Impact of Hope and Coping on Psychosocial Adjustment after Spinal Cord Injury in the Selected Rehabilitation Centre of Bangladesh

By

Rupanti Majumder Rupa

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This thesis is submitted in total fulfilment of the requirements for the subject RESEARCH 2 & 3 and partial fulfilment of the requirements for the degree of

Bachelor of Science in Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Faculty of Medicine

University of Dhaka

Thesis completed by

Rupanti Majumder Rupa
4th year, B.Sc. in Occupational Therapy
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

………………………………
Signature

Supervisor's Name, Designation, and Signature

Md. Saddam Hossain
Lecturer
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

………………………………
Signature

Head of the Department's Name, Designation, and Signature

Sk. Moniruzzaman
Associate Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

………………………………
Signature

Board of Examiners

Statement of Authorship

This is an affirmation that I, Rupanti Majumder Rupa, with Roll No. 21, have completed the thesis project titled “Impact of Hope and Coping on Psychosocial Adjustment after SCI in The Selected Rehabilitation Centre of Bangladesh” in order to fulfil the requirements for earning a B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute, Savar, Dhaka, Bangladesh. There is no prior submission of this study for the award of any other degree or certificate.

I certify that nothing in this thesis has been published elsewhere or is being utilized to satisfy the criteria of any other academic program, with the exception of the instances where it is specifically recognized in the text. This work does not contain any content that has been taken from a thesis given by me or anybody else for any academic reason.

I further declare that this study has been conducted with due diligence and that ethical considerations have been protected. Any future dissemination of the research findings will include proper acknowledgement of its origins as an undergraduate thesis. I acknowledge that my research supervisor has a strong interest in ensuring the responsible dissemination of the project's findings.

Rupanti Majumder Rupa
DU Roll: 404
4th year, B.Sc. in Occupational Therapy
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Centre for the Rehabilitation of the Paralysed (CRP)
Chapain, Savar, Dhaka: 1343

……………………………
Signature

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Dedication

I dedicate my thesis journey to the holy energies that guide me, and I am deeply grateful to My Lord Krishna, the manifestation of cosmic consciousness, for his wisdom and strength. I express profound gratitude to my highly respected parents and elder brother, who are the foundation of my being. I dedicate this work to my parents and elder brother, whose steadfast support and trust on me has consistently served as a source of inspiration.

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List of Abbreviation

ADL	Activity of Daily living
CI	Confidence Interval
CRP	Centre for the Rehabilitation of Paralysis
IRB	International Review Board
OT	Occupational Therapy
OTs	Occupational Therapists
PAIS-SR	Psychosocial Adjustment to Illness Scale-Self Report
PTG	Post Traumatic Growth
SCI	Spinal Cord Injury
SD	Standard Deviation
SPSS	Statistical Package of Social Science
THS	Total Hope Score
TP	Paraplegia
TT	Tetraplegia
WHO	World Health Organization

Abstract

Background: Individuals with physical impairment who are hopeful, live more positive lives than those who experience hopelessness. One the other side different people use different coping strategies to handle their stressful situation. Hope and coping strategies are two crucial elements that have been identified as important contributors to psychosocial adjustment in the context of Spinal Cord Injury (SCI) which is widely acknowledged globally. This study helps to provide some light of information about these factors in a different context.

Aim: To find out the impact of hope and coping on psychosocial adjustment process after SCI in the rehabilitation centre of Bangladesh.

Methods: The study followed a cross sectional quantitative design by conducting face to face survey among 109 participants both male and female who were receiving rehabilitation service from CRP inpatient unit, Savar through purposive sampling. Standardized questionnaire Adult Hope Scale, Brief Cope and Psychosocial Adjustment to Illness Scale - Self Report used to know the level of hope, coping, and psychosocial adjustment with their disability and the correlation between these factors. Descriptive analysis and analytical cross-sectional analysis used by SPSS 20 to analyze the data and Spearman's Rank correlation and Kruskal Wallis tests was used to employed in the study.

Results: 96 Male and 13 Female with mean age 33.76 ±13.24 responded the survey. In these 37.6% were tetraplegia and 62.4% were paraplegia. The study found a low level of hope among 68.8% of participants, with 2.8% were high level. And the total hope level represented less hope (Mean ±SD = 33.21±12.958) in these participants. Furthermore, the participants had moderately low levels of problem focused coping and emotion focused coping (Mean ±SD = 52.6950 ±15.28252 and 52.7332 ±9.09739). On the other hand, relatively less avoidant coping (43.7500 ±10.70774). The psychosocial adjustment of the SCI patient had moderately low level of adjustment (1.5361 ±.65805). And there was a negative correlation between hope (r= -.447**), problem focused coping (r= -.397**), emotion focused coping (r= -.244*) with psychosocial adjustment. Also, there were positive correlation between problem focused coping (r= .647**), emotion focused coping (r=.384**) with Hope. Interestingly, there was no statistically significant correlation between avoidant coping with hope and psychosocial adjustment.

Conclusion: In conclusion, these findings underscore the need for interventions aimed at fostering hope, promoting effective coping mechanisms, and addressing psychosocial adjustment to enhance the overall well-being of SCI patients in Bangladesh. Occupational Therapists (OTs) can strategies the findings into individualized intervention.

Keywords: Spinal Cord Injury, Hope, Coping, Psychosocial Adjustment, Rehabilitation Centre.

CHAPTER I: INTRODUCTION

1.1 Background

SCI is a tragic occurrence that affects every aspect of life (Radomski & Latham, 2014). The damage to neural components inside the spinal canal caused by trauma (such as an automobile accident) or disease or degeneration (such as cancer) is named SCI (Radomski & Latham, 2014; *SCI*, n.d.). Depending on the severity of the injury, paraplegia causes damage to the trunk, legs, pelvic organs, and also impaired arm function (Radomski & Latham, 2014).

According to WHO, between 250 000 to 500 000 persons worldwide are affected by SCI each year. People with SCI which is a serious global health concern are most significantly impacted in low- and middle-income countries, particularly Bangladesh. In recent study, there were 28.6% women and 71.4% men. In this study, it was found that Dhaka Division consists of 48.3% of those who had been diagnosed with SCI. It is important to note that while 61% of the population lives in rural areas, a higher concentration of medical practitioners is found in cities, such as the capital city of Dhaka (Uddin et al., 2023).

After a SCI, the months spent in the hospital are the most challenging for patients as they learn to live with the possibility of a lifetime of disability. OTs help patients to achieve their maximum level of functional, physical, and psychological independence (Grundy & Swain, 2002).

SCI is a devastating occurrence on an emotional level. Paralysis, numerous medical issues, and being dependent on others for everyday tasks are very common in the early days following an injury as well as during acute rehabilitation. Numerous emotions, including those of worry, loss, hope, sadness, depression, stress and helplessness, may be felt by patients (Radomski & Latham, 2014). In a study found that 1467 out of 48,543 patients in the non-traumatic SCI group and 5375 out of 16,151 patients with traumatic SCI experienced psychiatric illnesses (Wan et al., 2020).

Some literature reviews provide evidence for the significance of appraisal and coping mechanisms in SCI adjustment (Chevalier et al., 2009). Hope levels are positively connected with life satisfaction and adjustment & adversely connects with life problems. also hope levels have positive impact on coping strategies, such as acceptance, and fighting spirit (Dorsett et al., 2017). Additionally, it was discovered that basic hope and coping mechanisms assist in predicting a range of individual growth features (Byra, 2015). This means, hope and coping strategies are two crucial elements that have been identified as important contributors to psychosocial adjustment in the context of SCI. But there is still an absence of research that precisely examines these elements in the particular setting of Bangladesh. This research aspires to contribute to the development of more tailored and effective rehabilitation interventions. Ultimately, the findings of this study have the potential to improve the psychosocial well-being and overall quality of life of individuals living with SCI in Bangladesh.

1.2 Justification of the study

The researcher is interested in doing this research because there is limited research about hope and coping on the psychosocial aspects of SCI in Bangladesh. From a study, founding a comprehensive understanding of how cognitive impairment, mental health, and physical function have an impact on the overall well-being of a person with SCI (Sargent et al., 2023). By doing this research we can identify how hope and coping strategies can influence psychosocial adjustment. By knowing this rehabilitation center can upgrade their therapy programs to support patients.

Psychosocial adjustment is crucial for a person's mental health and overall well-being after a SCI. Poor psychosocial adjustment may contribute to depression, anxiety, a decrease in quality of life, and ruined social relationships (Post & Leeuwen, 2012). Therapists who work with SCI patients can benefit from understanding how hope and coping mechanisms contribute to psychosocial adjustment. If the study explores the role of hope and coping in influencing psychosocial adjustment, it creates alternatives for interventions. To improve SCI patients' overall adjustment, healthcare providers and rehabilitation centers may develop therapies that boost hope and coping strategies.

As OTs, we have a vast role in mental health and psychosocial aspects because these affect a person’s ADL. With this research, we can upgrade our intervention strategies according to the patient’s mental health needs. Indeed, OT is a holistic approach that goes beyond just treating physical impairments which aims to enable people with injuries to participate in meaningful activities and attain independence in their day-to-day lives.

The results of this study can be used as a basis in future studies for investigations with similar or different context and populations. Patients will also be benefited as they could know about the recent evidence of these psychosocial aspects.

1.3 Operational Definition

1.3.1 SCI

“SCI is a serious medical condition, which often results in severe morbidity and permanent disability. It occurs when the axons of nerves running through the spinal cord are damaged, leading to loss of motor and sensory function below the level of injury. Injury is usually the result of major trauma, and primary injury is often irreversible” (Grundy & Swain, 2002).

1.3.2 Hope

“Hope can be defined as a positive motivational state that is based on an interactively derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals)” (Snyder et al., 1991).

1.3.3 Cope

“Coping is defined as the thoughts and behaviors mobilized to manage internal and external stressful situations. It is a term used distinctively for conscious and voluntary mobilization of acts, different from 'defense mechanisms' that are subconscious or unconscious adaptive responses, both of which aim to reduce or tolerate stress” (Folkman & Moskowitz, 2004).

1.3.4 Psychosocial Adaptation/ Adjustment

“Psychosocial adaptation is defined as the process in which a person with a disability moves from a state of disablement to a state of enablement and is characterized by the transformation from negative to positive well-being. The final stage of psychosocial adaptation, known as adjustment, represents maximum congruence” (Chan et al., 2013).

1.4 Aim of the study

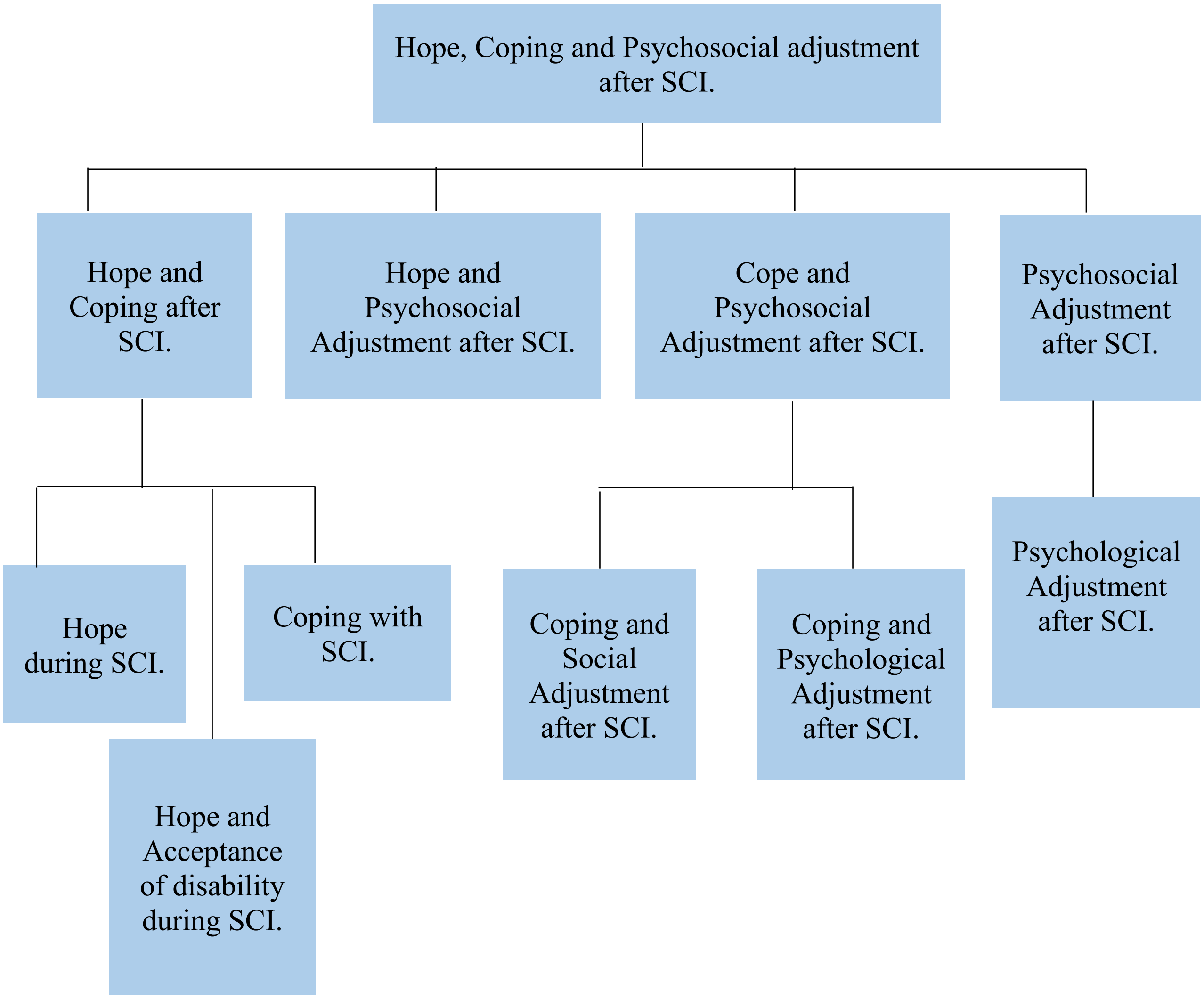
The purpose was to find out the impact of hope and coping on psychosocial adjustment process after SCI in the rehabilitation centre of Bangladesh.

CHAPTER II: LITERATURE REVIEW

This section covers the review of present and existing literature regarding relationship of hope, coping and psychosocial adjustment after SCI in different contexts. In terms of psychosocial adjustment, this chapter has the information from existing literature about psychological, social, and emotional adjustment. A brief discussion highlighted in the literature review.

Figure 2.1

Overview of literature review findings



2.1 Hope, Coping and Psychosocial Adjustment after SCI

A longitudinal study explores the role of hope in coping and psychosocial adjustment in 47 participants with newly acquired traumatic SCI which was conducted in two rehabilitation units in Queensland, Australia and Christchurch, New Zealand. According to that study, hope levels and coping strategies were consistent over time and positively correlated with life satisfaction and self-reported adjustment and positive coping styles, and negatively correlated with life problems and negative coping strategies. On the other hand higher level of hope represent better psychosocial adjustment than the lower hope (Dorsett et al., 2017). In another study which is a cross-sectional survey was conducted on 54 newly injured individuals, Results showed that hope and primary appraisals of threat were significantly correlated with the coping strategy of fighting spirit. Appraisals showed the strongest association with adjustment, accounting for 12% of anxiety and 34% of depression variance (Kennedy et al., 2009).

2.1.1 Hope and Coping after SCI

SCI is challenged by the strength of clients' hope because of physical, social, and environmental challenges. A 10-year longitudinal study of 46 people with SCI revealed that 73% of participants identified hope as an essential factor in coping. Three main foci of hope emerged: hope for complete recovery, hope for a cure, and hope for a satisfying quality of life. Hope is a strong theme in the overall adjustment and coping process. According to the results, 73% of the participants said that hope was a crucial component in their ability to cope with their injuries (Dorsett, 2010). Another study involving 169 individuals with SCI found that posttraumatic growth (PTG) means positive changes is primarily manifested in increased appreciation of life (AL). Coping strategies such as religion, problem-focused thinking, humor, alcohol/drug use ideation, and basic hope account for 60% of PTG variance. The study suggests that specific coping strategies and basic hope play a significant role in fostering positive changes (Byra, 2016).

2.1.1.1 Hope during SCI. A study explores the meaning of hope among individuals with SCI. It uses ethnographic methods and Ernst Bloch's theory of hope. Hope helps them cope with changes and establish goals. The findings may help to understand the limits and potentialities of hope in daily life (Zuchetto et al., 2020). Another research used a longitudinal, descriptive-explorative design and personal interviews to understand patients' experiences of hope and hope a year after an acute SCI. It demonstrates how hope experiences were significant to each participant, giving the struggle process strength and vitality since hope is essential to advancement and personal growth (Lohne & Severinsson, 2006). A study found that Participants experienced hope, with positive expectations for recovery and can be walk again. The process involved continuous ups and downs (Lohne & Severinsson, 2004). Another study explores patients' experiences of hope during their first year with SCI. Data was collected through personal interviews in Norway, revealing two main themes: 'The Vicious Circle' and 'Longing'. The study emphasizes the value of listening to people who are in suffering and aching to offer them with hope for the future (Lohne & Severinsson, 2005).

2.1.1.2. Hope and Acceptance of disability during SCI. A cross-sectional study in Poland investigated the correlations between basic hope, acceptance of disability, and posttraumatic growth in people with traumatic paraplegia. Data was collected from 281 individuals with paraplegia. Results showed a positive correlation between basic hope, acceptance of disability, and posttraumatic growth (Byra, 2019).

2.1.1.3 Coping with SCI. A study of 256 Swedish individuals with traumatically acquired spinal cord lesions found that coping strategies were crucial for successful adjustment to severe physical illness/disability. Even in situations where coping resources are scarce, the study shows that coping strategies and resources- in particular, engagement coping- are highly associated with adaptation to SCI, which has significant implications for rehabilitation (Elfström et al., 2005).

2.1.2 Hope and Psychosocial Adjustment after SCI

A study of 57 individuals with severe physical disabilities, results showed that goal-directed determination and ability to find ways to meet goals predicted lower psychosocial impairment post-injury. However, pathways were predictive of impairment and depression regardless of disability duration. Snyder's components of hope significantly impacted social capacity perceptions (Elliott et al., 1991). In another study, the Trait Hope Scale (THS) in individuals with SCI, finding that agency and pathways thinking positively affect hope-related constructs like self-efficacy, self-esteem, disability acceptance, and life satisfaction, warranting its use in rehabilitation research (Smedema et al., 2013). SCI can significantly impact a patient's physical and psychological well-being. Therapists often struggle to promote hope for recovery. This review explores the role of hope after injury, its benefits, and strategies to support it in physiotherapy practice which show that hope can reduce depression, improve coping, and increase life satisfaction (Lit & Kayes, 2014).

2.1.3 Cope and Psychosocial Adjustment after SCI

A cross-sectional survey of 95 individuals with SCI who received outpatient rehabilitation services in the mid southern US investigates the impact of SCI survivors' use of coping resources and strategies on their psychosocial adaptation which found that coping resources and strategies were significantly associated with psychosocial adaptation. The findings suggest that engagement coping positively influences psychosocial adaptation even when coping resources are mostly absent (Livneh & Martz, 2014). Another study aimed to understand the factors influencing coping in 243 adults with spinal cord injuries and the predictors of coping which found that less educated, less hardy, and recently injured participants were more likely to use escape-avoidance coping and less likely to use social support, problem-solving, and positive reappraisal coping behaviors. This research highlights the importance of understanding and implementing coping strategies to enhance the quality of life for individuals with spinal cord injuries (Barone & Waters, 2012). Coping and adaptation theory synthesizes data on psychological recovery from SCI. Factors like premorbid personality and influence explain patient coping (Bracken & Shepard, 1980).

