail.com

Contact number:

Supervisor

Md. Saddam Hossain

Assistant Professor

Department Of Occupational Therapy

BHPI, CRP,Savar, Dhaka-1343.

E-mail: saddamot6@gmail.com

Contact number:

Thank you.

Abubakar Siddique

Participant information sheet (Bangla version)

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ, সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩

টেলিফোন: ০২-৭৭৪৫৪৬৪, ফ্যাক্স: ০২-৭৭৪৫০৬৯

গবেষণার শিরোনাম: স্ট্রোক থেকে বেঁচে যাওয়া ব্যক্তিদের আধ্যাত্মিক সুস্থতা এবং সম্পৃক্ততার মাত্রা : একটি পরিমাণগত গবেষণা

গবেষকেরনাম:

আবুবকর ছিদ্দিক

৪র্থ বর্ষ

বিএসসি ইন অকুপেশনাল থেরাপি

রোল: ২১

সুপারভাইজার:

মো: সাদ্দাম হোসাইন

সহকারী অধ্যাপক

অকুপেশনাল থেরাপি বিভাগ, বিএইচপিআই, সিআরপি, সাভার, ঢাকা-১৩৪৩

ইমেইল: saddamot6@gmail.com

আমি আবুবকর সিদ্দিক, এবং আমি আপনাকে এই গবেষণায় অংশগ্রহণের জন্য আমন্ত্রণ জানাচ্ছি। সিদ্ধান্ত নেওয়ার আগে, আপনার জানা দরকার এই গবেষণাটি কেন করা হচ্ছে এবং এটি আপনার সাথে কীভাবে সম্পর্কিত। অনুগ্রহ করে নিচের তথ্য মনোযোগ সহকারে

পড়ুন। পড়ার পর কোনো সমস্যা হলে বা অতিরিক্ত তথ্যের প্রয়োজন হলে, আপনি আমার সাথে যোগাযোগ করতে পারেন।

এই গবেষণার উদ্দেশ্য কী?

স্ট্রোক থেকে বেঁচে যাওয়া ব্যক্তিদের আধ্যাত্মিক সুস্থতা এবং সম্পৃক্ততার মাত্রা : একটি পরিমাণগত গবেষণা এর উদ্দেশ্য হলো কমিউনিটিতে স্ট্রোক বেঁচে থাকা ব্যক্তিদের আধ্যাত্মিকতার মাত্রা নির্ধারণ করা। পুনর্বাসন সেবার পর তাদের আধ্যাত্মিক অবস্থার পর্যবেক্ষণের মাধ্যমে, এই গবেষণা এমন কিছু অন্তর্দৃষ্টি দিতে চায় যা ভবিষ্যতে কার্যকর কৌশল এবং হস্তক্ষেপ তৈরি করতে সহায়তা করবে, যা ব্যক্তির আধ্যাত্মিকতা ও সুস্থতা বৃদ্ধিতে সহায়ক হবে।

গবেষণার প্রক্রিয়া কী?

গবেষণায় অংশগ্রহণকারীদের একজন শিক্ষার্থী গবেষকের সঙ্গে পূর্বনির্ধারিত সময় অনুযায়ী মুখোমুখি সাক্ষাৎকারে অংশ নিতে আমন্ত্রণ জানানো হচ্ছে, যার সময়কাল আনুমানিক ৮ মিনিট। সাক্ষাৎকারের সময় আধ্যাত্মিকতার সাথে সম্পর্কিত প্রশ্নোত্তর করা হবে। যদি আপনার কোনো প্রশ্ন থাকে, তাহলে দেওয়া ফোন নম্বর বা ইমেইলে যোগাযোগ করতে পারেন।

কেন আপনাকে এই গবেষণার জন্য বাছাই করা হয়েছে?

আপনি স্ট্রোকের পর আধ্যাত্মিক কার্যকলাপ ও মনোসামাজিক সুস্থতার অভিজ্ঞত লাভ করেছেন বলে এই গবেষণায় আপনার অংশগ্রহণ অত্যন্ত গুরুত্বপূর্ণ।

অর্থায়নের উৎস:

এই গবেষণাটি স্বতন্ত্রভাবে অর্থায়ন করা হয়েছে।

অংশগ্রহণে সম্মতি ও গবেষণা থেকে সরে যাওয়া:

গবেষণায় অংশগ্রহণের জন্য আপনাকে সম্মতিপত্রে স্বাক্ষর করতে হবে এবং তা সাক্ষাৎকারের আগে জমা দিতে হবে। অংশগ্রহণ স্বেচ্ছাসেবী এবং আপনি সম্মতি না দিলেও কোনো সমস্যা হবে না। তথ্য বিশ্লেষণের আগে আপনি চাইলে গবেষণা থেকে সরে যেতে পারবেন, এবং এতে আপনার কোনো ক্ষতি হবে না। আপনি চাইলে যেকোনো প্রশ্নের উত্তর না দিলেও তা গ্রহণযোগ্য হবে।