2.1.3.1 Coping and Social Adjustment after SCI. A study analyzed coping strategies in individuals with SCI and found that planful problem-solving was the most common coping strategy. Other coping strategies, except escape-avoidance, positively correlated with social adjustment. Positive reappraisal, accepting responsibility, and distancing contributed to 33.5% of social adjustment (Song & Nam, 2010).

2.1.3.2 Coping and psychological Adjustment after SCI. An article reviews literature on the psychological adjustment to SCI and highlights the use of a Stress Appraisal and Coping model (SAC) for rehabilitation. Results show that psychological adjustment is influenced by coping, appraisal, and psychosocial resources (Galvin & Godfrey, 2001). Another study examined the impact of coping strategies and psychological adjustment on Spinal Cord Injured (SCI) patients. Results showed that positive and problem-focused coping strategies were positively correlated with psychological adjustment, while active avoidance and religion & denial coping strategies were negatively correlated (Noor et al., 2016). A paper reviews the literature on psychological adjustment to SCI highlights the importance of appraisals and coping strategies in adjustment, addresses methodological issues, and suggests longitudinal research to prevent maladaptive adjustment issues and identify unique coping strategies for the spinal cord injured population (Chevalier et al., 2009).

2.1.4 Psychosocial Adjustment after SCI

A study investigates the impact of disability-related medical and psychological variables on psychosocial adaptation to SCI or disorder (SCI/D). The study found that negative emotional responses, disengagement-type coping, and the severity and impact of disability were related to lower levels of adaptation (Martz et al., 2005). Another study examined the psychosocial adjustment patterns of 102 individuals with SCI in Taiwan. The study found that vocational, sexual, and leisure areas of adjustment were the most problematic for individuals with SCI in Taiwan. Counseling and rehabilitation intervention efforts should focus on these identified needs (Wu & Chan, 2007).

2.1.4.1 Psychological Adjustment after SCI. A study used data from the Swiss SCI inception cohort study, focusing on individuals 16 years old or older with recently diagnosed SCI who completed clinical rehabilitation. Four profiles of psychological adaptation outcomes were identified, with higher optimism, purpose in life, and self-efficacy associated with a Minimal impact profile. The results suggest that rehabilitation that strengthens psychological resources may contribute to better adaptation outcomes (Aparicio et al., 2020).

2.2 Key Gaps of the Study

- Although SCI is very common in Bangladesh but there is limited information about the clinical and demographic characteristics of SCI patients.
- There is no national database or registration for people with SCI in Bangladesh, and most of the previous research on the condition was either out-of-date or focused on a single centre.
- No study was accessible for researcher on hope, coping and psychosocial aspects of person with SCI in Bangladesh.
- The sample size was limited by the overall population size and while the numbers are relatively small, they do represent a sizable proportion of the people who sustain SCI.
- Also limited study was found that focused the three aspects (hope, coping and psychosocial adjustment) together.
- The cross-sectional method limited the study’s scope to investigate the influence of time post-injury on coping strategies. Previous research using longitudinal design has found this to be an influential factor in choice of coping strategy. Longitudinal research would be more adequate to explain the relationship between these factors.
- Different studies used different coping strategies scale which cannot help to determine the exact coping level.

CHAPTER III: METHODS

3.1 Study Questions, Aim and Objectives

3.1.1 Research Questions

What is the impact of hope and coping strategies on psychosocial adjustment among individuals undergoing rehabilitation for SCI a rehabilitation center in Bangladesh?

3.1.2 Aim

The purpose was to find out the impact of hope and coping on psychosocial adjustment process after SCI in the rehabilitation centre of Bangladesh.

3.1.3 Objectives

- To identify the level of hope among people with SCI.
- To identify the level of coping strategies such as Problem Focused Coping, Emotion Focused Coping and Avoidant Coping among person with SCI.
- To identify the level of psychosocial adjustment after SCI.
- To identify the correlation between hope, coping and psychosocial adjustment.
- To see the sociodemographic information among person with SCI.

3.2 Study Design

3.2.1 Study Method

This study used Quantitative Study Method. This method looked at real-life situations and described them using numbers and simple languages. Then, it used math to analyze the collected data. By using this method numerical values acquired through observations to described and explained the processes that the observations shaded light on (Taherdoost, 2022).

3.2.2 Study Approach

The Cross-Sectional Study Approach was used in this study to find out the impact of hope and coping on psychosocial adjustment process following a SCI.

In a cross-sectional study, the researcher simultaneously assessed the participants' exposures and outcomes. After choosing the study subjects, the researcher conducts the study in order to evaluate the exposure and results. The association between these variables can be examined by the researcher (Setia, 2016). So here, the exposure was hope and coping strategies among SCI patient who were admitted in CRP inpatient unit and the outcome was their psychosocial adjustment. This approach was chosen because in the context of studying hope, coping, and psychosocial adjustment after SCI, a cross-sectional design involved assessing these factors in individuals at a particular moment. This approach helped researchers to capture a snapshot of how these variables such as- hope and coping are interconnected with psychosocial adjustment at a specific point of time when they are staying in a rehabilitation center. This design allowed researchers to examine relationship between exposures and outcomes. So that, Cross sectional study was absolutely perfect for this study.

3.3 Study Setting and Period

3.3.1 Study Setting

The survey was conducted at Centre for the Rehabilitation of the Paralysed (CRP), Savar, Dhaka.

3.3.2 Study Period

The study period was between May 2023 to February 2024 and the data collection period was between 1 December 2023 to 31 December 2023.

3.4 Study Participants

3.4.1 Study Population

The population of the study was SCI patient who admitted into CRP and taking rehabilitation services from CRP.

3.4.2 Sampling Techniques

To conduct the study, researcher set some inclusion and exclusion criteria to meet the exact population for the study. Through the purposeful sampling researcher intentionally selected participants based on their capacity to clarify a certain theme, concept, or phenomenon (Robinson, 2014). This sampling depended on researcher's own judgement to ensure a better match between the sample and the study's aims and objectives (Campbell et al., 2020; Sharma, 2017) . Therefore, purposive sampling was the best way to select the participants of this study.

3.4.3 Inclusion Criteria

- The participants were both male and female who had confirm diagnosis of SCI.
- The age limit was from 16 years to older.
- Participants who took rehabilitation from CRP.
- Participants who were willing to take part in the study.

3.4.4 Exclusion Criteria

- Participants who had a significant brain injury and diagnosed cognitive impairment.
- Participants who were not medically stable gave their own information.
- Participants who received rehabilitation service from only the out-patient unit of CRP.

3.4.5 Sample Size

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

Here, Z= the standard normal deviate usually set at 1.96

p= 0.5; As the prevalence of SCI is yield, so the quantity of person with SCI is considered as 50%.

q= (1-p) = 0.5; proportion in the target population not having the characteristics.

Confidence Interval= 95%; d= 5%; Level of precision

Sample size, n = $\dfrac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2}$

$= 384.16 \sim 385$

Adding 10% non-response data to the actual sample size = 422.57 ~ 423

According to the equation the sample size would be 423 participants. The researcher could collect 109 from the participants of the study.

3.5 Ethical Consideration

3.5.1 Ethical Approval from IRB

The ethical issues were sought from the Institutional Review Board (IRB) with the explanation of aim, objective and purpose of the study through the Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI). The IRB number CRP-BHPI/IRB/10/2023/767. Permission from Head of the OT department, BHPI and OT SCI department also taken before taking participant's information (World Medical Association, 2022).

3.5.2 Informed Consent

The researcher explained the aim, objective, and purpose of the study to the participants through an information sheet. The participants, who felt willingly interested to participate in the study, their data was collected. Researcher took signed consent in a consent form from the participants during the face-to-face survey.

3.5.3 Right to Refusal to Participate or Withdraw

Participants had complete freedom to choose whether to participate or not in this study. The withdrawal form was attached with the consent form, so that the participants could withdraw their participation from the study within two weeks from the time of collecting data.

3.5.4 Confidentiality

The information provided by the participants was 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 will remain confidential for future uses, such as report writing, publication, conference or any other written materials and verbal discussion.

3.5.5 Unequal or Power Relationship

The researcher did not have any unequal relationship or any power relationship that may influence their decision in participation. The researcher collected data following a standardized questionnaire so there was no scope to bias.

3.5.6 Risk and Beneficence

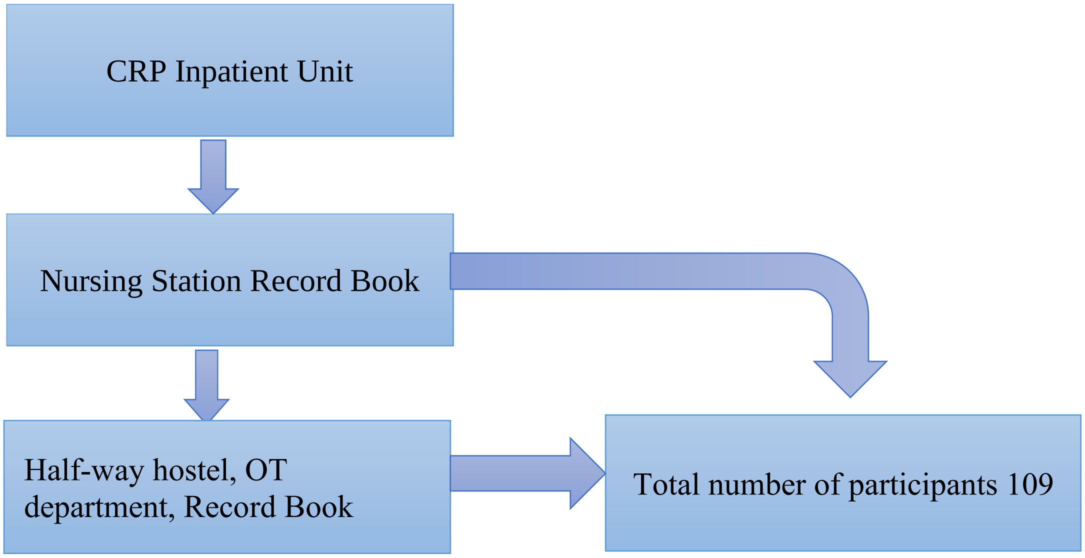
The participation in this study did not involve any kind of risk and beneficence in participating in this study. However, the researcher prioritized their safety and wellbeing. There was no financial or any other benefit involved in this study.

3.6 Data Collection Process

3.6.1 Participants Recruitment Process

Figure.3.6.1

Participants Recruitment Process



The researcher went to CRP inpatient unit and collected the record book from the nursing station and halfway hostel OT Department, CRP to collect information of the participants. The researcher collected the name, type of injury, neurological level, ASIA score, age of injury, date of injury, date of admission and contact numbers of the participants. Following the inclusion and exclusion criteria, potential participants were listed to collect data.

3.6.2 Data Collection Method

The data was collected by face-to-face survey. After taking verbal consent from the participants, data was taken by initially sociodemographic questionnaire and also using the standardized tools (The Psychosocial Adjustment to Illness Scale (PAIS), Brief Cope, Adult Hope Scale). The questionnaire was close to ending. Before that the researcher talked about the purpose and consent for the study. The researcher also gathered the socio-demographic data (Age, gender, education level, etc.) The researcher was physically present to ask the survey questions and to help the respondent if they had faced any kind of problem to understand the question with their responses in a face-to-face survey. Face-to-face survey maintained the quality of data (Doyle, 2005).

3.6.3 Data Collection Instrument

The Psychosocial Adjustment to Illness Scale (PAIS)

PAIS and its self-report variant, the PAIS-SR, is a broad, semi-structured clinical interview which consists of 46 items and There are 7 primary domains of adjustment in this scale. Such as- Health Care Orientation, Vocational Environment, Domestic Environment, Sexual Relationships, Extended Family Relationships, Social Environment and Psychological Distress. A 4-point (0–3) adjustment rating scale is used for each PAIS/PAIS-SR item, with higher scores indicating poorer adjustment status (Derogatis, 1986); (*Clinical Psychometric Research | PAIS/PAIS-SR - Derogatis Psychological Testing*, n.d.). In this study The PAIS-SR was used to measure how well medical patients are adjusting to their disease on a psychological and social level (*Clinical Psychometric Research | PAIS/PAIS-SR - Derogatis Psychological Testing*, n.d.).

Brief Cope

The Brief Cope was developed by Charles S. Carver which contains 28 items on 14 factors (Solberg et al., 2021). Four items, measure conceptually distinct aspects of problem-focused coping (active coping, planning, suppression of competing activities, restraint coping, and seeking instrumental social support); Five items, measure elements of what might be viewed as emotional-focused coping (seeking emotional social support, positive reinterpretation, acceptance, denial, and turning to religion); Four items, measure coping responses that specifically tries to evaluate people's attempts at active coping as well as any coping behaviors that can hinder or interfere with active coping (Carver et al., 1989). Higher subscale scores represent more frequent usage of that coping technique (Carver, 1997). In this study The Brief Cope was used to evaluate the various ways in which individuals respond to stress (Carver et al., 1989).

Adult Hope Scale

Adult Hope scale is developed by Rick Snyder which consists of 12 items. This scale is divided into two subscales: (1) Agency (i.e., goal-directed energy) and (2) Pathways (i.e., planning to attain objectives). The Agency subscale have 4 items and the Pathways subscale have 4 items. Two items of this scale indicate the present, one represents the past. Researcher used this scale to measure a person's level of hope (Snyder et al., 1991).

3.6.4 Field Test

The field test was conducted with two people with SCI from halfway hostel. Throughout this field test, some changes were fixed later such as- ASIA score and Neurological level were added in sociodemographic information as well as fixed some Bengali sentences in the questionnaire by keeping the original meaning unchanged.

3.7 Data Management and Analysis

Data management, which refers to the systematic method of handling, organizing, and guaranteeing the quality and accessibility of data during the study period and its lifecycle, is an essential and integral component of quantitative cross-sectional research, as well as any other type of research. This typically includes various stages from data creation to disposal. Effectively managing data assets, preserving data integrity, conducting analyses, and providing quick, safe access to produced information are the objectives of research data management. In this instance, following careful data management planning, the procedure began with gathering data through face-to-face surveys using a well-crafted and structured data collection questionnaire. In order to further the cause, the data was now processed, cleansed, and loaded into Statistical Package for Social Science (SPSS) version 20. This required looking for, locating, and fixing any problems, duplicate entries, inconsistent data, etc. Following that, appropriate data storage on Google Cloud was made sure of, allowing the data to be conveniently accessible, safe, and structured when needed.

The most important aspect of data management at this point is to conduct data analysis in a way that advances the goals and objectives of the study. Researcher used descriptive statistics analysis to calculate means, standard deviations and frequency distributions for level of Hope, Cope and Psychosocial Adjustment. After the revision of the data set and checking the normality and to determine the relationship and examine correlation between Hope, Cope and Psychosocial Adjustment Spearman’s rank correlation coefficient was used for analysis. Once this crucial portion is finished, it is crucial to involve appropriate individuals in the data sharing process, such as supervisors in order to ensure data quality and researchers to guarantee data sharing while maintaining privacy and ethical compliance. And it is necessary to disseminate the findings and insights gained from the data analysis and that is why it was written and presented through tables and reports for the purpose of conveying information effectively. The data preservation and archiving stage of data management is now centered on storing the data in a secure and accessible manner because data has evolved into information and is important for future reference. After ten years, data that is no longer needed or relevant will be safely deleted or destroyed to safeguard privacy in accordance with established laws and regulations.

3.8 Quality Control and Quality Assurance

The study ensured the highest level of data quality and safety by strictly adhering to the five steps of data cycle management. 109 participants actively participated in this study. The surveys were conducted in a paper document format with areas set aside for answers, along with informed consent and withdrawal forms. Every response of the participants and data was maintained confidentiality. Every document was photocopied for further preservation in order to increase security. Both the data gathering procedure and the ensuing data input were carried out with fairness. All data was originally saved in the SPSS. Furthermore, copies of the data were safely kept in the personal laptop which was highly secured. There was a strong focus on making sure the data was used responsibly, and strict precautions were made to avoid any unwanted access. Throughout the investigation, the data were kept in their original condition; neither alteration nor exploitation took place. As they anticipate its significance for future research projects, the supervisor and the researcher both urge for comprehensive preservation. Realizing that the data will only be useful for a short time once the study period is over, the data utilized in this research will be properly disposed of after its assessment is over.

CHAPTER IV: RESULTS

4.1 Socio-Demographic Characteristics

This chapter represents the findings of the study. The chapter contains the study findings in tables and figures focusing on the socio demographic information, the level of hope, coping and psychosocial adjustment and the correlation between these variables.

Table 1

Socio-Demographic characteristics [Table 1 extends from page 23-24]

Variable		**Frequency (n=109)**	**Percentage (%)**
Sex	Male	96	88.1
	Female	13	11.9
Age	16-26 years	42	38.5
	27-37 years	30	27.5
	38-48 years	19	17.4
	49-59 years	12	11.0
	60-70 years	6	5.5
	Mean ±SD = 33.76 ±13.24 years, Minimum=16 years, Maximum=65 years		
Marital status	Married	71	65.1
	Unmarried	38	34.9
Residence Area	Rural	87	79.8
	Semi urban	5	4.6
	City	17	15.6
Educational Qualification	Illiterate	14	12.8
	Primary	41	37.6
	SSC	27	24.8
	HSC	15	13.8
	Graduation	9	8.3
	Post graduation	3	2.8
Occupational Status	Job	18	16.5
	Business	20	18.3
	Day labor	28	25.7
	Farmer	16	14.7

Variable		**Frequency (n=109)**	**Percentage (%)**
Occupational Status	Unemployed	3	2.8
	Housewife	5	4.6
	Student	19	17.4
Causes of injury	Road accident	29	26.6
	Fall from height	57	52.3
	Falling of heavy object on head or neck	15	13.8
	Tumor	8	7.3
Types of injury	Tetraplegia	41	37.6
	Paraplegia	68	62.4
ASIA Score	Complete A	72	66.1
	Incomplete B	19	17.4
	Incomplete C	14	12.8
	Incomplete D	4	3.7
Neurological Level	C1-C8	34	31.2
	T1-T12	47	43.1
	L1-L5	28	25.7
Pressure sore	Present	28	25.7
	Absent	81	74.3
Duration of injury	1-48 Month	108	99.1
	98-146 Month	1	.9
Duration of taking rehabilitation	0-15 Days	36	33.0
	16-30 Days	18	16.5
	31-60 Days	28	25.7
	61-90 Days	27	24.8

The study population (n=109) exhibited diverse sociodemographic characteristics. The majority of participants were male 88.1% (96) and smaller proportion females 11.9% (13). Age distribution ranged from 16 to 70 years, with the largest group falling within the 16-26 years category 38.5% (42), followed by 27-37 years 27.5% (30), 17.4% were 38-48 years category, 11% were 49-59 years category and 5.5% were 60-70 years category. Regarding marital status, a significant portion of participants were married 65.1% (71) compared to unmarried individuals 34.9% (38). Geographically, most participants resided in rural areas 79.8% (87), fewer were from semi-urban 4.6% (5) and urban areas 15.6% (17). Educational attainment varied, with primary education being the most common 37.6% (41), followed by SSC 24.8% (27) and HSC 13.8% (15). Occupationally, participants were engaged in a range of activities, including day labor 25.7% (28), business 18.3%, (20), and farming 14.7% (16). Notably, a small portion identified as unemployed 2.8% (3) or housewives 4.6% (5), while others were students 17.4% (19). The participants having SCI through fall from height which were the predominant cause, accounting for 52.3% (57), while only 7.3% (8) injuries resulting from diseases. Furthermore, 26.6% was for road accident and 13.8% for falling of heavy object on head or neck. In terms of injury types, paraplegia was more prevalent, affecting 62.4% (68) of participants, compared to tetraplegia, which affected 37.6% (41). Among the patients, 34 (31.2%) were classified with injuries in the cervical region, 47 (43.1%) in the thoracic, and 28 (25.7%) in the lumbar region. The ASIA score indicated that complete injury (Grade A) was the most common, observed in 66.1% (72) of cases, followed by incomplete injuries of various severities: Grade B 17.4% (19), Grade C 12.8% (14), and Grade D 3.7% (4). Pressure sores were present in 25.7% (28) of participants. Regarding the duration of injury, the majority 99.1% (108) reported experiencing injuries for a period ranging from 1 to 48 months, with only 1% reporting a longer duration of 98 to 146 months. In terms of rehabilitation, participants underwent varying durations, with a mean duration of 57.68 months (±51.675). Most of the participants were taking rehabilitation from 0-15 days 33% (36), followed by 16-30 days were 16.5% (18), 31-60 days were 25.7% (28) and 61-90 days were 24.8% (27). These findings provide a comprehensive overview of the sociodemographic aspects of spinal cord injuries within the study population.