অংশগ্রহণকারীদের সম্ভাব্য সুবিধা ও ঝুঁকি:

এই গবেষণায় সরাসরি কোনো ব্যক্তিগত সুবিধা নাও থাকতে পারে, তবে সংগ্রহ করা তথ্য স্ট্রোক বেঁচে থাকা ব্যক্তিদের পুনর্বাসন সেবা উন্নয়নে সহায়তা করবে। গবেষণাটি কম ঝুঁকিপূর্ণ হলেও ব্যক্তিগত অভিজ্ঞতা শেয়ার করার সময় কিছু মানসিক অস্বস্তি হতে পারে। যদি এমনটি ঘটে, তাহলে গবেষক নিচের পদ্ধতিগুলো অনুসরণ করবে:

• আপনাকে স্মরণ করিয়ে দেওয়া হবে যে অংশগ্রহণ সম্পূর্ণ স্বেচ্ছাসেবী এবং আপনি যেকোনো সময় তা বাতিল করতে পারেন।
• যদি মুখোমুখি সাক্ষাৎকার চলাকালে আপনি অস্বস্তি অনুভব করেন, তাহলে বিরতির সুযোগ দেওয়া হবে। প্রয়োজনে সাক্ষাৎকারের সময় পুনঃনির্ধারণ করা হবে।

গোপনীয়তা:

গবেষণায় অংশগ্রহণকারীদের সব তথ্য গোপন রাখা হবে। কোনো প্রকাশিত ডকুমেন্টে আপনার নাম ব্যবহার করা হবে না। একটি কোড ব্যবহার করে উত্তরগুলো নামবিহীন করা হবে, যাতে করে পরিচয় প্রকাশ না পায়। মূল প্রশ্নপত্রে থাকা আপনার নাম শুধুমাত্র গবেষকেরা দেখতে পারবেন।

তথ্য সংরক্ষণ:

সংগ্রহ করা তথ্য একটি পাসওয়ার্ড-সুরক্ষিত কম্পিউটার এবং ক্লাউড সিস্টেমে সংরক্ষণ করা হবে, যা শুধুমাত্র গবেষকদের জন্য উপলব্ধ থাকবে। মুদ্রিত কপি সিআরপিতে একটি লক করা ক্যাবিনেটে সুরক্ষিতভাবে রাখা হবে।

ফলাফল:

এই গবেষণায় প্রাপ্ত তথ্য ও প্রশ্নপত্রের মাধ্যমে একটি বিস্তারিত প্রতিবেদন প্রস্তুত করা হবে। গবেষণার কিছু অংশ জার্নাল বা সম্মেলনে প্রকাশ হতে পারে। চাইলে সংক্ষিপ্ত সারাংশ পাওয়ার জন্য আপনারা প্রদত্ত যোগাযোগের মাধ্যমে গবেষকদের সাথে যোগাযোগ করতে পারেন।

অভিযোগ:

যদি গবেষণার পদ্ধতি নিয়ে কোনো অভিযোগ বা উদ্বেগ থাকে, তাহলে আপনি সুপারভাইজারের সাথে যোগাযোগ করতে পারেন।

গবেষক

আবু বকর ছিদ্দিক

বাংলাদেশ হেল্‌থ প্রফেশন ইনস্টিটিউট (বিএইচপিআই)

বিএসসি ইন অকুপেশনাল থেরাপি

বিভাগ : অকুপেশনাল থেরাপি

সেশন: ২০২০-২০২১

ইমেইল: abubakarsiddique.ot24@gmail.com

সুপারভাইজার

মো: সাদ্দাম হোসাইন

সহকারী অধ্যাপক

অকুপেশনাল থেরাপি বিভাগ, বিএইচপিআই, সিআরপি, সাভার, ঢাকা-১৩৪৩

ইমেইল: saddamot6@gmail.com

ধন্যবাদ।

আবুবকর সিদ্দিক

Consent Form (English Version)

Title of the Study: Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study

I am _____ (participant name), have thoroughly read and fully understand the purpose and nature of my participation in this research, and I freely agree to participate. I acknowledge my right to withdraw my consent and discontinue my involvement in the study at any time until data will be analysed without fear of any prejudice and recognise that my activities and data will be analysed by my participation will remain strictly confidential.

I, _____ (Investigator name), confirm that all information shared during this study will be kept private and secure. Access to the data will be strictly limited to the researcher and their supervisor, ensuring that my privacy is protected at all times.

I, _____ (participant name), have been fully informed of all the details mentioned above and hereby voluntarily consent to take part in this study.