4.2 Overview of Hope of the Participants

Table 2

Scores of Adult Hope Scale

	Variables	Frequency (n)	Percentage (%)
Agency	Low Agency	74	67.9
	High Agency	35	32.1
		Mean ±SD = 15.63 ±6.391	
Pathway	Low pathways	55	55
	High pathways	54	54
		Mean ±SD = 17.58 ±7.079	
Total Hope	8-39 (Less Hope)	75	68.8
	40-48 (Hopeful)	15	13.8
	49-56 (Moderate Hopeful)	16	14.7
	57-64 (Higher Hope)	3	2.8
		Mean ±SD = 33.21±12.958	

The Adult Hope Scale was utilized to assess the participants' levels of hope, comprising two components: Agency (goal-directed energy) and Pathway (planning to accomplish goals). From table 2 the high agency (32.1%) was less than low agency (67.9%) of the participants. That means among 109 participants most of the participants (74) have not enough goal directed energy. On the other hand, 54% of participants have the ability to make small steps towards goal (high pathway) whereas 55% of participants had low pathway. In the bottom, The Total Hope score, combining Agency and Pathway. Upon further analysis, the participants were categorized based on their Total Hope scores into four groups. In this study, the noticeable thing is a significant portion falling into the less Hope category. 68.8% of participants reported they have no hope which indicated that low level of hope. On the other hand, a little portion of participants, 2.8% reported high levels of hope. 14.7% of participants were moderate hope level and a smaller yet noteworthy proportion of participants, totaling 15 individuals or 13.8%, indicated feeling "Hopeful. That means, these findings suggest a predominant absence of hope among the study population, with a notable minority expressing varying degrees of hopefulness after SCI in rehabilitation centers.

4.3 Overview of the Participants Coping

Table 3

Scores of Brief Cope Scale

Variable		**Frequency (n)**	**Percentage (%)**
Problem focused coping	(26-50) Have been doing this a little bit	62	56.9
	(51-75) Have been doing a medium amount	38	34.9
	(76-100) Have been doing this a lot	9	8.3
	Mean ±SD = 52.6950 ±15.28252		
Emotion focused coping	(26-50) Have been doing this a little bit	49	45.0
	(51-75) Have been doing a medium amount	58	53.2
	(76-100) Have been doing this a lot	2	1.8
	Mean ±SD = 52.7332 ±9.09739		
Avoidant coping	(0-25) Haven't been doing this at all	3	2.8
	(26-50) Have been doing this a little bit	85	78.0
	(51-75) Have been doing a medium amount	21	19.3
	Mean ±SD = 43.7500 ±10.70774		
Total level of Coping	Mean ±SD = 56.17 ±9.049		

This table shows 3 types of Coping style. In analyzing coping strategies among participants using the Brief COPE scale, three distinct subscales emerged: Problem-Focused Coping, Emotion-Focused Coping, and Avoidant Coping. To determine the frequency distribution of coping behaviors, raw scores were converted to a scale of 0 to 100. Participants were then categorized based on their responses using a four-point Likert scale, ranging from "Haven't been doing this at all" to "Have been doing this a lot."

For Problem-Focused Coping, 56.9% (62) of participants reported engaging in this strategy a little bit, 34.9% (38) reported a medium amount, and 8.3% (9) reported doing this a lot, with a mean score of 52.6950 ±15.28252 which indicates low level of problem focused coping.

Emotion-Focused Coping was utilized by 45.0% (49) of participants a little bit, 53.2% (58) a medium amount, and 1.8% (2) a lot, with a mean score of 52.7332 ±9.09739 which also indicates low level of emotion focused coping.

Avoidant Coping was less common, with 2.8% (3) reporting not engaging in this strategy at all, 78.0% (85) a little bit, and 19.3% (21) a medium amount, yielding a mean score of 43.7500 ±10.70774 and the avoidant coping is less than other two coping strategies.

However, the overall coping level was determined low level of coping among SCI patients with the mean 56.17 ±9.049. That means the people with SCI faced challenges to coping with their situation.

4.4 Overview of the Participants Psychosocial Adjustment

Table 4

Scores of Psychosocial Adjustment to Illness Scale Section I

Section I. Health Care Orientation	Mean	SD
General Health Care Orientation	.83	1.085
Health Care - Present Disorder	.87	1.055
General attitude toward medicine & doctors	.79	.771
Attitude toward present treatment & doctor	.99	.948
Patient expectancies-disorder	1.52	1.111
Patient information-disorder	.85	1.153
Patient expectancies-treatment	.88	.988
Patient information-treatment	.90	1.027
Total = Mean ±SD	**.9553 ± .63408**	

This table 4 shows one of the domains from Psychosocial Adjustment to Illness Scale named Health Care Orientation. Overall, participants demonstrated a moderately high level of psychosocial adjustment to illness, with a mean score of 0.9553 ± 0.63408. This indicates that, participants exhibited positive adjustment behavior to Health Care Orientation. They displayed a relatively high level of general health care orientation (0.83 ±1.085) and a positive attitude toward present treatment and doctors (0.99±0.948). This suggests that participants felt confident and comfortable in their interactions with medical professionals and their current treatment plans. After that, other items of this sector show, Health Care - Present Disorder (.87 ± 1.055), Patient information-disorder (.85 ± 1.153), Patient expectancies-treatment (.88 ± .988), Patient information-treatment (.90 ± 1.027) which indicates relatively positive attitude. The most noticeable thing is in patient's expectancies to his disorder mean 1.52 with SD ±1.111 which indicates low levels of adjustment. One the other hand general attitude toward medicine & doctors was well adjusted (.79 ±.771).

Table 5

Scores of Psychosocial Adjustment to Illness Scale Section II

Section II. Vocational Environment	**Mean**	**SD**
Vocational Impairment	2.72	.579
Personal performance evaluation	2.85	.404
Time lost on the job	2.97	.287
Vocational investment	1.12	1.245
Vocational goals	2.09	1.127
Interpersonal conflicts	.78	1.133
Total = Mean ±SD	**2.0887 ± .41733**	

Table 5 shows, with a total mean score of 2.0887 ±0.41733, which is above the threshold of 1.5, it suggests that participants demonstrated lower psychosocial adjustment within the vocational environment. This means that, on average, participants faced challenges and difficulties in adapting to their illness within their work settings. Specifically, participants reported low levels of vocational impairment (2.72 ± 0.579) and personal performance evaluation (2.85 ± 0.404), indicating challenges in these areas. Additionally, participants reported a relatively low level of adjustment in time lost on the job (mean = 2.97, SD = 0.287), which suggests difficulties in maintaining regular work attendance. In terms of vocational investment and goals, participants demonstrated negative attitudes (1.12 ± 1.245. Similarly, participants reported low levels of vocational goals (2.09 ± 1.127), indicating that they maintained aspirations and objectives related to their work despite their health challenges. Regarding interpersonal conflicts within the vocational environment, participants reported a relatively low mean score (0.78 ± 1.133), suggesting minimal interpersonal challenges with colleagues or supervisors and it is high adjustment.

Table 6

Scores of Psychosocial Adjustment to Illness Scale Section III

Section III. Domestic Environment	**Mean**	**SD**
Quality of relations-principal cohabitant	.34	.819
Quality of relations-additional cohabitants	.28	.708
Domestic impairment	2.65	.843
Family adaptability	.65	.875
Family communication	.28	.705
Dependency posture	1.18	1.211
Physical disability	2.44	.700
Financial resources	2.31	.940
Total = Mean ±SD	**1.2672 ± .38357**	

In table 6, Participants demonstrated a moderately high level of psychosocial adjustment within the domestic environment, with a total mean score of 1.2672 ±0.38357. In terms of relationships within the household, participants reported high adjustment for the quality of relations with both the principal cohabitant (mean = 0.34, SD = 0.819) and additional cohabitants (mean = 0.28, SD = 0.708), suggesting positive and supportive interpersonal dynamics at home. Family adaptability and communication were also reported at low mean scores (mean = 0.65, SD = 0.875 and mean = 0.28, SD = 0.705, respectively), suggesting strong adaptability and effective communication within the family unit. Domestic impairment was reported at a low mean score (mean = 2.65, SD = 0.843), indicating minimal difficulties in managing household tasks and responsibilities due to their illness. Overall, participants reported low levels of physical disability (mean = 2.44, SD = 0.700) and adequate financial resources (mean = 2.31, SD = 0.940), contributing to their positive psychosocial adjustment within the domestic environment. Dependency posture was reported at a low mean score (mean = 1.18, SD = 1.211), indicating minimal reliance on others for assistance with daily activities.

Table 7

Scores of Psychosocial Adjustment to Illness Scale Section IV

Section IV. Sexual Relationships	**Mean**	**SD**
Quality of interpersonal sexual relationships	.35	.886
Sexual interest	1.23	1.324
Frequency of sexual activity	1.80	1.439
Sexual satisfaction	1.86	1.443
Sexual dysfunction	1.85	1.439
Interpersonal conflict-sexual	.35	.832
Total = Mean ±SD	**1.2401 ± .96610**	

In table 7, Participants demonstrated high psychosocial adjustment within their sexual relationships, as indicated by a total mean score of 1.2401 (±0.96610). This suggests positive adjustment despite illness-related challenges. The findings reveal low mean scores for the quality of interpersonal sexual relationships and interpersonal conflict, indicating positive and harmonious sexual dynamics. While some variability exists in sexual interest, frequency of sexual activity, sexual satisfaction, and sexual dysfunction, overall scores fall within the range indicating high adjustment in sexual relationships.

Table 8

Scores of Psychosocial Adjustment to Illness Scale Section V

Section V. Extended Family Relationship	**Mean**	**SD**
Communication	1.41	1.307
Interest in interacting	1.42	1.314
Dependency - Physical	1.72	1.292
Dependency - Social	2.63	.801
Quality of Relationship	1.03	.937
Total = Mean ±SD	**1.6422 ± .80373**	

In table 8, participants demonstrated a low level of psychosocial adjustment within their extended family relationships, as indicated by a total mean score of 1.6422 (±0.80373). Overall, participants reported low mean scores that means high adjustment for communication (1.41±1.307), interest in interacting and quality of relationship within the extended family. But there is low adjustment in dependency (both physical and social) within the extended family.

Table 9

Scores of Psychosocial Adjustment to Illness Scale Section VI

Section VI. Social Environment	**Mean**	**SD**
Individual leisure interest	1.08	1.306
Individual leisure activity	2.54	.866
Family leisure interest	1.35	1.343
Family leisure activities	2.51	.812
Social leisure interest	1.25	1.292
Social leisure activities	2.43	.809
Total = Mean ±SD	**1.8609 ± .71164**	

In table 9, Participants demonstrated a low level of psychosocial adjustment within their social environment, as indicated by a total mean score of 1.8609 (±0.71164). Overall, participants reported low mean scores for individual leisure interest, family leisure interest, and social leisure interest, indicating a strong interest in engaging in various leisure activities both individually and with family and friends. Although participants reported higher mean scores for individual leisure activity, family leisure activities, and social leisure activities, these scores indicating relatively negative adjustment in engaging in leisure activities within their social environment.

Table 10

Scores of Psychosocial Adjustment to Illness Scale Section VII

Section VII. Psychological Distress	**Mean**	**SD**
Anxiety	2.17	.848
Depression	2.17	.859
Hostility	1.54	.996
Guilt	.99	1.151
Worry	2.05	.917
Self-devaluation	1.65	1.083
Body image distortion	1.31	.997
Total = Mean ±SD	**1.6986 ± .68988**	

In table 10, Participants demonstrated low psychosocial adjustment regarding psychological distress, with a total mean score of 1.6986 (±0.68988). This indicates moderate adjustment despite facing some psychological challenges related to their illness. Specifically, participants reported low mean scores for hostility, guilt, self-devaluation, and body image distortion, indicating high adjustment in these areas which indicate high adjustment. However, participants reported relatively high mean scores for anxiety, depression, and worry, suggesting some level of distress in these emotional domains indicates low adjustment.

Table 11

Total Scores of Psychosocial Adjustment to Illness Scale

Variables	Mean ± SD
Section I. Health Care Orientation	.9553 ±.63408
Section II. Vocational Environment	2.0887 ±.41733
Section III. Domestic Environment	1.2672 ±.38357
Section IV. Sexual Relationships	1.2401 ±.96610
Section V. Extended Family Relationship	1.6422 ±.80373
Section VI. Social Environment	1.8609 ±.71164
Section VII. Psychological Distress	1.6986 ±.68988
Total Score of Psychosocial Adjustment	**1.5361 ±.65805**

The psychosocial adjustment of SCI patients was assessed across various domains using the provided variables. The results indicate that, on average, participants reported low psychosocial adjustment, with a total score of 1.5361 ± 0.65805. These findings indicate that on average, patients scored above 1.5 in the Total Psychosocial Adjustment section, suggesting a low level of psychosocial adjustment among SCI patients.

4.5 Correlation of the participant's Hope, Cope and Psychosocial Adjustment

Table 12

Correlation of the participant's Hope, Cope and Psychosocial adjustment

	PAIS	**Emotion Focused Coping**	**Problem Focused Coping**	**Avoidant Coping**	**Adult Hope**
PAIS	1.000				
Emotion Focused Coping	-.244*	1.000			
Problem Focused Coping	-.397**	.441**	1.000		
Avoidant Coping	.167	.099	.057	1.000	
Adult Hope	-.447**	.384**	.647**	.035	1.000

In table 11 shows that there is significant relationship between coping strategies (problem focused, emotion focused, and avoidant coping), adult hope, and psychosocial adjustment to illness in SCI patients. The correlation of Hope and Psychosocial Adjustment to Illness (PAIS) among SCI patients was statistically negatively significant where coefficient was -0.447**. In this case, the negative correlation suggests that higher levels of adult hope are associated with lower levels of psychosocial adjustment, suggesting that individuals with greater adult hope may experience fewer psychosocial difficulties with SCI.

On the other hand, there was a statistically negatively significant correlation between problem-focused coping, Emotion-Focused Coping and psychosocial adjustment among SCI patients, with the coefficient of -0.397** and -0.244*. This indicates that higher levels of problem-focused coping and emotion focused coping strategies are associated with lower levels of psychosocial adjustment, suggesting that individuals who utilize more problem-focused coping mechanisms and individuals who rely more on emotion-focused coping mechanisms may experience fewer psychosocial difficulties in coping with SCI. Furthermore, this table shows that the correlation between avoidant coping and psychosocial adjustment was not statistically significant (r=.167, .083).

Furthermore, there was a significant positive correlation between Adult hope and Coping Strategies (Problem Focused Coping and Emotion focused Coping) with a coefficient of .647**, .384**. This indicates that higher hope is associated with a high level of Problem Focused Coping and Emotion focused Coping. Interestingly, there was no statistically significant correlation between Adult Hope and Avoidant Coping.

4.6 Mean Differences Between Rehabilitation Stages of SCI and Hope, Coping and Psychosocial Adjustment among SCI Patients

Table 13

Kruskal-Wallis Test for Identifying Significant Difference between Rehabilitation Stages of SCI and Hope, Coping and Psychosocial Adjustment among SCI Patients

Variables	Stages	Duration of taking rehabilitation (Days)	Frequency n=109	Mean rank	Chi-square (χ^2)	*p*-value
Coping	Acute	0-15	36	38.99	14.314	.003
	Active	16-30	18	58.36		
	Rehabilitation	31-60	28	64.23		
	Community reintegration	61-90	27	64.54		
Hope	Acute	0-15	36	42.35	8.838	.032
	Active	16-30	18	59.33		
	Rehabilitation	31-60	28	60.39		
	Community reintegration	61-90	27	63.39		
Psychosocial Adjustment	Acute	0-15	36	60.58	4.004	.261
	Active	16-30	18	46.33		
	Rehabilitation	31-60	28	49.07		
	Community reintegration	61-90	27	59.48		

The Kruskal-Wallis Test was conducted to investigate the relationship between rehabilitation stages of SCI and the variables of hope, coping, and psychosocial adjustment among individuals with SCI.

Statistically significant differences were found in coping ($\chi^2 = 14.314$, $p = .003$) and hope ($\chi^2 = 8.838$, p = .032) across the various stages of rehabilitation. Higher mean ranks in coping and hope, particularly evident in the Community Reintegration Stage. That means it indicated greater abilities to cope and higher levels of hope among individuals at later stages of rehabilitation.

However, no statistically significant difference was observed in psychosocial adjustment across rehabilitation stages ($\chi^2 = 4.004$, $p = .261$), although higher mean ranks in the Community Reintegration Stage suggest relatively higher levels of psychosocial adjustment. These findings underscore the importance of addressing coping strategies and fostering hope throughout the rehabilitation process, while also suggesting the resilience of psychosocial adjustment across different stages of rehabilitation.

CHAPTER V: DISCUSSION

The findings of this study shed light on the intricate interplay between hope, coping strategies, and psychosocial adjustment among individuals with SCI in the selected rehabilitation center of Bangladesh.

At first, the results of this study show that SCI patients in this context exhibit a lower level of hope. Several studies found that hope is beneficial to patients with SCI for their foster recovery (Kennedy et al., 2009; Dorsett et al., 2017; Zuchetto et al., 2020; Byra, 2015; Van & Kayes, 2014). Another important finding is that SCI patients had a lower level of hope after their injury and individuals with complete spinal cord lesions who have little hope for recovery can maintain a contradictory hope to walk while fully engaging in a rehabilitation program (Kennedy et al., 2009; Dorsett et al., 2017). Another study revealed that participants often experienced limited social support, low self-worth, and hopelessness within a vicious circle (Lohne & Severinsson, 2005). A study confirms that rehabilitation professionals often struggle with maintaining a person's lower hope to walk again and prepare for living with a mobility disability. This is also evident in palliative care, where hope is widely acknowledged in contradictory circumstances (Dorsett et al., 2017). Another study found that participants' individual dimensions of hope varied, possibly due to personality, injury, or disability. During the initial months after SCI, patients expressed hope in their physical abilities, particularly walking, standing, running, or dancing again, as the injury altered their bodily functioning. Increased sensory levels and movement abilities during recovery stimulated hope (Lohne & Severinsson, 2004). The patient with SCI demonstrated that hope empowers them to overcome obstacles and transform them into possibilities by adopting a new perspective (Zuchetto et al., 2020).

Basic hope remains stable despite traumatic events or radical life changes, but its impact may vary at specific PTG stages (Byra, 2015).

Furthermore, this study reveals that SCI patients in this context tend to employ moderate levels of problem-focused coping and emotion-focused coping strategies. Problem-focused coping involves efforts to directly address and manage the stressor or problem, while emotion-focused coping involves regulating emotional responses to the stressor. Interestingly, the study also found a low level of avoidant coping among SCI patients in the selected rehabilitation center. Avoidant coping is the strategies that aimed at avoiding or minimizing the stressor or its associated emotions. The low use of avoidant coping strategies suggests that individuals with SCI in this population may be more inclined to confront and address their challenges rather than avoid them, which could have positive implications for their overall adjustment and rehabilitation outcomes. A study confirmed that the most commonly used coping strategies include planful problem-solving, positive reappraisal, and confrontive coping (Song & Nam, 2010). Another study found that emotion-focused coping strategies significantly influence social reintegration. This contradicts previous research suggesting that problem-focused coping strategies are more effective in overall adjustment, highlighting the importance of coping strategies in achieving adaptation (Chevalier et al., 2009). On the other hand according to Barone, Recently injured individuals often used escape- avoidance coping behaviors without seeking social support, problem-solving, or personal growth strategies (Barone & Waters, 2012). Another study found that more revaluation of life values (acceptance) and fewer tendencies towards dependent behavior (social reliance) improved health-related quality of life. The findings suggest that greater focus should be on coping strategies and facilitating adaptive outcomes in rehabilitation (Elfström et al., 2005).

However, despite these coping efforts, this study indicates that SCI patients in this context exhibit moderately low levels of psychosocial adjustment. Psychosocial adjustment encompasses various aspects of functioning, including emotional well-being, social relationships, and overall quality of life. The finding of moderately low psychosocial adjustment underscores the significant challenges faced by individuals with SCI in adapting to their condition and achieving optimal psychological well-being. More specifically the result of this study is low level of psychosocial adjustment in Vocational Environment, Extended Family Relationship, Social Environment and psychological Distress. On the other hand, moderately high level of psychosocial adjustment in Health Care Orientation, Domestic Environment, Sexual Relationship. A study in Taiwan identified four groups of individuals with SCI: well adjusted, moderately adjusted, moderately adjusted and sexually inexperienced, and poorly adjusted. The study found that vocational, sexual, and leisure areas were the most problematic for adjustment (Wu & Chan, 2007). Another study reveals negative emotional responses, disengagement-type coping, and disability severity negatively impact adaptation levels. The revised model fits well with medium effects on psychosocial adaptation (Martz et al., 2005).

The correlations identified in this study provide additional insight into the relationship between hope, coping strategies, and psychosocial adjustment among SCI patients. The negative correlations observed between hope, problem-focused coping, emotion-focused coping with psychosocial adjustment which suggest that lower levels of hope and low active coping strategies are associated with better psychosocial adjustment. Also, there was a positive significant correlation between Hope and Coping Strategies

(Problem focused and Emotion focused coping). But at the same time there was no statistically significant correlation between Hope and avoidant Coping as well as Psychosocial adjustment and avoidant Coping. Several studies reported that higher hope individuals with SCI show better psychosocial adjustment outcomes and hope levels positively correlate with positive coping styles like reappraisal, planning, acceptance, and fighting spirit, while negatively correlated with negative coping strategies like behavioral disengagement and social reliance (Dorsett et al., 2017; Lit & Kayes, 2014). According to Kennedy, the varying coping measures across studies complicates comparison of current findings with previous research on adjustment-associated coping strategies (Kennedy et al., 2009). This finding is contrary to some studies which have suggested that Adjustment was positively correlated with most coping strategies except escape-avoidance (Song & Nam, 2010). More specifically, a study found a significant correlation between positive and problem-focused coping strategies and psychological adjustment, while a negative correlation was observed with active avoidance and religion & denial coping strategies (Noor et al., 2016). Lower levels of adaptation to SCI were linked to negative emotional responses, disengagement-type coping, and the severity and impact of disability (Livneh & Martz, 2014). Other study found that coping resources and strategies have significant association to psychosocial adaptation (Livneh & Martz, 2014).

Overall, the findings of this study contribute to our understanding of the factors influencing psychosocial adjustment among individuals with SCI in the selected rehabilitation center of Bangladesh. Future research could explore potential cultural and contextual factors that may influence hope, coping strategies, and psychosocial adjustment in this population and examine the effectiveness of interventions.

CHAPTER VI: CONCLUSION

6.1 Strengths and Limitations

6.1.1 Strengths

- Author permitted to use these tool- Adult Hope Scale, Brief Cope, and PAIS-SR Bangla questionnaire.
- To ensure the quality of data, five stages of data life cycle management had been followed.
- Data was collected in a face-to-face survey method and stored in the personal laptop which was highly secured.
- There was no unauthorized access without the researcher. All data was used as it is. No modification was done.
- Provide valuable insights into the hope, coping strategies and psychosocial adjustment of SCI patients in a current situation.

6.1.2 Limitations

There are some limitations of the study. They are,

- Insufficient time for data collection may have restricted sample representation and depth of understanding.
- This study focused on a specific rehabilitation centre (CRP), which made the sample a small group of people.
- The calculated sample size was 423 but this study conducted the survey with a sample size of 109 participants in CRP inpatient unit, so the result of this study may not be generalized.
- As there were some sensitive questions in PAIS-SR scale, the participants were not

comfortable to share their information.

6.2 Practice Implication

6.2.1 Recommendations for Future Practice

- Coping intervention can be modified by Occupational Therapists, emphasizing the development of problem-focused coping mechanisms and correcting maladaptive ones like avoidance coping.
- OTs can Integrate the interventions which aimed at fostering adult hope, including goal setting and resilience-building programs into rehabilitation services.
- Ots can establish psychosocial support programs within rehabilitation centers such as fostering inclusion in social environment, addressing challenges in vocational environment and extended family relationship. Provide a platform for sharing experiences and receive emotional support to minimize psychosocial distress.
- Adoption of a holistic rehabilitation approach that encompasses physical, psychological, and social aspects of care to promote optimal psychosocial adjustment and overall well-being among individuals with spinal cord injuries in Bangladesh.
- Enhancing the multidisciplinary approach to SCI rehabilitation by collaboration with other healthcare experts, such as psychologists, social workers, and rehabilitation specialists which can improve patient's psychosocial adjustment by providing comprehensive care.
- Encourage people with SCI and their families to understand the value of hope and useful coping mechanisms can help them to overcome the challenges related to their condition and make adaptation to easier everyday life after an accident.

- Provision of mental health services, including counseling and education for healthcare professionals, to address the psychological aspects of adjustment.

By implementing these practice implications, rehabilitation centers can improve the quality of life and long-term rehabilitation success for patients living with spinal cord injuries.

6.2.2 Recommendations for Future Research

- Identify the association between sociodemographic characteristics and Hope, Coping and Psychosocial Adjustment.
- A qualitative study should be conducted on this topic to find out the reason behind the correlation between hope, cope and psychosocial adjustment.
- Can be Conducted longitudinal studies to track long-term effects of coping strategies and hope on psychosocial adjustment among SCI patients in Bangladesh.
- A study can be conducted to explore cultural factors influencing coping behaviors and perceptions of hope in this population.
- A study can be conducted to Investigate the role of family and social support networks in coping with SCI and maintaining hope among patients.

6.3 Conclusion

This study investigated the impact of hope and coping on psychosocial adjustment following SCI (SCI) in a selected rehabilitation center in Bangladesh. The findings shed light on several key aspects of this relationship and provide valuable insights into the experiences of SCI patients in this context. Firstly, the study contributes to our understanding of the sociodemographic characteristics and current status of this population. Findings revealed lower levels of hope among SCI patients, alongside moderate use of problem-focused and emotion-focused coping strategies, and low levels of avoidant coping. The study identified moderately low levels of psychosocial adjustment. There were also negative correlations were observed between hope, problem-focused coping, emotion-focused coping, and psychosocial adjustment, indicating that higher levels of hope and adaptive coping are associated with better adjustment outcomes. A positive correlation was found between hope and problem-focused coping and emotion-focused coping. However, no significant correlation was found between hope and avoidant coping, or between psychosocial adjustment and avoidant coping. These findings emphasize the importance of addressing hope and encouraging adaptive coping strategies in rehabilitation interventions for SCI patients in Bangladesh to enhance psychosocial adjustment outcomes. Furthermore, research are needed to explore additional factors influencing adjustment and to develop targeted interventions tailored to the needs of this population.

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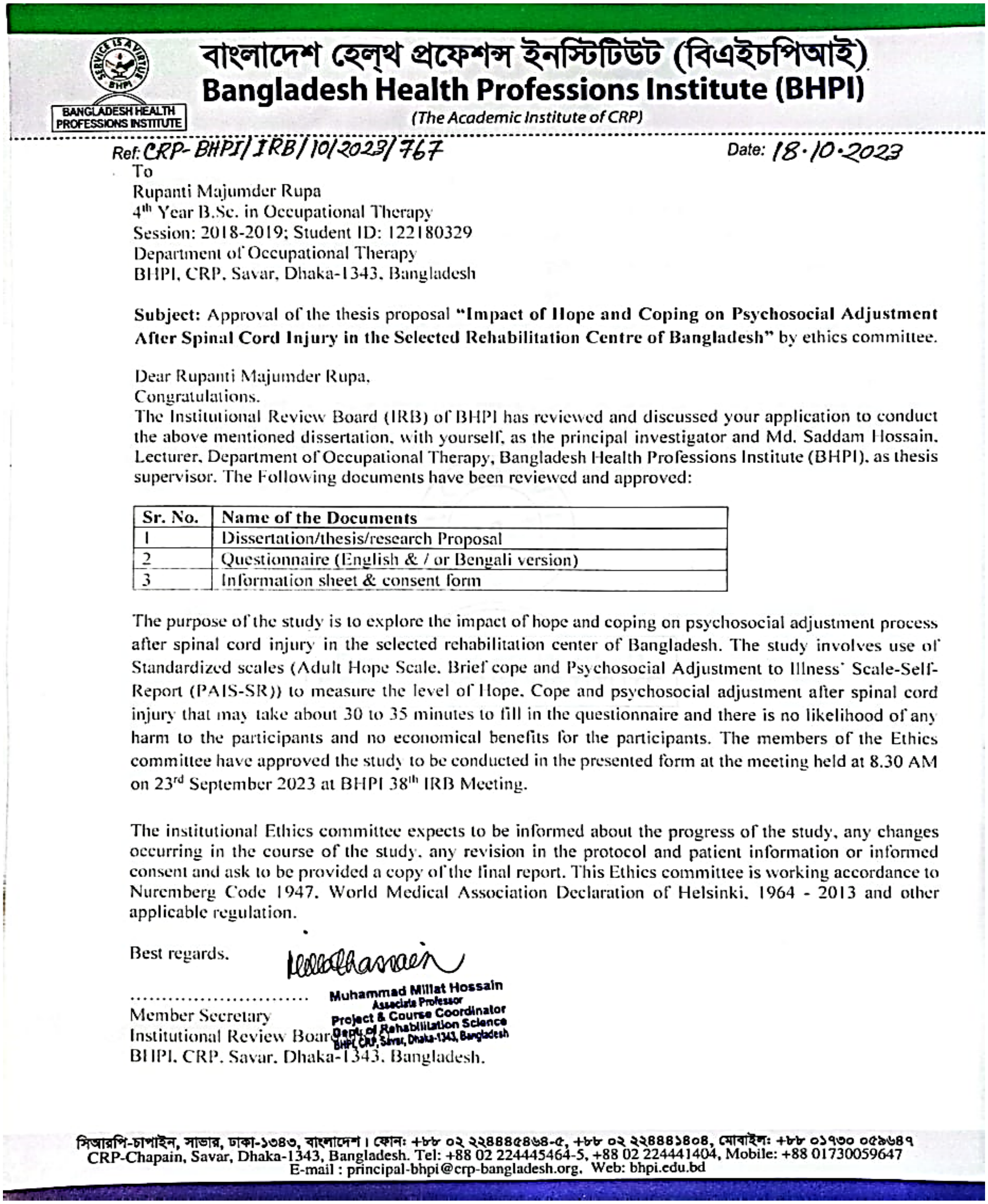
APPENDICES

Appendix A: Approval Letter and Permission Letter

IRB Approval Letter



বাংলাদেশ হেল্‌থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)
BANGLADESH HEALTH PROFESSIONS INSTITUTE

Ref: CRP- BHPI/ IRB/ 10/2023/ 767 Date: 18·10·2023

To
Rupanti Majumder Rupa
4th Year B.Sc. in Occupational Therapy
Session: 2018-2019; Student ID: 122180329
Department of Occupational Therapy
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal **"Impact of Hope and Coping on Psychosocial Adjustment After Spinal Cord Injury in the Selected Rehabilitation Centre of Bangladesh"** by ethics committee.

Dear Rupanti Majumder Rupa,
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, Lecturer, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), as thesis supervisor. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation/thesis/research Proposal
2	Questionnaire (English & / or Bengali version)
3	Information sheet & consent form

The purpose of the study is to explore the impact of hope and coping on psychosocial adjustment process after spinal cord injury in the selected rehabilitation center of Bangladesh. The study involves use of Standardized scales (Adult Hope Scale, Brief cope and Psychosocial Adjustment to Illness' Scale-Self-Report (PAIS-SR)) to measure the level of Hope, Cope and psychosocial adjustment after spinal cord injury that may take about 30 to 35 minutes to fill in the questionnaire and there is no likelihood of any harm to the participants and no economical benefits for 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 23rd September 2023 at BHPI 38th IRB Meeting.

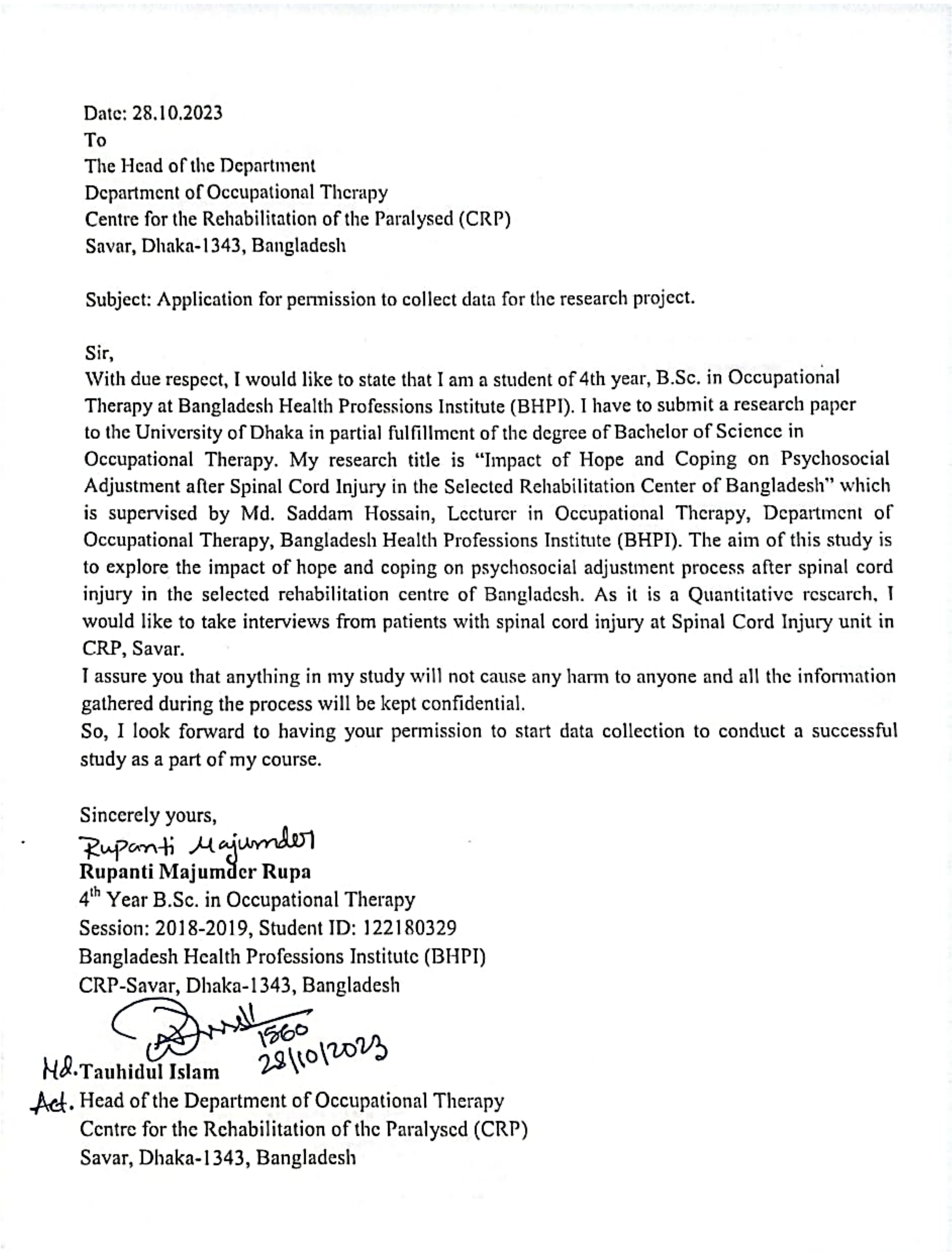
The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance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

Best regards,

Muhammad Millat Hossain
Associate Professor
Project & Course Coordinator
Dept. of Rehabilitation Science
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

....
Member Secretary
Institutional Review Board
BHPI, CRP, Savar, Dhaka-1343, Bangladesh.

Permission Letter



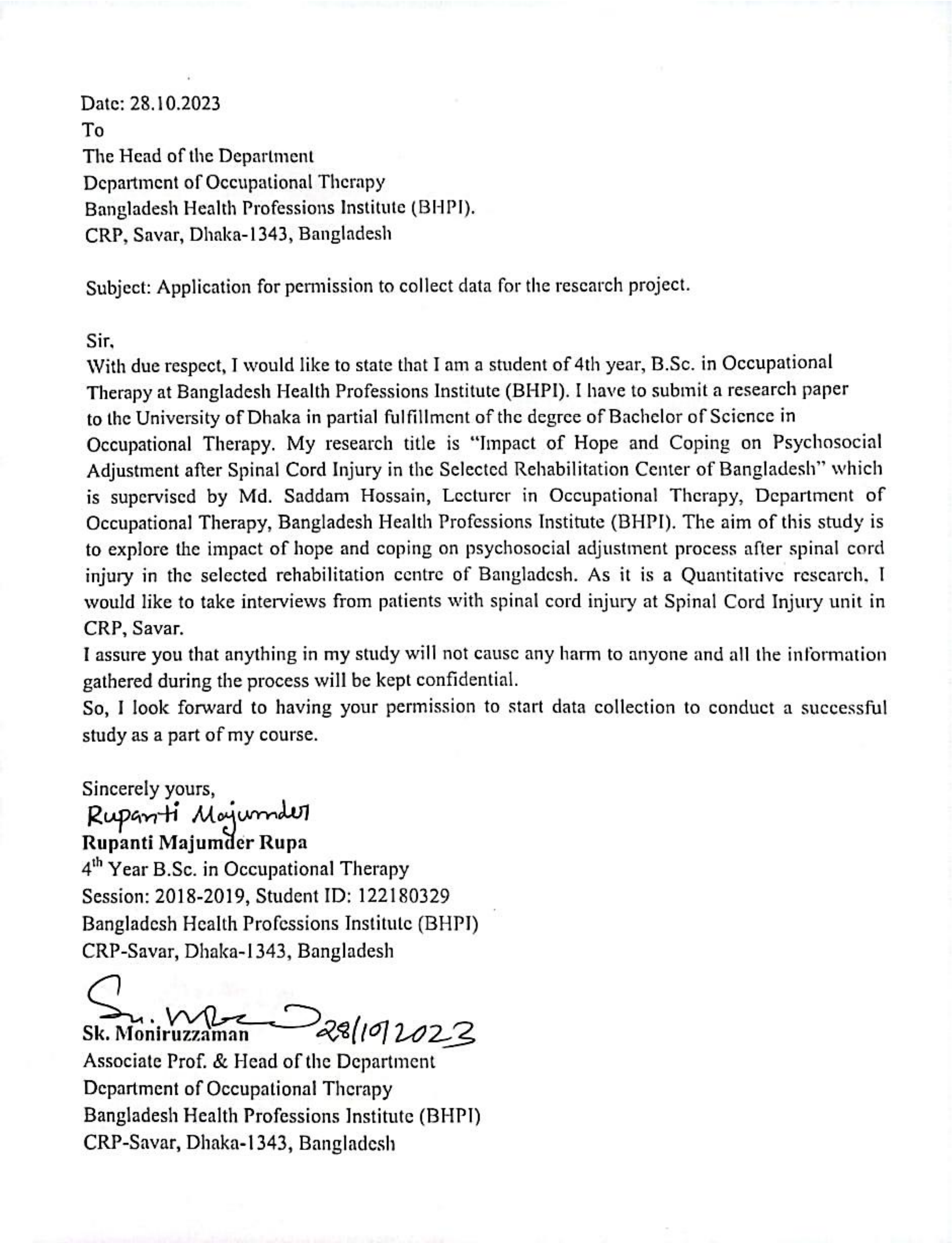
Date: 28.10.2023
To
The Head of the Department
Department of Occupational Therapy
Centre for the Rehabilitation of the Paralysed (CRP)
Savar, Dhaka-1343, Bangladesh

Subject: Application for permission to collect data for the research project.