Name of the Participant: _____

Signature of Participant/Thumb Print: _____

Date: _____

Student Researcher's Signature: _____

Date: _____

Consent Form (Bangla version)

সম্মতি ফর্ম (Consent Form)

গবেষণার শিরোনাম: স্ট্রোক থেকে বেঁচে যাওয়া ব্যক্তিদের আধ্যাত্মিক সুস্থতা এবং সম্পৃক্ততার মাত্রা : একটি পরিমাণগত গবেষণা

আমি, _____ (অংশগ্রহণকারীর নাম), গবেষণার উদ্দেশ্য এবং এতে আমার অংশগ্রহণের ধরণ সম্পূর্ণভাবে পড়েছি এবং বুঝেছি। আমি স্বেচ্ছায় এই গবেষণায় অংশগ্রহণে সম্মতি দিচ্ছি। আমি জানি যে, তথ্য বিশ্লেষণের পূর্ব পর্যন্ত আমি যেকোনো সময়ে আমার সম্মতি প্রত্যাহার করে গবেষণা থেকে সরে যেতে পারি, এবং এতে আমার কোনো ক্ষতি বা নেতিবাচক প্রভাব হবে না। আমি এটাও বুঝি যে, আমার অংশগ্রহণ গোপন রাখা হবে এবং আমার দেয়া তথ্য বিশ্লেষণ purposes-এ ব্যবহার করা হবে।

আমি, _____ (গবেষকের নাম), নিশ্চিত করছি যে, এই গবেষণায় অংশগ্রহণকারীর প্রদত্ত সকল তথ্য সম্পূর্ণ গোপন ও নিরাপদভাবে সংরক্ষণ করা হবে। গবেষক এবং তার তত্ত্বাবধায়ক ব্যতীত অন্য কেউ এই তথ্য দেখতে পারবে না। এতে অংশগ্রহণকারীর গোপনীয়তা সর্বদা রক্ষা করা হবে।

আমি, _____ (অংশগ্রহণকারীর নাম), উপরোক্ত সব তথ্য সম্পূর্ণভাবে বুঝে এবং অবগত হয়ে স্বেচ্ছায় এই গবেষণায় অংশগ্রহণে সম্মতি প্রদান করছি।

অংশগ্রহণকারীর নাম: _____

অংশগ্রহণকারীর স্বাক্ষর / আঙুলের ছাপ: _____

তারিখ: _____

গবেষক শিক্ষার্থীর স্বাক্ষর: _____

তারিখ: _____

Withdrawal of consent form

Research title: Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study

Student investigator: Abubakar Siddique

I_____ (the participant), wish to WITHDRAW my consent to the use of data arising from my participation. Data arising from my participation must NOT be used in this research project as described in the Information and Consent Form. I understand that data arising from my participation will be destroyed provided this request is received within four weeks of the completion of my participation in this project. I understand that this notification will be retained together with my consent form as evidence of the withdrawal of my consent to use the data I have provided specifically for this research project.

Name of participant: _____

Signature of participant/ thumb print: _____

Date:

Withdrawal of consent form (Bangla Version)

সম্মতি প্রত্যাহারের ফর্ম

গবেষণার শিরোনাম: স্ট্রোক থেকে বেঁচে যাওয়া ব্যক্তিদের আধ্যাত্মিক সুস্থতা এবং সম্পৃক্ততার মাত্রা : একটি পরিমাণগত গবেষণা

আমি, _____

(অংশগ্রহণকারী), এই গবেষণা প্রকল্পে আমার অংশগ্রহণ থেকে প্রাপ্ত তথ্য ব্যবহারের জন্য পূর্বে দেওয়া সম্মতি প্রত্যাহার করতে ইচ্ছুক।
তথ্য ও সম্মতি ফর্মে বর্ণিত গবেষণা প্রকল্পে আমার অংশগ্রহণ থেকে প্রাপ্ত কোনো তথ্য ব্যবহার করা যাবে না।

আমি বুঝি যে, আমার অংশগ্রহণ শেষ হওয়ার চার সপ্তাহের মধ্যে এই অনুরোধ গ্রহণ করা হলে, আমার প্রদানকৃত তথ্য ধ্বংস করে ফেলা হবে।
আমি এটাও বুঝি যে, এই ফর্মটি আমার সম্মতি ফর্মের সঙ্গে সংরক্ষণ করা হবে, যেন প্রমাণ থাকে যে আমি আমার তথ্য এই গবেষণায় ব্যবহারের সম্মতি প্রত্যাহার করেছি।

অংশগ্রহণকারীর নাম: _____

অংশগ্রহণকারীর স্বাক্ষর / আঙুলের ছাপ: _____

তারিখ: _____

Appendix C: Application for permission of SAIL scale

Queries regarding permission and scoring of Spiritual Attitude And Involvement List (SAIL)