Sir,
With due respect, I would like to state that I am a student of 4th year, B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI). I have to submit a research paper to the University of Dhaka in partial fulfillment of the degree of Bachelor of Science in Occupational Therapy. My research title is "Impact of Hope and Coping on Psychosocial Adjustment after Spinal Cord Injury in the Selected Rehabilitation Center of Bangladesh" which is supervised by Md. Saddam Hossain, Lecturer in Occupational Therapy, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI). The aim of this study is to explore the impact of hope and coping on psychosocial adjustment process after spinal cord injury in the selected rehabilitation centre of Bangladesh. As it is a Quantitative research, I would like to take interviews from patients with spinal cord injury at Spinal Cord Injury unit in CRP, Savar.
I assure you that anything in my study will not cause any harm to anyone and all the information gathered during the process will be kept confidential.
So, I look forward to having your permission to start data collection to conduct a successful study as a part of my course.

Sincerely yours,
Rupanti Majumder
Rupanti Majumder Rupa
4th Year B.Sc. in Occupational Therapy
Session: 2018-2019, Student ID: 122180329
Bangladesh Health Professions Institute (BHPI)
CRP-Savar, Dhaka-1343, Bangladesh

1560
28/10/2023
Md. **Tauhidul Islam**
Act. Head of the Department of Occupational Therapy
Centre for the Rehabilitation of the Paralysed (CRP)
Savar, Dhaka-1343, Bangladesh



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Rupanti Majumder
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4th Year B.Sc. in Occupational Therapy
Session: 2018-2019, Student ID: 122180329
Bangladesh Health Professions Institute (BHPI)
CRP-Savar, Dhaka-1343, Bangladesh

Sk. Moniruzzaman 28/10/2023
Associate Prof. & Head of the Department
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
CRP-Savar, Dhaka-1343, Bangladesh

Appendix B: Information Sheet, Consent form, Withdrawal Form (English version)

Bangladesh Health Professions Institute

Occupational Therapy Unit

CRP, Savar, Dhaka-1343

Information Sheet

Research title: Impact of Hope and Coping on Psychosocial Adjustment After SCI in the Selected Rehabilitation Centre of Bangladesh.

Name of researcher: Rupanti Majumder Rupa, 4th year, B.Sc. in Occupational Therapy.

Supervisor: Md. Saddam Hossain, Lecturer, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP, Savar, Dhaka.

I Rupanti Majumder Rupa, want to invite you to participate in a research study. Before deciding to participate, it is crucial that you understand the purpose of the study, what will be asked of you, and how you are related to it. Please read the information below and feel free to ask any questions that you may have.

Who am I and what is this study about:

I am Rupanti Majumder Rupa, a student of 4th year, B. Sc in Occupational Therapy, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralyzed (CRP). As a part of my academic course curriculum, I am going to conduct a research activity which is supervised by Md. Saddam Hossain. The title of my study is " Impact of Hope and Coping on Psychosocial Adjustment After SCI in the Selected Rehabilitation Centre of Bangladesh." The aim of this study to explore the impact of hope and coping on psychosocial adjustment process after SCI in the selected rehabilitation center of Bangladesh.

What to do to participate in the study?

I will be measuring the level of hope, coping and psychosocial adjustment of SCI patient. For which I will use three scales to measure hope, coping and psychosocial adjustment. Also, sociodemographic data will be collected by using a self-developed questionnaire. All the questions should be answered by the participants. Time will be taken for 30-35 minutes.

Why are you invited to participate in this study?

Participants who are willing and meet the inclusion criteria of the study are invited to participate.

Do you have to participate?

Participation in the study is entirely voluntary and consent will be taken. After participating, they will be accounted for to answer all the questions. You have the right to withdraw your consent and discontinue participation after two weeks of conducting survey without any repercussions.

What are the possible risks and benefits of participation?

The participant will not get any direct benefit for participating in this research, however the information gained from this research will be contributed for future development and improvement of rehabilitation services. Participants will not face any type of problem or harm, participating in the research but can feel psychological discomfort while sharing their tough experience. If this problem arises during the interview the research will take a break or discuss re-scheduling the interview. Participants can also withdraw their consent according to their wish.

Will the participation be confidential?

All information collected during this study will be strictly kept confidential by maintaining secrecy. No information will be shared with anyone else outside of the study unless it is required by the law. Only the researcher and supervisor are allowed to access the data here. The participants will not be named in any reports, publications, or presentations that may come from this study. Information paper will be locked in a drawer, in the personal laptop of the researcher and lock cloud system.

What will be the result of the study?

The findings of this research will help the health professionals to better understand the impact of hope and coping on psychosocial adjustment after SCI in several rehabilitation centers. The findings will also help the Occupational therapist in providing treatment to the patient with SCI. The results will help the Department of Occupational Therapy to upgrade their intervention plan for better psychosocial adjustment after SCI. Furthermore, the results of this study can be used as a basis in future studies for investigations with similar or different context and populations.The result of the study may be published in a scientific journal.

Promotional result:

The results of this research will be published and presented through print media, electronic/ social media, conferences and criticism.

For more information, please contact the address below

Student researcher: Rupanti Majumder Rupa

B.Sc. in Occupational Therapy

Session: 2018-19, Roll: 21

BHPI, CRP, Savar, Dhaka.

Contact number: 01611444902

Email: rupantimajumder@gmail.com

Supervisor: Md. Saddam Hossain

Lecturer in Occupational Therapy

Department of Occupational Therapy

BHPI, CRP, Savar, Dhaka.

Contact number: 01977398324

Email: saddamot6@gmail.com

Consent Form

I am Rupanti Majumdar Rupa, 4th year, B.Sc. in Occupational Therapy, session 2018-19 at Bangladesh Institute of Health Professions under Faculty of Medicine, University of Dhaka, an Academic Institution of Centre for the Rehabilitation of the Paralysed. As part of the B.Sc course curriculum, I am going to conduct a research project supervised by Md. Saddam Hossain, Lecturer, Department of Occupational Therapy, BHPI, CRP, Savar, Dhaka. The title of the study is "Impact of Hope and Coping on Psychosocial Adjustment after SCI in Selected Rehabilitation Centers of Bangladesh." The main aim of the study was to explore the impact of hope and coping on psychosocial adjustment process after SCI in the selected rehabilitation centre of Bangladesh. In order to complete my research, I need some information from you. Therefore, I would like to ask you some questions. The duration of this discussion will be 30-35 minutes.

I assure you that this is part of my study, and it will not be used for any other purpose. Your participation in this study will not affect your lifestyle or treatment. All information you provide will be kept confidential and ensure that the source of this information remains anonymous. Participation in this research is voluntary and you can withdraw from this study at any time.

Please read the following statements so that you understand the content of the information sheet and that you agree to participate in the above study.

- I confirm that I have read the Research Participant Information Sheet and understand its aims and objectives. The information sheet was explained to me, and I was given an opportunity to ask questions.

- I confirm that I give consent to participate in the above research.

If you have any queries regarding this research, you can contact the researchers Rupanti Majumder Rupa. And Md. Saddam Hossain, Lecturer, Department of Occupational Therapy, BHPI, CRP, Savar, Dhaka.

Participant’s signature	Date
Researcher’s signature	Date

Withdrawal form

Title of the study: “Impact of Hope and Coping on Psychosocial Adjustment After SCI in the Selected Rehabilitation Centre of Bangladesh.”

Name of researcher: Rupanti Majumder Rupa, 4th year, B.Sc. in Occupational Therapy. Roll-21

I ______________________________________ confirm that I wish to withdraw my consent to the use of data arising from my participation.

Reason for withdrawal:

Name of the participant ________________________

Signature of participant/thumbprint___________________

Date ________________________

Appendix B: Information Sheet, Consent form, Withdrawal Form (Bangla Version)

বাংলাদেশ হেলথ প্রফেসনস ইনস্টিটিউট (বিএইচপিআই)

অকুপেশনাল থেরাপি বিভাগ

সিআরপি, চাপাইন, সাভার, ঢাকা-১৩৪৩

তথ্যপত্র

গবেষণার শিরোনাম: বাংলাদেশের নির্বাচিত পুনর্বাসন কেন্দ্রে মেরুরজ্জুর আঘাতের পরে মনোসামাজিক সামঞ্জস্যের উপর আশা ও মোকাবিলার কেমন প্রভাব রয়েছে।

গবেষকের নাম: রূপন্তী মজুমদার রূপা, ৪র্থ বর্ষ, বি.এসসি. অকুপেশনাল থেরাপিতে।

সুপারভাইজার: মোঃ সাদ্দাম হোসেন, প্রভাষক, অকুপেশনাল থেরাপি বিভাগ, বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই), সিআরপি, সাভার, ঢাকা।

আমি রূপন্তী মজুমদার রূপা, আপনাকে একটি গবেষণায় অংশগ্রহনের জন্য আমন্ত্রণ জানাতে চাই। অংশগ্রহণ করার সিদ্ধান্ত নেওয়ার আগে আপনার, এই গবেষনার উদ্দেশ্য, আপনাকে কী জিজ্ঞাসা করা হবে এবং আপনি কীভাবে এর সাথে সম্পর্কিত তা জানা খুবই গুরুত্বপূর্ণ। নীচের তথ্য গুলো পড়ুন এবং যে কোনো বিষয়ে জানার থাকলে প্রশ্ন জিজ্ঞাসা করুন।

আমি কে এবং এই গবেষণাটি কি সম্পর্কে:

আমি রূপন্তী মজুমদার রূপা, ৪র্থ বর্ষের ছাত্রী, বি.এসসি ইন অকুপেশনাল থেরাপি, অকুপেশনাল থেরাপি বিভাগ, বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই), দ্য একাডেমিক ইনস্টিটিউট অফ সেন্টার ফর দ্য রিহ্যাবিলিটেশন অফ দ্য প্যারালাইজড (সিআরপি)। একাডেমিক কোর্স পাঠ্যক্রমের অংশ হিসেবে, আমি একটি গবেষণা কার্যক্রম পরিচালনা করতে যাচ্ছি যার তত্ত্বাবধানে আছেন মোঃ সাদ্দাম হোসেন। আমার গবেষণার শিরোনাম "বাংলাদেশের নির্বাচিত পুনর্বাসন কেন্দ্রে মেরুরজ্জুর আঘাতের পরে মনোসামাজিক সামঞ্জস্যের উপর আশা ও মোকাবিলার কেমন প্রভাব রয়েছে।" বাংলাদেশের নির্বাচিত পুনর্বাসন কেন্দ্রে মেরুদন্ডের আঘাতের পরে মনোসামাজিক সমন্বয় প্রক্রিয়ার উপর আশা এবং মোকাবিলার প্রভাব অন্বেষণ করাই এই গবেষণার মুল লক্ষ্য।

গবেষণায় অংশগ্রহণের জন্য কী করতে হবে?

আমি মেরুরজ্জুর আঘাতের রোগীর আশা, মোকাবিলা এবং মানসিক সামঞ্জস্যের মাত্রা পরিমাপ করব। যার জন্য আমি আশা, মোকাবিলা এবং মনোসামাজিক সমন্বয় পরিমাপের জন্য তিনটি স্কেল ব্যবহার করব। এছাড়াও নিজের তৈরি কিছু প্রশ্নাবলী ব্যবহার করে জনসংখ্যা সংক্রান্ত তথ্য সংগ্রহ করা হবে। অংশগ্রহণকারীদের সমস্ত প্রশ্নের উত্তর দিতে হবে যার জন্য ৩০-৩৫ মিনিট সময় নেওয়া হবে।

কেন আপনি এই গবেষণায় অংশগ্রহণের জন্য আমন্ত্রিত?

অংশগ্রহণকারীরা যারা ইচ্ছুক এবং গবেষনার অন্তর্ভুক্তির মানদণ্ড পূরণ করে, তাদের অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে।

আপনাকে কি অংশগ্রহণ করতে হবে?

গবেষণায় অংশগ্রহণ সম্পূর্ণরূপে স্বেচ্ছায় এবং আপনার সম্মতি নিয়ে করা হবে। আপনার সম্মতি প্রত্যাহার

এবং কোনও প্রতিক্রিয়া ছাড়াই জরিপ পরিচালনার দুই সপ্তাহ পরে অংশগ্রহণ বন্ধ করার অধিকার রয়েছে।

অংশগ্রহণের সম্ভাব্য ঝুঁকি এবং সুবিধাগুলি কী কী?

অংশগ্রহণকারী এই গবেষণায় অংশগ্রহণের জন্য সরাসরি কোনো সুবিধা পাবেন না, তবে এই গবেষণা থেকে প্রাপ্ত তথ্য ভবিষ্যতের উন্নয়ন এবং পুনর্বাসন সেবার উন্নতির জন্য অবদান রাখা হবে। অংশগ্রহণকারীরা গবেষণায় অংশগ্রহণ করে কোনো ধরনের সমস্যা সম্মুখীন হবে না কিন্তু তাদের কঠিন অভিজ্ঞতা শেয়ার করার সময় যদি মানসিক অস্বস্তি অনুভব করে তবে শিক্ষার্থীর গবেষনায় একটি বিরতি নেবে। অংশগ্রহণকারীরা তাদের ইচ্ছা অনুযায়ী তাদের সম্মতি প্রত্যাহার করতে পারবেন।

অংশগ্রহনের গোপনীয়তা কিভাবে নিশ্চিত হবে?

এই গবেষণার সময় সংগৃহীত সমস্ত তথ্যে গোপনীয়তা বজায় রাখা হবে। আইনের প্রয়োজন না হলে অধ্যয়নের বাইরে অন্য কারো সাথে কোনো তথ্য শেয়ার করা হবে না। শুধুমাত্র গবেষক এবং সুপারভাইজাররের কাছে সকল তথ্য সংরক্ষিত থাকবে। এই গবেষণা থেকে আসা কোনো প্রতিবেদন, প্রকাশনা বা উপস্থাপনায় অংশগ্রহণকারীদের নাম দেওয়া হবে না। তথ্য কাগজ একটি ড্রয়ারে লক করা হবে, গবেষকের ব্যক্তিগত ল্যাপটপে এবং লক ক্লাউড সিস্টেমে।

গবেষণার ফলাফল কী হবে?

এই গবেষণার ফলাফলগুলি স্বাস্থ্য পেশাদারদের বিভিন্ন পুনর্বাসন কেন্দ্রে মেরুসজ্জুর আঘাতের পরে মনোসামাজিক সামঞ্জস্যের উপর আশার প্রভাব এবং মোকাবেলা করতে আরও ভালভাবে বুঝতে সাহায্য করবে। ফলাফলগুলি অকুপেশনাল থেরাপিস্টকে এই ধরনের রোগীর চিকিৎসা প্রদানে সহায়তা করবে। ফলাফলগুলি অকুপেশনাল থেরাপি বিভাগকে তাদের চিকিৎসা পরিকল্পনা আরো উন্নত করতে সাহায্য করবে। এই সমীক্ষার ফলাফলগুলি একই রকম বা ভিন্ন প্রেক্ষাপট এবং জনসংখ্যার জন্য ভবিষ্যতের গবেষণায় ভিত্তি হিসাবে ব্যবহার করা যেতে পারে। গবেষণার ফলাফল একটি বৈজ্ঞানিক জার্নালে প্রকাশিত হতে পারে।

প্রচারমূলক ফলাফল:

সম্মেলন এবং সমালোচনার মাধ্যমে প্রকাশ ও উপস্থাপন করা হবে ।

আরও জানতে চাইলে নীচের ঠিকানায় যোগাযোগ করুন

ছাত্রী গবেষক: রূপন্তী মজুমদার রুপা

বিএসসি, অকুপেশনাল থেরাপি
সেশন: ২০১৮-১৯, রোল: ২১
বিএইচপিআই, সিআরপি, সাভার, ঢাকা।
যোগাযোগের নম্বরঃ ০১৬১১৪৪৪৯০২
ইমেইল: rupantimajumder@gmail.com

সুপারভাইজারঃ মোঃ সাদ্দাম হোসেন

অকুপেশনাল থেরাপি প্রভাষক
বিএইচপিআই, সিআরপি, সাভার, ঢাকা।
যোগাযোগ নম্বর: ০১৯৭৭৩৯৮৩২৪
ইমেইল: saddamot6@gmail.com

সম্মতি পত্র

আমি রুপন্তী মজুমদার রুপা,বি.এস.সি. ইন অকুপেশনাল থেরাপীতে, ঢাকা বিশ্ববিদ্যালয়ের মেডিসিন অনুষদের অধীনে বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউটটে ২০১৮-১৯ সেশনের ৪র্থ বর্ষে অধ্যয়নরত আছি, যেটি পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রের একটি একাডেমিক ইনস্টিটিউট। ইনস্টিটিউট। বি.এস.সি কোর্স পাঠ্যক্রম এর অংশ হিসেবে, আমি একটি গবেষণা কার্যক্রম পরিচালনা করতে যাচ্ছি যেটির তত্ত্বাবধানে আছেন মোঃ সাদ্দাম হোসেন, প্রভাষক, অকুপেশনাল থেরাপি বিভাগ, বি.এইচ.পিআই, সিআরপি, সাভার, ঢাকা। গবেষণার শিরোনাম "বাংলাদেশের নির্বাচিত পুনর্বাসন কেন্দ্রে মেরুরজ্জুর আঘাতের পরে মনোসামাজিক সামঞ্জস্যের উপর আশা ও মোকাবিলার কেমন প্রভাব রয়েছে।" বাংলাদেশের নির্বাচিত পুনর্বাসন কেন্দ্রে মেরুদন্ডের আঘাতের পরে মনোসামাজিক সমন্বয় প্রক্রিয়ার উপর আশা এবং মোকাবিলার প্রভাব অন্বেষণ করাই এই গবেষণার মুল লক্ষ্য। আমার গবেষণাটি সম্পূর্ন করার জন্য আপনার থেকে কিছু তথ্য নেওয়া প্রয়োজন।এজন্য আমি আপনাকে কিছু প্রশ্ন করতে চাচ্ছি। এই আলোচনার সময়কাল হবে ৩০-৩৫ মিনিট।

আমি আপনাকে অনুগত করছি যে, এটা আমার অধ্যয়নের অংশ এবং যা অন্যকোন উদ্দেশ্যে ব্যবহৃত হবে না। এই গবেষনায় আপনার অংশগ্রহণ আপনার জীবন যাত্রায় এবং চিকিৎসায় কোন প্রকার প্রভাব ফেলবে না। আপনি যে সব তথ্য প্রদান করবেন তার গোপনীয়তা বজায় থাকবে এবং আপনার প্রতিবেদনের ঘটনা প্রবাহে এটা নিশ্চিত করা হবে যে এই তথ্যের উৎস অপ্রকাশিত থাকবে। এই গবেষণাতে আপনি স্বেচ্ছা অংশগ্রহণ করতে পারবেন এবং আপনি যে কোন সময় এই অধ্যয়ন থেকে প্রত্যাহার করতে পারেন।

অনুগ্রহ করে নিম্নলিখিত বিবৃতিগুলো পড়ুন যাতে আপনি তথ্য পত্রের বিষয়বস্তু বুঝতে পারেন এবং আপনি উপরোক্ত গবেষণায় অংশ নিতে সম্মত হন।

- আমি নিশ্চিত করছি যে, আমি গবেষণায় অংশগ্রহণকারীদের তথ্য পত্রটি পড়েছি এবং এর লক্ষ্য এবং উদ্দেশ্যসম্পর্কে বুঝতে পেরেছি। তথ্য পত্রটি আমাকে ব্যাখ্যা করা হয়েছে এবং আমি প্রশ্ন করার সুযোগ পেয়েছি।
- আমি নিশ্চিত করছি যে উপরোক্ত গবেষনাতে আমি সেচ্ছায় অংশগ্রহন করার সম্মতি দিচ্ছি।

এই গবেষণা নিয়ে যদি আপনার কোন প্রশ্ন থাকে তাহলে গবেষক রুপন্তী মজুমদার রুপা এবং মোঃ সাদ্দাম হোসেন, প্রভাষক, অকুপেশনাল থেরাপি বিভাগ, বি.এইচ.পিআই, সিআরপি, সাভার, ঢাকা, এর সাথে যোগাযোগ করতে পারেন।

অংশগ্রহণকারীর স্বাক্ষর:	তারিখঃ
গবেষকের স্বাক্ষর:	তারিখঃ

প্রত্যাহার ফর্ম

গবেষণার শিরোনাম: বাংলাদেশের নির্বাচিত পুনর্বাসন কেন্দ্রে মেরুরজ্জুর আঘাতের পরে মনোসামাজিক সামঞ্জস্যের উপর আশা ও মোকাবিলার কেমন প্রভাব রয়েছে।

গবেষকের নাম: রুপন্তী মজুমদার রুপা, ৪র্থ বর্ষ, বি.এসসি. অকুপেশনাল থেরাপি, রোল -২১

আমি ____________________ নিশ্চিত করছি যে আমি এই গবেষনায় আমার অংশগ্রহণ প্রত্যাহার করতে চাই।

অংশগ্রহণকারীর নাম:

প্রত্যাহারের কারণ:

অংশগ্রহণকারীর স্বাক্ষর/ আঙ্গুলের ছাপ:

তারিখ:

Appendix C: Questionnaire (English)

Sociodemographic questionnaire

Age	
Gender	☐ Male ☐ Female
Religion	☐ Muslim ☐ Hindu ☐ Christian ☐ Buddha
Marital status	☐ Married ☐ Unmarried ☐ Widow ☐ Divorce ☐ Separate
Residence area	☐ Rural ☐ Semi urban ☐ City
Educational qualification	☐ Illiterate ☐ Primary ☐ SSC ☐ HSC ☐ Graduation ☐ Post graduation
Occupation	☐ Job ☐ Business ☐ Day labor ☐ Farmer ☐ Unemployed ☐ Housewife ☐ Student ☐ Others
Monthly income	
Duration of injury	
Hospital admission date	
Duration of staying in rehabilitation center	

How does the injury occure	☐ For accident ☐ For disease
Causes of injury	☐ Road accident ☐ Fall from height ☐ Falling of heavy objet on head or neck ☐ Injured by scurf ☐ Tumor ☐ Others
Types of injury	☐ Tetraplegia ☐ Paraplegia
ASIA score	☐ Complete A ☐ Incomplete B ☐ Incomplete C ☐ Incomplete D ☐ Normal E
Neurological level	
Pressure sore	☐ Yes ☐ No
Address	
Phone number	

Adult Hope Scale

1= Definitely False	5= Slightly True
2= Mostly False	6= Somewhat True
3= Somewhat False	7= Mostly True
4= Slightly False	8= Definitely True

Item	Rating
1. I can think of many ways to get out of a jam	
2. I energetically pursue my goals	
3. I feel tired most of the time.	
4. There are lots of ways around any problem	
5. I am easily downed in an argument.	
6. I can think of many ways to get the things in life that are most important to me.	
7. I worry about my health	
8. Even when others get discouraged, I know I can find a way to solve the problem.	
9. My past experiences have prepared me for my future.	
10. I've been pretty successful in life	
11. I usually find myself worrying about something.	
12. I meet the goals that I set for myself.	
Agency subscale score	
Pathway subscale score	
Total score	

Scoring information

Pathways subscale score: Add items 1, 4, 6, and 8. Scores on this subscale can range from 4 to 32, with higher scores indicating higher levels of pathways thinking.

Agency subscale score: Add items 2, 9, 10, and 12. Scores on this subscale can range from 4 to 32, with higher scores indicating higher levels of agency thinking.

Total hope score: Add the pathways and Agency subscales together. Scores can range from 8 to 64, with higher scores representing higher hope levels.

Brief COPE

	I haven't been doing this at all	**I've been doing this a little bit**	**I've been doing a medium amount**	**I've been doing this a lot**
1. I've been turning to work or other activities to take my mind off things				
2. I've been concentrating my efforts on doing something about the situation I'm in				
3. I've been saying to myself "this isn't real".				
4. I've been using alcohol or other drugs to myself feel better				
5. I've been getting emotional support from others.				
6. I've been giving up trying to deal with it.				
7. I've been taking action to try to make the situation better.				
8. I've been refusing to believe that it has happened.				
9. I've been saying things to let my unpleasant feeling escape.				
10. I've been getting help an advice from other people.				
11. I've been using alcohol or other drugs to help me get through it				
12. I've been trying to see it in a different light, to make it seem more positive.				
13. I've been criticizing myself.				
14. I've been trying to come up with a strategy about what to do.				
15. I've been getting comfort and understanding from someone.				
16. I've been giving up the attempt to cope.				
17. I've been looking for something good in what is happening.				
18. I've been making jokes about it.				
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.				

20. I’ve been accepting the reality of the fact that it has happened.				
21. I’ve been expressing my negative feelings.				
22. I’ve been trying to find comfort in my religion or spiritual beliefs.				
23. I’ve been trying to get advice or help from other people about what to do.				
24. I’ve been learning to live with it.				
25. I’ve been thinking hard about what steps to take.				
26. I’ve been blaming myself for things that happened.				
27. I’ve been praying or meditating.				
28. I’ve been making fun of the situation.				

Brief COPE Scoring Procedure

Scores are presented for three overarching coping styles as average scores (sum of item scores divided by number of items), indicating the degree to which the respondent has been engaging in that coping style.

1 = I haven’t been doing this at all
2 = A little bit
3 = A medium amount
4 = I’ve been doing this a lot

A normative percentile is presented based on data from a nonclinical sample of athletes (Poulus et al., 2020). Interpretation by way of normative percentile helps contextualise results in comparison to typical responses of regular individuals. In addition, a clinical percentile is presented which compares responses to clients receiving outpatient mental health services. A percentile of 50, for example, represents an average score for a client in psychological therapy, whereas a percentile of 90 indicates that the respondents scored higher than 90 percent of other individuals in treatment.

<u>Brief COPE Scores</u>

During interpretation it is most helpful to look at the pattern of responding across the three subscales. Consistently low scores on all subscales may indicate either:

(A) the respondent does not feel they have many stressors to cope with. For example, that life is stress free.

(B) a lack of reflective capacity or resistance to disclose personal information.

(C) the respondent does not have many coping skills.

The three overarching coping styles are outlined below.

- Problem-Focused Coping (Items 2, 7, 10, 12, 14, 17, 23, 25) Characterised by the facets of active coping, use of informational support, planning, and positive reframing. A high score indicates coping strategies that are aimed at changing the stressful situation. High scores are indicative of psychological strength, grit, a practical approach to problem solving and is predictive of positive outcomes.

- Emotion-Focused Coping (Items 5, 9, 13, 15, 18, 20, 21, 22, 24, 26, 27, 28) Characterised by the facets of venting, use of emotional support, humour, acceptance, self-blame, and religion. A high score indicates coping strategies that are aiming to regulate emotions associated with the stressful situation. High or low scores are not uniformly associated with psychological health or ill health, but can be used to inform a wider formulation of the respondent's coping styles.
- Avoidant Coping (Items 1, 3, 4, 6, 8, 11, 16, 19) Characterised by the facets of self-distraction, denial, substance use, and behavioural disengagement. A high score indicate physical or cognitive efforts to disengage from the stressor. Low scores are typically indicative of adaptive coping. In addition to the three overarching subscales, scores are presented for the below 14 facets. Individual examination of the questions can pinpoint adaptive or maladaptive styles of coping and be useful for eliciting a discussion with the respondent.

Active Coping	Cope2 + Cope7 (Problem-Focused Coping)
Use of Instrumental Support	Cope10 + Cope23 (Problem-Focused Coping)
Positive Reframing	Cope12 + Cope17 (Problem-Focused Coping)
Planning	Cope14 + Cope25 (Problem-Focused Coping)
Use of Emotional Support	Cope5 + Cope15 (Emotion-Focused Coping)
Venting	Cope9 + Cope21 (Emotion-Focused Coping)
Humor	Cope18 + Cope28 (Emotion-Focused Coping)
Acceptance	Cope20 + Cope24 (Emotion-Focused Coping)
Religion	Cope22 + Cope27 (Emotion-Focused Coping)
Self-Blame	Cope13 + Cope26 (Emotion-Focused Coping)
Self-Distraction	Cope1 + Cope19 (Avoidant coping)
Denial	Cope3 + Cope8 (Avoidant coping)
Substance Use	Cope4 + Cope11 (Avoidant coping)
Behavioral Disengagement	Cope6 + Cope16 (Avoidant coping)

Psychosocial Adjustment to Illness' Scale-Self-Report (PAIS-SR)

SECTION-I

1) Which of the following statements best describe your usual attitude about taking care of your health?

[ ] 0) I am very concerned and pay close attention to my personal health.

[ ] 1) Most of the time I pay attention to my health care needs.

[ ] 2) Usually, I try to take care of health matters but sometimes I just don't get around to it.

[ ] 3) Health care is something that I just don't worry too much about.

2) Your present illness probably requires some special attention and care on your part. Would you please select the statement below that best describes your reaction?

[ ] 0) I do thing pretty much the way I always have done them and I don't worry or take any special considerations for my illness.

[ ] 1) I try to do all the things I am supposed to do take care of myself, but lots of time I forget or I am too tired or busy.

[ ] 2) I do a pretty good job taking care of my present illness.

[ ] 3) I pay close attention to all the needs of my present illness and do everything I can to take care of myself.

3) In general, how do you feel about the quality of medical care available today and the doctors who provide it?

[ ] 0) Medical care has never been better, the doctors who give it are doing an excellent job.

[ ] 1) The quality of medical care available is very good, but there are some areas that could stand improvement.

[ ] 2) Medical care and doctors are just not of the same quality they once were.

[ ] 3) I don't have much faith in doctors and medical care today.

4) During your present illness you have received treatment from both doctors and medical staff. How do you feel about them and the treatment you have received from them?

[ ] 0) I am very unhappy with the treatment I have received and don't think the staff Has done all they could have for me.

[ ] 1) I haven't been impressed with the treatment, but I think probably the best they can do.

[ ] 2) The treatment has been pretty good, although there have been a few problems.

[ ] 3) The treatment and the treatment staff have been excellent.

5) When they are ill, different people expect different things about their illness, and have different attitudes about being ill. Could you please check the statement below which comes closest to describing your feelings?

[ ] 0) I am sure that I am going to overcome the illness and its problems quickly and get back to begin my old self.

[ ] 1) My illness has caused some problems for me, but I feel I will overcome them fairly soon, and get back to the way I was before.

[ ] 2) My illness has really put a great strain both physically and mentally, but I am trying very hard to overcome it, and feel sure that I will be back to my old self-one of these days.

[ ] 3) I feel worn out and very weak from my illness, and there are times when I don't know if I am really ever going to be able to overcome it.

6) Being ill can be a confusing experience, and some patients feel that they do not receive enough information and detail from their doctors and the medical staff about their illness. Please select a statement below which best describes your feelings about this matter.

[ ] 0) My doctor and the medical staff have told me very little about my illness even though I have asked more than once.

[ ] 1) I do have some information about my illness but I feel I would like to know more.

[ ] 2) I have a pretty fair understanding about my illness and feel that if I want to know more, I can always get the information.

[ ] 3) I have been given a very complete picture of my illness, and my doctor and the medical staff have given me all the details I wish to have.

7) In an illness such as yours, people have different ideas about their treatment and what to expect from it. Please select one of the statements below which best describes what you expect about your treatment.

[ ] 0) I believe my doctors and medical staff are quite able to direct my treatment and feel it is the best treatment I could receive.

[ ] 1) I have trust in my doctor's direction of my treatment; however, sometimes I have doubts about it.

[ ] 2) I don't like certain parts of my treatment which are very unpleasant, but my doctors tell me I should go through it anyway.

[ ] 3) In many ways I think my treatment is worse than the illness, and I am not sure it is worth going through it.

8) In an illness such as yours, patients are given different amounts of information about their treatment. Please select a statement from those below which best describes information you have been given about your treatment.

[ ] 0) I have been told almost nothing about my treatment and feel left out about it.

[ ] 1) I have some information about my treatment, but not as much as I would like to have.

[ ] 2) My information concerning treatment is pretty complete, but there are one or two things I still want to know.

[ ] 3) I feel my information concerning treatment is very complete and up-to-date.

SECTION-II

1) Has your illness interfered with your ability to do your job (Schoolwork)?

[ ] 0) No problems with my job

[ ] 1) Some problems, but only minor ones

[ ] 2) Some serious problems

[ ] 3) Illness has totally prevented me from doing my job

2) How well do you physically perform your job (studies) now?

[ ] 0) Poorly

[ ] 1) Not too well
[ ] 2) Adequately
[ ] 3) Very Well

3) During the past 30 days, have you lost any time at work (school) due to your illness?
[ ] 0) 3 days or less
[ ] 1) 1 week
[ ] 2) 2 weeks
[ ] 3) More than 2 weeks

4) Is your job (school) as important to you now as it was before your illness?
[ ] 0) Little or no importance to me now
[ ] 1) A lot less important
[ ] 2) Slightly less important
[ ] 3) Equal or greater importance than before

5) Have you had to change your goals concerning your job as a result of your illness?
[ ] 0) My goals are unchanged
[ ] 1) There has been a slight change in my goals
[ ] 2) My goals have changed quite a bit
[ ] 3) I have changed my goals completely

6) Have you noticed any increase in problems with your co-workers (students, neighbors) since your illness?
[ ] 0) A great increase in problems
[ ] 1) A moderate increase in problems
[ ] 2) A slight increase in problems
[ ] 3) None

SECTION-III

1) How would you describe your relationship with your husband or wife (partner, if not married) since your illness?
[ ] 0) Good
[ ] 1) Fair
[ ] 2) Poor
[ ] 3) Very poor

2) How would you describe your general relationship with the other people you live with (e.g., children, parents, aunts, etc.)
[ ] 0) Very poor
[ ] 1) Poor
[ ] 2) Fair
[ ] 3) Good

3) How much has your illness interfered with your work and duties around the house?
[ ] 0) Not at all
[ ] 1) Slight problem, easily overcome

[ ] 2) Moderate problem, not all of which can be overcome
[ ] 3) Severe difficulties with household duties

4) In those areas where your illness has caused problems with your household work, how has the family shifted duties to help you out?
[ ] 0) The family has not been able to help out at all
[ ] 1) The family has tried to help but many things are left undone
[ ] 2) The family has done well except for a few minor things
[ ] 3) No problem

5) Has your illness resulted in a decrease in communication between you and your family?
[ ] 0) No decrease in communication
[ ] 1) A slight decrease in communication
[ ] 2) Communication has decreased, and I feel somewhat withdrawn from them
[ ] 3) Communication has decreased a lot, I fell very alone

6) Some people with an illness like your fell they need from other people (friends, neighbors, family, etc.) to get things done from day-to-day. Do you feel you need such help and is there anyone to provide it?
[ ] 0) I really need help but seldom is anyone around to help
[ ] 1) I get some help, but I can't count on it all the time
[ ] 2) I don't get all the help I need, but maximum time help is there when I need
[ ] 3) I don't feel I need such help, or the help I need is available from my family or friends

7) Have you experienced any physical disability with your illness?
[ ] 0) No physical disability
[ ] 1) A slight physical disability
[ ] 2) A moderate physical disability
[ ] 3) A severe physical disability

8) An illness such as yours can sometimes cause a drain on the family's finances; are you having any difficulties meeting the financial demands of your illness?
[ ] 0) Severe financial hardship
[ ] 1) Moderate financial problem
[ ] 2) A slight financial drain
[ ] 3) No money problem

SECTION:IV

1) Sometimes having an illness can cause problem in a relationship. Has your illness led to any problems with your husband or wife (partner, if not married)?
[ ] 0) There has been no change in our relationship
[ ] 1) We are a little close since my illness
[ ] 2) We are definitely less close since my illness
[ ] 3) We have had serious problems or a break in our relationship since my illness

2) Sometimes when people are ill they report a loss of interest in sexual activities. Have you experienced less sexual interest since your illness?