Abubakar siddique <abubakar080401@gmail.com> Tue, Jan 28, 11:47 PM (3 days ago)

to info

Dear HDI

I hope you are well. I am Abubakar Siddique, a student in the 3rd year of a B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (an academic institute of CRP) in Bangladesh. In our course curriculum, we have to undertake undergraduate research. I am passionate about researching spirituality, and my research title is " Level of Spirituality among Stroke Survivors: a quantitative study ". I want to use the modified occupational questionnaire you and your team developed in this research. Therefore, I have a few questions about the questionnaire. I would appreciate it if you could guide me with my following queries:

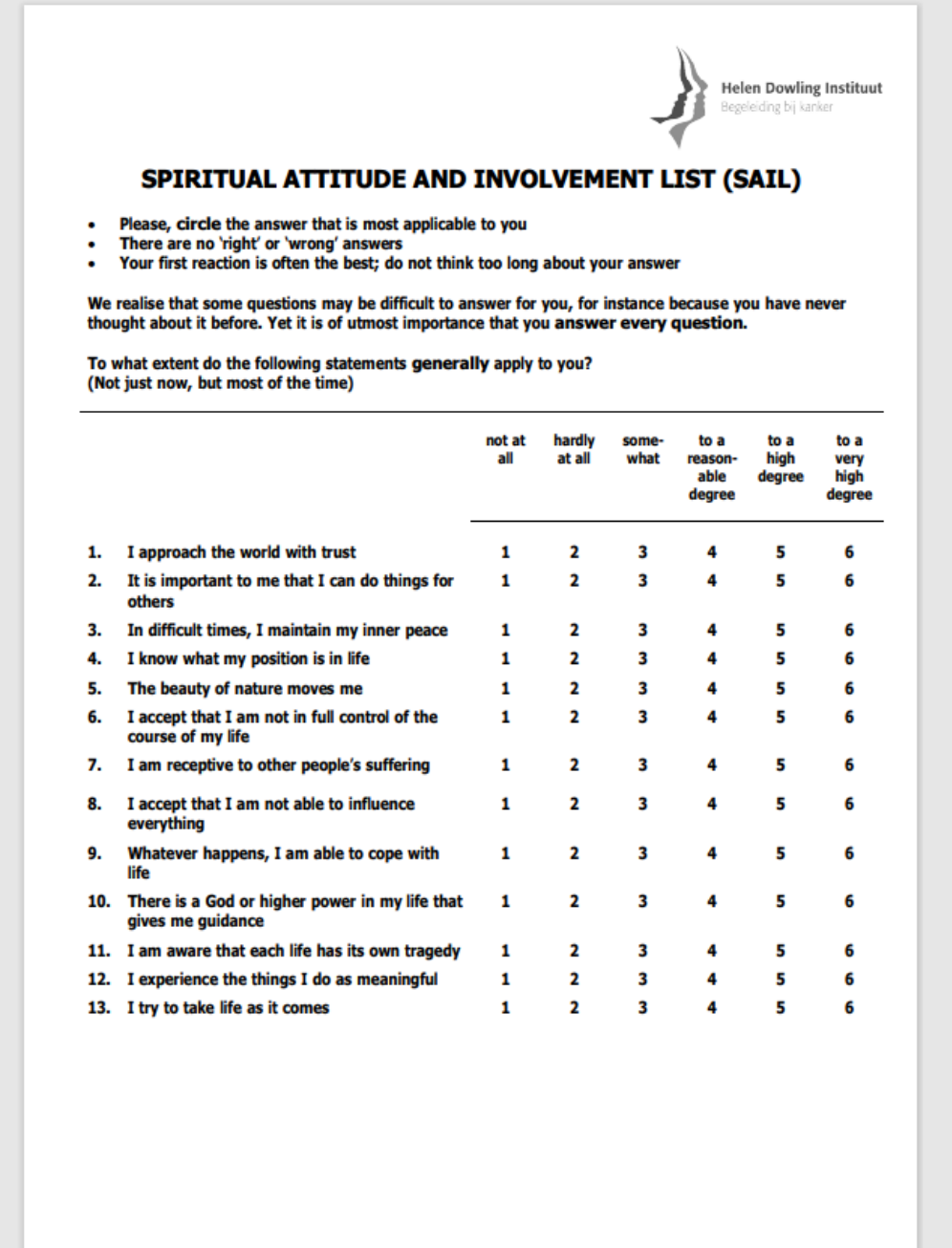
1. How can I get permission to use this questionnaire?
2. What is the licensing system or procedure?
3. Do I need to pay for using this questionnaire?
4. What is the scoring system for the questionnaire?
5. Can I translate it into Bengali by keeping the original meaning unchanged? Because the native language of my participants is Bengali, it will be helpful for the survey.

Your response to my queries will be beneficial to me. I have copied this email to my subject teacher, Arifa Jahan Ema, Assistant Professor in Occupational Therapy and Course Coordinator of MSc in Occupational Therapy of BHPI.

I look forward to hearing from you! Thank you very much!