[ ] 0) Absolutely no sexual interest since illness
[ ] 1) A marked of loss of sexual interest
[ ] 2) A slight loss of sexual interest
[ ] 3) No loss of sexual interest

3) Illness sometimes causes a decrease in sexual activity. Have you experienced any decrease in the frequency of your sexual activities?
   [ ] 0) No decrease in sexual activities
   [ ] 1) Slight decrease in sexual activities
   [ ] 2) Marked decrease in sexual activities
   [ ] 3) Sexual activities have stopped
4) Has there been any change in the pleasure or satisfaction you normally experience from sex?
   [ ] 0) Sexual pleasure and satisfaction have stopped
   [ ] 1) A marked loss of sexual pleasure or satisfaction
   [ ] 2) A slight loss of sexual pleasure or satisfaction
   [ ] 3) No change in sexual satisfaction
5) Sometimes an illness will cause interfere in a person's ability to perform sexual activities even though the person is still interested in sex. Has this happened to you, if so, what degree?
   [ ] 0) No change in my ability to have sex
   [ ] 1) Slight problem with my sexual performance
   [ ] 2) Constant sexual performance problem
   [ ] 3) Totally unable to perform sexually
6) Sometimes an illness will interfere with a couple's normal sexual relationship and cause arguments or problems between them. Have you and your partner had any argument like this, and if so, to what degree?
   [ ] 0) Constant argument
   [ ] 1) Frequent argument
   [ ] 2) Some argument
   [ ] 3) No argument

SECTION:V

1) Have you had as much contact as usual (either personally or by telephone) with members of your family outside your household since your illness?
   [ ] 0) Contact is the same or greater since illness
   [ ] 1) Contact is slightly less
   [ ] 2) Contact is markedly less
   [ ] 3) No contact since illness
2) Have you remained as interested in getting together with these members of your family since your illness?
   [ ] 0) Little or no interest in getting together with them
   [ ] 1) Interest is a lot less than before
   [ ] 2) Interest is slightly less

[ ] 3) Interest is the same or grater since illness

3) Sometimes, when people are ill, they force to depend on members of the family outside their household for physical help? Do you need physical help from them, and do they supply the help you need?
   [ ] 0) I need no help, or they give me all the help I need
   [ ] 1) There is help enough, except for some minor things
   [ ] 2) They give me some help but not enough
   [ ] 3) They give me little or no help even though I need a great deal
4) Some people socialize a great deal with members of their family outside their immediate household. Do you do much socializing with these family members, and has your illness reduced such socializing?
   [ ] 0) Socializing with them has been pretty much eliminated
   [ ] 1) Socializing with them has been reduced significantly
   [ ] 2) Socializing with them has been reduced somewhat
   [ ] 3) Socializing with them has been pretty much unaffected, or (I have never done so much socializing of this kind)
5) In general, how have you been getting along with these members of your family recently?
   [ ] 0) Good
   [ ] 1) Fair
   [ ] 2) Poor
   [ ] 3) Very poor

SECTION:VI

1) Are you still as interested in your leisure time activities and hobbies as you were prior to your illness?
   [ ] 0) Same level of interest as previously
   [ ] 1) Slightly less interest than before
   [ ] 2) Significantly less interest than before
   [ ] 3) Little or no interest remaining
2) How about actual participation? Are you still actively involved in doing those activities?
   [ ] 0) little or no participation at present
   [ ] 1) Participation reduced significantly
   [ ] 2) Participation reduced slightly
   [ ] 3) Participation remains unchanged
3) Are you as interested in leisure time activities with your family (i.e., playing cards & games, taking trips, going swimming, etc.) as you were prior to your illness?
   [ ] 0) Same level of interest as previously
   [ ] 1) Slightly less interest than before
   [ ] 2) Significantly less interest than before
   [ ] 3) Little or no interest remaining
4) Do you still participate in those activities to the same degree you once did?

[ ] 0) little or no participation at present
[ ] 1) Participation reduced significantly
[ ] 2) Participation reduced slightly
[ ] 3) Participation remains unchanged

5) Have you maintained your interest in social activities since your illness (e.g., social clubs, church groups, going to movies, etc.)?
[ ] 0) Same level of interest as previously
[ ] 1) Slightly less interest than before
[ ] 2) Significantly less interest than before
[ ] 3) Little or no interest remaining

6) How about participation? Do you still go out with your friends and do those things?
[ ] 0) little or no participation at present
[ ] 1) Participation reduced significantly
[ ] 2) Participation reduced slightly
[ ] 3) Participation remains unchanged

SECTION:VII

1) Recently, have you felt afraid, tense, nervous, or anxious?
[ ] 0) Not at all [ ] 1) A little bit [ ] 2) Quite a bit [ ] 3) Extremely

2) Recently, have you felt sad, depresses, lost interest in things, or felt hopeless?
[ ] 0) Extremely [ ] 1) Quite a bit [ ] 2) A little bit [ ] 3) Not at all

3) Recently, have you felt angry, irritable, or had difficulty controlling your temper?
[ ] 0) Not at all [ ] 1) A little bit [ ] 2) Quite a bit [ ] 3) Extremely

4) Recently, have you blamed yourself for things, felt guilty, or felt like you have let people down?
[ ] 0) Extremely [ ] 1) Quite a bit [ ] 2) A little bit [ ] 3) Not at all

5) Recently, have you worried much about your illness or other matters?
[ ] 0) Not at all [ ] 1) A little bit [ ] 2) Quite a bit [ ] 3) Extremely

6) Recently, have you been feeling down on yourself or less valuable as a person?
[ ] 0) Extremely [ ] 1) Quite a bit [ ] 2)A little bit [ ] 3) Not at all

7) Recently, have you been concerned that your illness has caused changes in the way you look that make you less attractive?
[ ] 0) Not at all [ ] 1) A little bit [ ] 2) Quite a bit [ ] 3) Extremely

Appendix C: Questionnaire (Bangla Version)

সামাজীক জনসংখ্যা সংক্রান্ত তথ্য

বয়স	
লিঙ্গ	☐ পুরুষ ☐ মহিলা
ধর্ম	☐ মুসলিম ☐ হিন্দু ☐ খ্রিস্টান ☐ বৌদ্ধ
বৈবাহিক অবস্থা	☐ বিবাহিত ☐ অবিবাহিত ☐ বিধবা/ বিপত্নিক ☐ তালাকপ্রাপ্ত ☐ আলাদা সংসার
আবাসিক এলাকা	☐ গ্রাম ☐ মফস্বল ☐ শহর
শিক্ষাগত যোগ্যতা	☐ নিরক্ষর ☐ প্রাইমারি ☐ এসএসসি ☐ এইচএসসি ☐ স্নাতক ☐ স্নাতকোত্তর
পেশা	☐ চাকুরী ☐ ব্যবসা ☐ দিন মজুর ☐ কৃষক ☐ বেকার

	☐ গৃহিণী ☐ শিক্ষার্থী ☐ অন্যান্য
মাসিক আয়	
আঘাত পেয়েছেন কতদিন হলো	
হাসপাতালে ভর্তির তারিখ	
পুনর্বাসন সেবা নেওয়ার সময়কাল	
জখম কিভাবে হয়?	☐ দুর্ঘটনার ফলে ☐ রোগের ফলে
আঘাতের কারন	☐ সড়ক দুর্ঘটনা ☐ উচু থেকে পড়ে যাওয়া ☐ মাথা/ঘাড়ে ভারী বস্তুর পতন ☐ স্কার্ফের আঘাত ☐ টিউমার ☐ অন্যান্য (নির্দিষ্ট)
আঘাতের ধরন	☐ টেট্রাপ্লেজিয়া ☐ প্যারাপ্লেজিয়া
এসিয়া স্কোর	☐ কমপ্লিট এ ☐ ইনকমপ্লিট বি ☐ ইনকমপ্লিট সি ☐ ইনকমপ্লিট ডি ☐ নরমাল ই
নিউরোলোজিকাল লেভেল	
শরীরের কোথাও কোনো ঘা আছে?	☐ হ্যা ☐ না
ঠিকানা	
ফোন নম্বর	

Adult Hope Scale

১= অবশ্যই মিথ্যা	৫= সামান্য সত্য
২= বেশিরভাগই মিথ্যা	৬= কিছুটা সত্য
৩= কিছুটা মিথ্যা	৭= বেশিরভাগই সত্য
৪= সামান্য মিথ্যা	৮= অবশ্যই সত্য

তালিকাভুক্ত বিষয়	**রেটিং**
১. আমি দুশ্চিন্তা থেকে বেরিয়ে আসার অনেক উপায় ভাবতে পারি।	
২. আমি উদ্যমের সাথে আমার লক্ষ্য অনুসরণ করি।	
৩. আমি বেশিরভাগ সময় ক্লান্তি বোধ করি।	
৪. যে কোন সমস্যার অনেক সমাধান আছে।	
৫. আমি সহজেই যেকোনো তর্কের মধ্যে পড়ে যাই।	
৬. যে জিনিসগুলো আমার জীবনে গুরুত্বপূর্ণ তা পাওয়ার জন্য আমি অনেক উপায় নিয়ে ভাবতে পারি।	
৭. আমি আমার স্বাস্থ্য নিয়ে চিন্তা করি।	
৮. আমি সমস্যা সমাধানের একটি উপায় খুঁজে পেতে পারি, যখন একই অবস্থায় অন্যরা নিরুৎসাহিত হয।	
৯. আমার অতীত অভিজ্ঞতা আমাকে ভবিষ্যতের জন্য প্রস্তুত করেছে।	
১০. আমি জীবনে বেশ সফল হয়েছি।	
১১. আমি সাধারণত যেকোনো কিছু নিয়ে উদ্বিগ্ন হই।	
১২. আমি আমার নির্ধারিত লক্ষ্যগুলি পুরণ করতে পারি।	
এজেন্সি সাবস্কেল স্কোর	
পাথওয়ে সাবস্কেল স্কোর	
সম্পূর্ণ স্কোর	

Brief COPE

	আমি একদমই এই কাজটি করিনি	আমি এটি সামান্য করছি	আমি এটি মোটামুটি করছি	আমি এটা অনেক করছি
১। আমি আমার মন খারাপকে সরিয়ে দেওয়ার জন্য কাজ বা অন্যান্য ক্রিয়াকলাপের দিকে ঝুঁকছি।	১	২	৩	৪
২। আমার এই পরিস্থিতিতে আমি কিছু করার সময় আমার চেষ্টাতে মনোযোগ দেই।	১	২	৩	৪
৩। আমি নিজেকে বলেছি "এটি বাস্তব নয়"।	১	২	৩	৪
৪। আমি নিজেকে ভালো রাখার মদ্য বা অন্যান্য ওষুধ ব্যবহার করছি।	১	২	৩	৪
৫। আমি অন্যদের কাছ থেকে মানসিক সহায়তা পেয়েছি।	১	২	৩	৪
৬। আমি এর সাথে মোকাবেলা করার চেষ্টা ছেড়ে দিয়েছি।	১	২	৩	৪
৭। পরিস্থিতি ভালো করার জন্য আমি ব্যবস্থা নিচ্ছি।	১	২	৩	৪
৮। আমি বিশ্বাসই করতে চাইনা যে এটি ঘটেছে।	১	২	৩	৪
৯। আমি আমার অস্বস্তিকর অনুভূতি এড়াতে কথা বলি।	১	২	৩	৪
১০। আমি অন্যদের কাছ থেকে সাহায্য ও পরামর্শ পেয়েছি।	১	২	৩	৪
১১। আমি মদ্য বা অন্যান্য মাদকদ্রব্য ব্যবহার করছি যেন এগুলো আমাকে এই পরিস্থিতির মধ্য দিয়ে যেতে সাহায্য করে।	১	২	৩	৪
১২। আমি এটিকে আরও ইতিবাচক মনে করার জন্য এটিকে একটি ভিন্ন আলোতে দেখার চেষ্টা করছি।	১	২	৩	৪
১৩। আমি নিজের নিন্দা করেছি।	১	২	৩	৪
১৪। কি করা যায় সে সম্পর্কে আমি একটি ব্যবস্থা নেওয়ার চেষ্টা করছি।	১	২	৩	৪
১৫। আমি কারও কাছ থেকে সান্ত্বনা এবং সহানুভূতিশীলতা পেয়েছি।	১	২	৩	৪
১৬। আমি মানিয়ে নেওয়ার চেষ্টা ছেড়ে দিয়েছি।	১	২	৩	৪
১৭। যা ঘটছে তার মধ্যেও ভাল কিছু খুঁজছি।	১	২	৩	৪

১৮। আমি আমার অসুস্থতা নিয়ে মজা করছি।	১	২	৩	৪
১৯। আমি এই সম্পর্কে কম ভাবার জন্য কিছু না কিছু করি, যেমন সিনেমা দেখতে যাওয়া, টিভি দেখা, পড়া, দিবাস্বপ্ন দেখা, ঘুমানো বা কেনাকাটা করা।	১	২	৩	৪
২০। যে ঘটনা ঘটেছে তার বাস্তবতা আমি মেনে নিয়েছি।	১	২	৩	৪
২১। আমি আমার নেতিবাচক অনুভূতিগুলি প্রকাশ করেছি।	১	২	৩	৪
২২। আমি আমার ধর্ম বা আধ্যাত্মিক বিশ্বাসে সান্ত্বনা খোঁজার চেষ্টা করছি।	১	২	৩	৪
২৩। কি করতে হবে সে সম্পর্কে অন্যদের কাছ থেকে পরামর্শ বা সাহায্য পাওয়ার চেষ্টা করছি।	১	২	৩	৪
২৪। আমি এর সাথে বাঁচতে শিখে গেছি।	১	২	৩	৪
২৫। আমি কি পদক্ষেপ নিবো তা নিয়ে অনেক চিন্তা করেছি.	১	২	৩	৪
২৬। যা ঘটেছে তার জন্য আমি নিজেকে দোষারোপ করছি।	১	২	৩	৪
২৭। আমি প্রার্থনা বা ধ্যান করছি।	১	২	৩	৪
২৮। আমি এই পরিস্থিতি নিয়ে মজা করছি।	১	২	৩	৪

Psychosocial Adjustment to Illness Scale (self -report) PAIS-SR

অনুচ্ছেদ-১: স্বাস্থ্যসেবা বিষয়ে মনোভাব

১। নিম্নলিখিত বিবৃতিগুলির মধ্যে কোনটি নিজের স্বাস্থ্যের যত্ন নেওয়ার ক্ষেত্রে আপনার মনোভাবকে সবচেয়ে ভাল ভাবে বর্ণনা করে?

[ ] ০ = আমি আমার স্বাস্থ্য নিয়ে খুবই সচেতন এবং মনযোগী।

[ ] ১ = অধিকাংশ সময় আমি আমার স্বাস্থ্যের যত্ন নেওয়ার ব্যাপারে নজর দেই।

[ ] ২ = সাধারানত, আমি স্বাস্থ্যের যত্ন নেওয়ার চেষ্টা করি কিন্তু মাঝে মাঝে এড়িয়ে চলি।

[ ] ৩ = স্বাস্থ্যের যত্ন নেওয়া এমন একটি বিষয় যা নিয়ে আমি খুব বেশি উদ্বিগ্ন না।

২। সম্ভবত আপনার এই অসুস্থতার প্রতি বিশেষ নজর এবং যত্নের প্রয়োজন আছে। দয়া করে নিচের বিবৃতিগুলোর মধ্য থেকে আপনার উপযুক্ত প্রতিক্রিয়াটি নির্বাচন করুন?

[ ] ০ = আমি সবসময় যে ভাবে কাজ করতাম, এখনও সেভাবেই করি এবং আমি অসুস্থতার প্রতি বিশেষ নজর দেই না কিংবা এটাকে বিশেষ বিবেচনার বিষয় মনে করি না।

[ ] ১ = নিজের যত্ন নেওয়ার জন্য আমার যা করা উচিত তা করার চেষ্টা করি, কিন্তু অনেক সময় আমি ভুলে যাই অথবা আমি খুব ক্লান্ত বা ব্যস্ত থাকি।

[ ] ২ = বর্তমান অসুস্থতায় আমি নিজের যত্ন বেশ ভালভাবেই নেই

[ ] ৩ = আমি আমার বর্তমান অসুস্থতার সমস্ত চাহিদার প্রতি নজর দেই এবং নিজের যত্ন নেওয়ার জন্য সবকিছু করতে পারি।

(৩) বর্তমান চিকিৎসা সেবা এবং ডাক্তার অর্থাৎ আপনাকে যে চিকিৎসা দিয়েছে তার মান সম্পর্কে আপনার উপলব্ধি কেমন?

[ ] ০ = চিকিৎসা কেন্দ্রের সেবা তেমন ভাল ছিল না কিন্তু ডাক্তারগণ সবসময়ই সর্বোত্তম চেষ্টা করেছেন।

[ ] ১ = চিকিৎসা সেবার মান খুব ভাল কিন্তু কিছু কিছু ক্ষেত্রে উন্নতি করা প্রয়োজন।

[ ] ২ = ডাক্তার এবং চিকিৎসাকেন্দ্রের সেবার মান এখন আর আগের মত নেই।

[ ] ৩ = এখনকার ডাক্তার এবং চিকিৎসেবাতে আমার তেমন বিশ্বাস নেই।

(৪) আপনার এই অসুস্থতার সময় ডাক্তার এবং চিকিৎসাকর্মী উভয় থেকে চিকিৎসা পেয়েছিলেন। তাদের কাছ থেকে আপনি কেমন চিকিৎসা পেয়েছেন এবং তাদের সম্পর্কে আপনার অনুভূতি কেমন ?

[ ] ০ = আমি যে চিকিৎসা সেবা পেয়েছি তাতে আমি খুবই অসন্তুষ্ট এবং আমার মনে হয় না স্বাস্থ্যকর্মীরা যা করতে পারে ত্‌র সবকিছু করেছে।

[ ] ১ = যে চিকিৎসা সেবা পেয়েছি তাতে আমি সন্তুষ্ট হয়নি কিন্তু মনে করি তাঁরা তাদের সর্বচ্চটাই দিয়েছেন।

[ ] ২ = কিছু সমস্যা থাকা সত্ত্বেও চিকিৎসা সেবা সব মিলিয়ে বেশ ভাল হয়েছে।

[ ] ৩ = চিকিৎসা এবং চিকিৎসাকর্মীরা চমৎকার ছিলেন।

(৫) যখন কেউ অসুস্থ হয় তখন অনেক মানুষই তাদের অসুস্থতা নিয়ে নানারকম মনোভাব পোষণ করে। নিচের বিবৃতিগুলি থেকে নিজের ক্ষেত্রে সবচেয়ে উপযুক্ত অনুভূতি টা বলুন।

[ ] ০ = আমি নিশ্চিত যে আমি আমার অসুস্থতা এবং অসুস্থতা জনিত সমস্যা থেকে দ্রুত আরোগ্য লাভ করতে পারব এবং পুনরায় আগের অবস্থায় ফিরে যেতে পারবো।

[ ] ১ = অসুস্থতার কারনে আমি কিছু সমস্যা অনুভব করছি ; কিন্তু আমি মনে করি আমি এগুলো শীঘ্রই উত্তরন করতে পারব এবং আগের অবস্থায় ফিরে যেতে পারবো।

[ ] ২ = এই অসুস্থতা শারীরিক এবং মানসিক ভাবে আমাকে অনেক চাপের সম্মুখীন করেছে। কিন্তু তা উত্তরনের জন্য আপ্রান চেষ্টা করছি এবং নিশ্চিত যে আমি পুরানো আমিতে ফেরত আসবো।

[ ] ৩ = আমার অসুস্থতার জন্য আমি খুবই দুর্বল এবং ক্লান্ত অনুভব করছি, জানিনা সময় থাকতে আমি সত্যিই আরোগ্য লাভ করতে পারব কি না

(৬) অসুস্থতা নিয়ে বিভ্রান্তিকর অভিজ্ঞতা হতে পারে, কিছু রোগী আছে যারা চিকিৎসক বা চিকিৎসা কর্মী দের কাছ থেকে তাদের অসুস্থতা নিয়ে যথেষ্ট তথ্য পায়নি বলে মনে করে। নিম্নে বর্ণিত বিবৃতি থেকে এই সম্পর্কে আপনার অনুভূতি কেমন তা নির্বাচন করুন।

[ ] ০ = আমি একাধিকবার জিজ্ঞাসা করলেও ডাক্তার এবং চিকিৎসা কর্মীরা আমার অসুস্থতা সম্পর্কে খুব কমই বলেছেন।

[ ] ১ = আমার অসুস্থতা সম্পর্কে কিছু তথ্য জানি কিন্তু আমি আরও জানতে আগ্রহী।

[ ] ২ = এই অসুস্থতা সম্পর্কে আমার ধারণা আছে এবং যদি আরও বেশি জানতে চাই তাহলে আরও তথ্য পাব।

[ ] ৩ = আমার অসুস্থতা সম্পর্কে পূর্ণ ধারণা পেয়েছি এবং ডাক্তার ও চিকিৎসা কর্মীরা আমাকে সমস্ত বিবরণ দিয়েছেন যা আমি জানতে চেয়েছি।

(৭) অসুস্থতার সময়, মানুষ তাদের চিকিৎসা সম্পর্কে বিভিন্ন ধারণা রাখে এবং প্রত্যাশা করে। নিম্নে বর্ণিত বিবৃতি থেকে আপনার চিকিৎসা সম্পর্কে আপনি কি প্রত্যাশা করতেন তা নির্বাচিত করুন।

[ ] ০ = আমি মনে করি ডাক্তার বা চিকিৎসা কর্মীরা ভাল ভাবে চিকিৎসা করতে সক্ষম এবং আমি সবচেয়ে ভালো সেবা পেয়েছি

[ ] ১ = আমার চিকিৎসাতে ডাক্তারের প্রতি বিশ্বাস আছে তবে কখনও কখনও আমার সন্দেহ লাগে

[ ] ২ = আমি আমার চিকিৎসার কিছু জিনিস পছন্দ করি না, কিন্তু ডাক্তার বলেছেন যেভাবেই হোক আমার এর মধ্য দিয়েই যাওয়া উচিত।

[ ] ৩ = অনেক ভাবেই আমি চিন্তা করে দেখেছি আমার অসুস্থতার তুলনায় চিকিৎসা পদ্ধতি খারাপ, এবং আমি ব্যাপারটি সম্পর্কে নিশ্চিত নই যে এর মধ্য দিয়ে যাওয়া যথাযথ কিনা।

(৮) অসুস্থতার সময় রোগীরা তাদের চিকিৎসা সম্পর্কে বিভিন্ন তথ্য পেয়ে থাকে, নিম্নে বর্ণিত বিবৃতি থেকে আপনি চিকিৎসা সম্পর্কিত কি রকম তথ্য পেয়েছেন তা নির্বাচিত করবেন।

[ ] ০ = আমার চিকিৎসা সম্পর্কে তেমন কিছুই বলা হয়নি এবং এই বিষয়টি থেকে আমাকে বিরত রেখেছে বলে মনে হয়।

[ ] ১ = চিকিৎসা সম্পর্কে আমার কাছে কিছু তথ্য আছে, কিন্তু আমি যতটা চাই ততটা নেই।

[ ] ২ = চিকিৎসা সম্পর্কে আমি মোটামুটি তথ্য জানি, কিন্তু দু একটি বিষয় আমি এখনও জানতে চাই।

[ ] ৩ = আমি মনে করি চিকিৎসা বিষয়ে আমার তথ্য সুস্পষ্ট।

অনুচ্ছেদ-২ কাজের পরিবেশ

(১) আপনার অসুস্থতা আপনার কাজ করার ক্ষেত্রে কি সমস্যা করে (স্কুলের কাজ)?