Regards,

Appendix D: Questionnaire



Helen Dowling Instituut
Begeleiding bij kanker

SPIRITUAL ATTITUDE AND INVOLVEMENT LIST (SAIL)

- Please, **circle** the answer that is most applicable to you
- There are no 'right' or 'wrong' answers
- Your first reaction is often the best; do not think too long about your answer

We realise that some questions may be difficult to answer for you, for instance because you have never thought about it before. Yet it is of utmost importance that you **answer every question.**

To what extent do the following statements **generally** apply to you?
(Not just now, but most of the time)

		not at all	hardly at all	some-what	to a reason-able degree	to a high degree	to a very high degree
1.	I approach the world with trust	1	2	3	4	5	6
2.	It is important to me that I can do things for others	1	2	3	4	5	6
3.	In difficult times, I maintain my inner peace	1	2	3	4	5	6
4.	I know what my position is in life	1	2	3	4	5	6
5.	The beauty of nature moves me	1	2	3	4	5	6
6.	I accept that I am not in full control of the course of my life	1	2	3	4	5	6
7.	I am receptive to other people's suffering	1	2	3	4	5	6
8.	I accept that I am not able to influence everything	1	2	3	4	5	6
9.	Whatever happens, I am able to cope with life	1	2	3	4	5	6
10.	There is a God or higher power in my life that gives me guidance	1	2	3	4	5	6
11.	I am aware that each life has its own tragedy	1	2	3	4	5	6
12.	I experience the things I do as meaningful	1	2	3	4	5	6
13.	I try to take life as it comes	1	2	3	4	5	6

	not at all	hardly at all	some-what	to a reason-able degree	to a high degree	to a very high degree
14. When I am in nature, I feel a sense of connection	1	2	3	4	5	6
15. I accept that life will inevitably sometimes bring me pain	1	2	3	4	5	6
16. I try to make a meaningful contribution to society	1	2	3	4	5	6
17. My life has meaning and purpose	1	2	3	4	5	6
18. I want to mean something to others	1	2	3	4	5	6

	never	seldom	some-times	regular-ly	often	very often
19. I have had experiences during which the nature of reality became apparent to me	1	2	3	4	5	6
20. I have had experiences in which I seemed to merge with a power or force greater than myself	1	2	3	4	5	6
21. I have had experiences in which all things seemed to be part of a greater whole	1	2	3	4	5	6
22. I talk about spiritual themes with others (themes such as the meaning in life, death or religion)	1	2	3	4	5	6
23. I have had experiences where everything seemed perfect	1	2	3	4	5	6
24. I meditate or pray, or take time in other ways to find inner peace	1	2	3	4	5	6
25. I have had experiences where I seemed to rise above myself	1	2	3	4	5	6
26. I attend sessions, workshops, etc. that are focused on spirituality or religion	1	2	3	4	5	6

August, 2008 Eltica de Jager Meezenbroek, Bert Garssen and Machteld van den Berg. Helen Dowling Institute, care for cancer, hdi@hdi.nl, postbox 85061, 3508 AB, Utrecht, The Netherlands, www.hdi.nl.

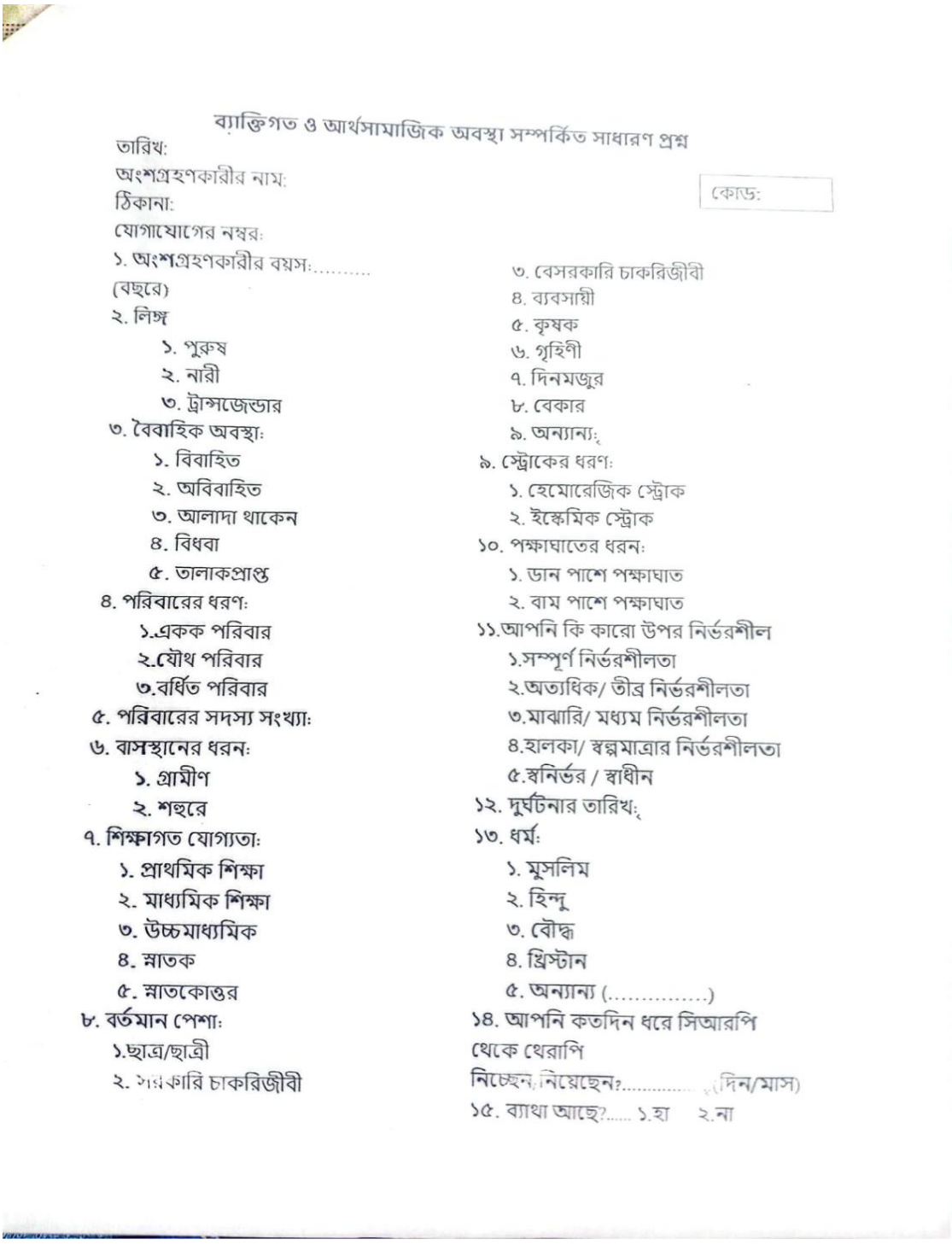
Calculation of sum scores

Table Items per subscale

Subscale	Items
Meaningfulness	4, 12, 17
Trust	1, 3, 9, 13
Acceptance	6, 8, 11, 15
Caring for Others	2, 7, 16, 18
Connectedness with Nature	5, 14
Transcendent Experiences	19, 20, 21, 23, 25
Spiritual Activities	10, 22, 24, 26

The 26 items of the SAIL represent seven subscales, see Table. Each item is scored on a range from 1 to 6. Sumscores are obtained by calculating the mean score on the items of each subscale.

SAIL Scale (Bangla Version)



ব্যাক্তিগত ও আর্থসামাজিক অবস্থা সম্পর্কিত সাধারণ প্রশ্ন

তারিখ:

অংশগ্রহণকারীর নাম:

ঠিকানা:

কোড:

যোগাযোগের নম্বর:

১. অংশগ্রহণকারীর বয়স:..... (বছরে)

২. লিঙ্গ

১. পুরুষ
২. নারী
৩. ট্রান্সজেন্ডার

৩. বৈবাহিক অবস্থা:

১. বিবাহিত
২. অবিবাহিত
৩. আলাদা থাকেন
৪. বিধবা
৫. তালাকপ্রাপ্ত

৪. পরিবারের ধরণ:

১.একক পরিবার
২.যৌথ পরিবার
৩.বর্ধিত পরিবার

৫. পরিবারের সদস্য সংখ্যা:

৬. বাসস্থানের ধরন:

১. গ্রামীণ
২. শহুরে

৭. শিক্ষাগত যোগ্যতা:

১. প্রাথমিক শিক্ষা
২. মাধ্যমিক শিক্ষা
৩. উচ্চমাধ্যমিক
৪. স্নাতক
৫. স্নাতকোত্তর

৮. বর্তমান পেশা:

১.ছাত্র/ছাত্রী
২. সরকারি চাকরিজীবী
৩. বেসরকারি চাকরিজীবী
৪. ব্যবসায়ী
৫. কৃষক
৬. গৃহিণী
৭. দিনমজুর
৮. বেকার
৯. অন্যান্য:

৯. স্ট্রোকের ধরণ:

১. হেমোরেজিক স্ট্রোক
২. ইস্কেমিক স্ট্রোক

১০. পক্ষাঘাতের ধরন:

১. ডান পাশে পক্ষাঘাত
২. বাম পাশে পক্ষাঘাত

১১.আপনি কি কারো উপর নির্ভরশীল

১.সম্পূর্ণ নির্ভরশীলতা
২.অত্যধিক/ তীব্র নির্ভরশীলতা
৩.মাঝারি/ মধ্যম নির্ভরশীলতা
৪.হালকা/ স্বল্পমাত্রার নির্ভরশীলতা
৫.স্বনির্ভর / স্বাধীন

১২. দুর্ঘটনার তারিখ:

১৩. ধর্ম:

১. মুসলিম
২. হিন্দু
৩. বৌদ্ধ
৪. খ্রিস্টান
৫. অন্যান্য (.....)

১৪. আপনি কতদিন ধরে সিআরপি থেকে থেরাপি নিচ্ছেন/নিয়েছেন?..... (দিন/মাস)

১৫. ব্যাথা আছে?..... ১.হ্যা ২.না

Spiritual Attitude and Involvement List (SAIL)

- অনুগ্রহ করে আপনার জন্য সবচেয়ে সঠিক যে উত্তরটি সেটিতে গোল দিন
- এখানে কোনো সঠিক বা ভুল উত্তর নেই
- আপনার প্রথম প্রতিক্রিয়াটি/চিন্তাটি হয়তো ঠিক,আপনার উত্তর সম্পর্কে খুব দীর্ঘ চিন্তা করবেন না।

আমরা বুঝতে পেরেছি যে কিছু প্রশ্নের উত্তর দেওয়া আপনার পক্ষে কঠিন হতে পারে, যেহেতু এটি সম্পর্কে আগে কখনোও ভাবেননি। তবুও আপনার প্রতিটি প্রশ্নের উত্তর দেওয়া অত্যন্ত গুরুত্বপূর্ন।

নিচের লেখাগুলো আপনার ক্ষেত্রে কতটা প্রযোজ্য? (শুধু এখন না, বেশিরভাগ সময়ের জন্য)

	একদমই না	খুবই কম	কিছুটা	মাঝেমধ্যে	প্রায় সব-সময়	সব-সময়
১।আমি বিশ্বাসের সাথে সামনে এগিয়ে যাই।	১	২	৩	৪	৫	৬
২। অন্যের জন্য কাজ করতে পারাটা আমার কাছে গুরুত্বপূর্ণ।	১	২	৩	৪	৫	৬
৩। খারাপ সময় গুলোতে আমি মন থেকে শান্ত থাকি।	১	২	৩	৪	৫	৬
৪। আমি আমার অবস্থা সম্পর্কে অবগত।	১	২	৩	৪	৫	৬
৫। প্রাকৃতিক সৌন্দর্য্য আমাকে মোহিত করে।	১	২	৩	৪	৫	৬
৬। আমি মেনে নিয়েছি যে, আমার জীবনের সকল কিছুর নিয়ন্ত্রন আমার হাতে নেই।	১	২	৩	৪	৫	৬
৭। অন্যের দুঃখ-দুর্দশা আমাকে ব্যাথিত করে।	১	২	৩	৪	৫	৬
৮। আমি মেনে নিয়েছি যে, আমি সব কিছুকে প্রভাবিত করতে পারবো না।	১	২	৩	৪	৫	৬
৯।সামনে যাই আসুক না কেন আমি জীবনের সাথে মানিয়ে চলবো।	১	২	৩	৪	৫	৬

	একদমই না	খুবই কম	কিছুটা	মাঝেমধ্যে	প্রায় সব সময়	সব সময়
১০। সৃষ্টিকর্তা বা সর্বশক্তিমান যিনি আছেন তিনি আমাকে সঠিক পথ প্রদর্শন করেন।	১	২	৩	৪	৫	৬
১১।আমি সার্বজনীনভাবেই বিশ্বাস করি যে, প্রত্যেকের জীবনেই কোনো না কোনো কঠিন সময় থাকে।	১	২	৩	৪	৫	৬
১২।আমি এমন কিছুরই অভিজ্ঞতা অর্জনের চেষ্টা করি যা আমার কাছে গুরুত্বপূর্ণ।	১	২	৩	৪	৫	৬
১৩।জীবন যেমনই হোক না কেনো, আমি মানিয়ে চলার চেষ্টা করি।	১	২	৩	৪	৫	৬
১৪।যখনই আমি প্রকৃতির কাছে যাই, তখনই আমি প্রকৃতির সাথে এক অবিচ্ছিন্ন সংযোগ অনুভব করি।	১	২	৩	৪	৫	৬
১৫।আমি বিশ্বাস করি যে, জীবন অনিবার্যভাবে বেদনা নিয়ে আসে।	১	২	৩	৪	৫	৬
১৬।আমি সমাজের জন্য অর্থপূর্ণ কিছু করার চেষ্টা করি।	১	২	৩	৪	৫	৬
১৭।আমার জীবনের লক্ষ্য ও উদ্দেশ্য রয়েছে।	১	২	৩	৪	৫	৬
১৮।আমি মানুষের জীবনেও মূল্যবান হতে চাই।	১	২	৩	৪	৫	৬

	কখনোই না	হঠাৎ	কখনো কখনো	নিয়মিত	প্রায়	প্রায় সব সময়
১৯। আমার কঠিন বাস্তবতার সম্মুখীন হওয়ার অভিজ্ঞতা আছে।	১	২	৩	৪	৫	৬
২০।আমার এমন অভিজ্ঞতা হয়েছে যেটা আমাকে মহান সৃষ্টিকর্তার আরও কাছাকাছি নিয়ে গিয়েছে।	১	২	৩	৪	৫	৬
২১। আমার এমন অভিজ্ঞতা হয়েছে যখন মনে হয়েছে সকল কিছুই কোনো বড় কিছুর অংশ।	১	২	৩	৪	৫	৬
২২।আমি অন্যদের সাথে আধ্যাত্বিক বিষয় নিয়ে কথা বলি। (যেমনঃ জীবন, মৃর্ত্যু ও ধর্মের কথা।)	১	২	৩	৪	৫	৬
২৩।আমি এমন অভিজ্ঞতার সম্মুখীন হয়েছিলাম যেখানে সকল কিছুই যথাযথ মনে হয়েছিলো	১	২	৩	৪	৫	৬
২৪।আমি ধ্যান, প্রার্থনা অথবা এমন কিছু করি যা আমাকে মানসিক প্রশান্তি দেয়।	১	২	৩	৪	৫	৬
২৫।আমি এমন অভিজ্ঞতার সম্মুখীণ হয়েছি যা আমাকে অতীতের চেয়ে আরো শক্ত মানুষে রুপান্তর করেছে।	১	২	৩	৪	৫	৬
২৬।আমি ধার্মিক এবং আধ্যাত্বিক বৈঠক ও কর্মশালাতে যোগদান করি।	১	২	৩	৪	৫	৬

Appendix E: Supervision Contact Schedule

Bangladesh Health Professions Institute
Department of Occupational Therapy
4th Year B. Sc in Occupational Therapy
OT 401 Research Project

Thesis Supervisor- Student Contact; face to face or electronic and guidance record

Title of thesis: Level of Spiritual Attitude and Involvement among Stroke Survivors: A Quantitative Study

Name of student: Abubakar Siddique

Name and designation of thesis supervisor: Md. Saddam Hossain
Assistant Professor
Department of Occupational Therapy, Bangladesh Health Professions Institute

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	25.5.25	BHPI Waiting Room	Title, Scale, aim, objective	1 hours	Need to know about clear idea concept	Ab. Siddique	
2	27.5.25	BHPI Waiting Room	Proposal presentation guideline	1 hours	Need to how to design presentation	Ab. Siddique	
3	31.5.25	BHPI Waiting Room	Proposal presentation feedback	1 hours	Got clear concept	Ab. Siddique	

4	4.6.25	BHPI Waiting Room	Discussion about sample size, data collection	30 minutes	Effective discussion	Ab. Siddique	
5	7.6.25	BHPI Library	Discussion about socio-demographic questionnaire	2 hours	Effective discussion	Ab. Siddique	
6	9.6.25	BHPI Library	Feedback on socio-demographic questionnaire	2 hours	Effective discussion	Ab. Siddique	
7	11.6.25	BHPI Waiting Room	Feedback on bangla translated questionnaire	2 hours	Effective discussion	Ab. Siddique	
8	14.6.25	BHPI Waiting Room	Guideline on literature review	30 minutes	Effective discussion	Ab. Siddique	
9	21.6.25	BHPI Waiting Room	Feedback on literature review	2 hours	Got a clear idea	Ab. Siddique	
10	6.8.25	BHPI Waiting Room	Guideline on data collection	2 hours	Got a clear concept	Ab. Siddique	
11	13.8.25	BHPI Waiting Room	Discussion about data collection status	2 hours	Effective discussion	Ab. Siddique	
12	20.8.25	BHPI Classroom	Discussion about data entry and data analysis	3 hours	Got a clear idea	Ab. Siddique	
13	1.9.25	BHPI Class Room	Data entry variables set guidelines	3 hours	Got a clear concept	Ab. Siddique	
14	10.11.25	BHPI Class room	Data analysis guideline on spss	3 hours	Effective learning	Ab. Siddique	

15	11.11.25	BHPI classroom	Descriptive analysis feedback	4 hours	Got a clear concept	Ab. Siddique	
16	12.11.25	BHPI classroom	Feedback on descriptive analysis result writing	4 hours	Got a clear concept	Ab. Siddique	
17	13.11.25	BHPI classroom	Discussion inferential analysis	4 hours	Effective discussion	Ab. Siddique	
18	16.11.25	BHPI classroom	Discussion and feedback overall result writing	3 hours	Got a clear concept	Ab. Siddique	
19	23.11.25	BHPI office	Feedback on 1st draft	3hours	Got a clear concept	Ab. Siddique	
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Note:

1. Appointment number will cover at least a total of 40 hours; applicable only for face to face contact with the supervisors.
2. Students will require submitting this completed record during submission your final thesis.