[ ] ০ = আমার কোন কাজে সমস্যা হয় না।

[ ] ১ = কিছু সমস্যা হয় তবে তা ছোট খাট

[ ] ২ = কঠিন রকমের কিছু সমস্যা হয়

[ ] ৩ = অসুস্থতা আমাকে পুরোপুরি কাজ থেকে দূরে রেখেছে

(২) আপনি এখন শারীরিকভাবে আপনার কাজ (পড়াশুনা) কতটা ভাল করেন?

[ ] ০ = খারাপ

[ ] ১ = খুব বেশি ভাল না

[ ] ২ = পরিমান মত

[ ] ৩ = খুব ভাল

(৩) গত ৩০ দিনের মধ্যে, আপনার অসুস্থতার কারনে আপনি কাজের জায়গায় কত সময় নষ্ট করেছেন (স্কুল/বাড়িতে)?

[ ] ০ = ৩ দিন বা তার কম

[ ] ১ = ১ সপ্তাহ

[ ] ২ = ২ সপ্তাহ

[ ] ৩ = ২ সপ্তাহের অধিক

(৪) অসুস্থতার আগে কাজ আপনার কাছে যতটা গুরুত্বপূর্ণ ছিল এখনও কি তাই আছে ?

[ ] ০ = খুবই কম; গুরুত্ব এখন নেই বললেই চলে

[ ] ১ = অনেক কম গুরুত্বপূর্ণ

[ ] ২ = সামান্য গুরুত্বপূর্ণ

[ ] ৩ = আগের মতই বা পূর্বের থেকেও বেশি গুরুত্বপূর্ণ

(৫) আপনার অসুস্থতার ফলে চাকুরী বা শিক্ষাক্ষেত্রে আপনার লক্ষ্য পরিবর্তন হয়েছে কি?

[ ] ০ = আমার লক্ষ্য অপরিবর্তিত আছে

[ ] ১ = আমার লক্ষ্য সামান্য পরিবর্তন হয়েছে।

[ ] ২ = আমার লক্ষ্য একটু বেশিই পরিবর্তন হয়েছে।

[ ] ৩ = আমার লক্ষ্য সম্পূর্ণরূপে পরিবর্তন হয়েছে।

(৬) আপনার অসুস্থতার পর থেকে আপনার সহকর্মী (সহপাঠী, প্রতিবেশী) দের সাথে কেমন সমস্যা বৃদ্ধি পেয়েছে কি?

[ ] ০ = খুব বেশি বৃদ্ধি পেয়েছে

[ ] ১ = মোটামুটি বৃদ্ধি পেয়েছে

[ ] ২ = সামান্য বৃদ্ধি পেয়েছে

[ ] ৩ = পায়নি

অনুচ্ছেদ-৩: সাংসারিক পরিবেশ

(১) অসুস্থতার পর থেকে আপনার স্বামী বা স্ত্রীর (সঙ্গী, বিয়ে না হলে) সাথে সম্পর্ক কেমন?

[ ] ০ = ভাল

[ ] ১ = মোটামুটি

[ ] ২ = খারাপ

[ ] ৩ = খুব খারাপ

(২) আপনার সাথে পরিবারের (যেমন- শিশু, পিতা-মাতা, ফুফু ,খালা, ইত্যাদি) লোকদের সাথে আপনার সম্পর্ক কেমন?

[ ] ০ = খুব খারাপ

[ ] ১ = খারাপ

[ ] ২ = মোটামুটি

[ ] ৩ = ভাল

(৩) অসুস্থতা আপনার বিভিন্ন দায়িত্ব এবং বাড়ির আশে পাশের কাজের ক্ষেত্রে কতটুকু অসুবিধা করেছে?

[ ] ০ = কোন অসুবিধা নেই

[ ] ১ = সামান্য হয়েছে তবে সহজেই তা উত্তরন করা যায়

[ ] ২ = মোটামুটি সমস্যা হয়েছে তবে সব কিছু উত্তরন করা যায় না।

[ ] ৩ = বাড়ির সব কাজ কর্মে খুব সমস্যা অনুভব করি

(৪) আপনার অসুস্থতার ফলে বাড়ির কাজকর্ম করতে যখন সমস্যা হচ্ছিলো তখন পরিবার আপনার দায়িত্ব পালনে কতটুকু সাহায্য করেছিল ?

[ ] ০ = পরিবার একেবারেই সাহায্য করতে পারে নি।

[ ] ১ = পরিবার সাহায্য করার চেষ্টা করেছিলো কিন্তু তারা আরও অনেক কিছুই করতে পারতো

[ ] ২ = কিছু ছোট খাট জিনিস বাদে বেশ ভালই সাহায্য করেছিলো।

[ ] ৩ = বাড়ির কাজকর্ম করতে আমার কোনো সমস্যা হয়নি।

(৫) অসুস্থতার ফলে আপনার সাথে পরিবারের যোগাযোগ কি কমে গেছে?

[ ] ০ = যোগাযোগ কমেনি।

[ ] ১ = যোগাযোগ সামান্য কমেছে।

[ ] ২ = যোগাযোগ কমে গেছে, আমি তাদের সাথে দুরত্ব বোধ করি।

[ ] ৩ = যোগাযোগ অনেক কমে গেছে এবং নিজেকে একা মনে হয়।

(৬) যারা আপনার মত একই রোগে আক্রান্ত তারা আশেপাশের লোক (বন্ধু, প্রতিবেশী পরিবার, ইত্যাদি) থেকে প্রতিদিনের কাজকর্মের ক্ষেত্রে সাহায্য আশা করে। আপনি কি মনে করেন আপনারও তেমন সাহায্যের প্রয়োজন আছে এবং এমন কেউ কি আছেন যিনি আপনাকে সাহায্য করতে পারেন?

[ ] ০ = আমার সাহায্য প্রয়োজন হয় কিন্তু খুব কমই কেউ সাহায্য করার জন্য কাছাকাছি থাকে।

[ ] ১ = খুব সামান্য সাহায্য পাই, কিন্তু এটা গোনার মধ্যে পড়ে না।

[ ] ২ = সবসময় সাহায্য পাই না, কিন্তু বেশিরভাগ সময়ই পাই।

[ ] ৩ = আমার এই ধরনের সাহায্যের প্রয়োজন আছে বলে মনে হয় না, অথবা যে সাহায্যের প্রয়োজন হয় তা পরিবার বা বন্ধুদের কাছ থেকে পাই।

(৭) আপনার এই অসুস্থতার সাথে কোন শারীরিক অক্ষমতার অভিজ্ঞতা আছে কি?

[ ] ০ = কোন শারীরিক অক্ষমতা নেই।

[ ] ১ = সামান্য শারীরিক অক্ষমতা আছে।

[ ] ২ = মোটামুটি শারীরিক অক্ষমতা আছে।

[ ] ৩ = অতিরিক্ত শারীরিক অক্ষমতা আছে।

(৮) একটি অসুস্থতা পরিবারে আর্থিক ক্ষতির কারন হতে পারে। আপনার এই অসুস্থতার কারনে আর্থিক চাহিদা মেটাতে কি কোন সমস্যা হচ্ছে?

[ ] ০ = গুরুতর আর্থিক সমস্যা

[ ] ১ = মোটামুটি আর্থিক সমস্যা

[ ] ২ = সামান্য আর্থিক সমস্যা

[ ] ৩ = কোন আর্থিক সমস্যা নেই।

অনুচ্ছেদ-৪-যৌন সম্পর্ক

(১) অসুস্থতা মাঝে মাঝে সম্পর্কের ক্ষেত্রে জটিলতা তৈরী করে। আপনার স্বামী বা স্ত্রীর (সঙ্গী, বিয়ে না করলে) সাথে কোন সমস্যা হয়েছে কি?

[ ] ০ = আমাদের সম্পর্কের কোন পরিবর্তন হয় নি

[ ] ১ = অসুস্থতার পর থেকে আমরা একটু কম ঘনিষ্ঠ

[ ] ২ = অসুস্থতার পর থেকে আমরা অনেক কম কাছাকাছি আছি

[ ] ৩ = অসুস্থতার পর থেকে আমাদের সম্পর্ক ভেঙ্গে গেছে অথবা কঠিন সমস্যায় আছি

(২) মানুষ যখন অসুস্থ হয় কখনও কখনও তারা বলে তাদের যৌন কার্যের প্রতি আগ্রহ কমে গেছে। আপনার অসুস্থতার পর থেকে আপনার যৌন আগ্রহ কি কমে গেছে বলে মনে করেন?

[ ] ০ = অসুস্থতার পর থেকে যৌন আগ্রহ একেবারেই নেই।

[ ] ১ = যৌন আগ্রহ অনেকাংশেই কমে গেছে।

[ ] ২ = যৌন আগ্রহ সামান্য কমে গেছে।

[ ] ৩ = যৌন আগ্রহে কোন কমতি হয়নি।

(৩) অসুস্থতা কখনও কখনও যৌন কার্যকলাপে হ্রাস ঘটায় আপনার কি যৌন কার্যকলাপ করার হার কমে গেছে?

[ ] ০ = যৌন কার্যকলাপ কমেনি।

[ ] ১ = যৌন কার্যকলাপ সামান্য কমেছে

[ ] ২ = যৌন কার্যকলাপ অনেকাংশেই কমেছে

[ ] ৩ = যৌন কার্যকলাপ বন্ধ আছে।

(৪) স্বাভাবিক অবস্থার যৌনসুখের সাথে বর্তমান অবস্থার যৌনসুখের তুলনামুলক কোন পরিবর্তন হয়েছে কি?

[ ] ০ = যৌনসুখ বা সন্তুষ্টি বন্ধ হয়ে গিয়েছে।

[ ] ১ = যৌনসুখ বা সন্তুষ্টি বেশ ভালই হ্রাস পেয়েছে।

[ ] ২ = যৌনসুখ বা সন্তুষ্টি সামান্য হ্রাস পেয়েছে।

[ ] ৩ = যৌন সন্তুষ্টিতে কোন পরিবর্তন হয় নি।

(৫) যৌন আগ্রহ থাকা সত্ত্বেও কখনও কখনও অসুস্থতা একজন ব্যক্তির যৌন কার্যকলাপ সম্পাদনে ব্যাঘাত ঘটায়। আপনার ক্ষেত্রেও কি এটা হয়েছে? যদি হ্যাঁ হয় তবে কি পরিমান?

[ ] ০ = যৌন কার্য সম্পাদনে আমার কোন পরিবর্তন হয় নি

[ ] ১ = যৌন কার্য সম্পাদনে সামান্য পরিবর্তন হয়েছে।

[ ] ২ = যৌন কার্য সম্পাদনে যেকোন সমস্যা থেকেই যায়।

[ ] ৩ = যৌন কার্য সম্পাদনে পুরোপুরি অক্ষম।

(৬) কখনও কখনও অসুস্থতা স্বামী-স্ত্রীর মাঝে স্বাভাবিক যৌন বিষয়ে ঝগড়া বা সমস্যার সৃষ্টি করে আপনি এবং আপনার স্ত্রী কি এরকম সমস্যা অনুভব করেছেন? যদি হ্যাঁ হয়, কি পরিমান?

[ ] ০ = ঝগড়া লেগেই থাকে

[ ] ১ = ঘন ঘন ঝগড়া হয়

[ ] ২ = সামান্য বাগড়া হয়

[ ] ৩ = কোন ঝগড়া হয়না

অনুচ্ছেদ-৫- বর্ধিত পারিবারিক সম্পর্ক

(১) অসুস্থতার পর থেকে আপনার পরিবারের বাহিরের সদস্যদের সাথে স্বাভাবিক (ব্যাক্তিগত বা ফোনের মাধ্যমে) যে যোগাযোগ ছিল সেটা কি আছে?

[ ] ০ = যোগাযোগ আগের মতই আছে অথবা অসুস্থতার পর থেকে বেশি

[ ] ১ = যোগাযোগ সামান্য কমে গেছে

[ ] ২ = যোগাযোগ লক্ষণীয় ভাবে কমে গেছে

[ ] ৩ = অসুস্থতার পর থেকে কোন যোগাযোগ নেই

(২) আপনার অসুস্থতার পর থেকে আপনি কি আপনার পরিবারের এই সদস্যদের সাথে একত্রিত হতে আগ্রহী ছিলেন?

[ ] ০ = তাদের সাথে একত্রে থাকতে কোন আগ্রহ নেই

[ ] ১ = আগের থেকে আগ্রহ অনেক কম

[ ] ২ = আগ্রহ সামান্য কম

[ ] ৩ = আগ্রহ আগের মতই আছে অথবা অসুস্থতার পর আরও বেশি

(৩) মানুষ যখন অসুস্থ হয়ে পড়ে তখন তারা শারীরিক সাহায্যের জন্য পরিবারের বাইরের সদস্যদের উপর নির্ভর হতে বাধ্য হয়। তাদের কাছ থেকে আপনার কোনো শারীরিক সাহায্যের প্রয়োজন আছে কি? বা তারা আপনার প্রয়োজনে সাহায্য করছে কি?

[ ] ০ = আমার কোনো সাহায্যের প্রয়োজন নেই অথবা তারা আমাকে সব ধরনের সাহায্য করে।

[ ] ১ = ছোট খাটো বিষয় ছাড়া তারা যথেষ্ট সাহায্য করে।

[ ] ২ = তারা আমাকে সাহায্য করে কিন্তু সেটা যথেষ্ট নয়।

[ ] ৩ = অনেক বেশি প্রয়োজন থাকা সত্ত্বেও আমি কোন সাহায্য পাই না

(৪) কিছু মানুষ পরিবারের ঘনিষ্ঠ সদস্য ছাড়াও অন্যদের সাথেও সামাজিক যোগাযোগ রক্ষা করে। আপনি কি আপনার পরিবারের এই ধরনের সদস্যদের সাথে সামাজিক আচার আচরন করেছেন? বা আপনার অসুস্থতার ফলে এই রকম সামাজিক আচার আচারন কমে গেছে কি?

[ ] ০ = তাদের সাথে সামাজিক আচার আচরন বেশ কমে গেছে

[ ] ১ = তাদের সাথে সামাজিক আচার আচরণ লক্ষণীয় ভাবে কমে গেছে

[ ] ২ = তাদের সাথে সামাজিক আচার আচরন কিছুটা কমে গেছে

[ ] ৩ = তাদের সাথে সামাজিক আচার আচরন আগের মতই আছে বা আমি কখনই খুব বেশি সামাজিক ছিলাম না

(৫) সম্প্রতি আপনি আপনার পরিবারের সদস্যদের কেমন কাছাকাছি পেয়েছেন ?

[ ] ০ = ভাল

[ ] ১ = মোটামুটি

[ ] ২ = খারাপ/তেমন না

[ ] ৩ = একেবারেই পাইনি/খুব খারাপ।

অনুচ্ছেদ-৬- সামাজিক পরিবেশ

(১) অসুস্থ হওয়ার আগে আপনার অবসর সময়ের কাজকর্ম এবং শখে আগ্রহ যেমন ছিল এখনও কি তেমন আছে?

[ ] ০ = আগের মতই আগ্রহ আছে

[ ] ১ = আগের থেকে আগ্রহ একটু কম

[ ] ২ = উল্লেখযোগ্য ভাবে আগের থেকে আগ্রহ কম

[ ] ৩ = খুব কম, অথবা কোন আগ্রহ নেই

(২) অবসর সময়ের কাজকর্মে আপনার অংশগ্রহণ কেমন? আপনি কি এখনও ঐ সকল কার্যক্রমে অংশগ্রহণ করেন?

[ ] ০ = খুব কম, অথবা বর্তমানে কোন অংশগ্রহণ নেই।

[ ] ১ = অংশগ্রহণ উল্লেখযোগ্য ভাবে কম।

[ ] ২ = অংশগ্রহণ সামান্য কমেছে।

[ ] ৩ = আগের মতই অংশগ্রহণ আছে।

(৩) আপনার পরিবারের সাথে অবসর সময়ের কাজকর্মে (যেমন- খেলা, ঠাট্টা করা ঘুরতে যাওয়া ইত্যাদি) অসুস্থ হওয়ার আগে যেমন ছিল এখনও কি তেমন আগ্রহ আছে?

[ ] ০ = আগের মতই সমান আগ্রহ আছে।

[ ] ১ = আগের চেয়ে সামান্য কম।

[ ] ২ = আগের থেকে উল্লেখযোগ্য ভাবে কম।

[ ] ৩ = খুব কম অথবা কোন আগ্রহ নেই।

(৪) আপনি কি এখনও আগের মতই সমান ভাবে ঐ সকল কাজকর্মে অংশগ্রহন করেন?

[ ] ০ = খুব কম অথবা বর্তমানে কোন অংশগ্রহণ নেই

[ ] ১ = অংশগ্রহণ উল্লেখযোগ্য ভাবে কম

[ ] ২ = অংশগ্রহণ সামান্য কমেছে।

[ ] ৩ = আগের মতই অংশগ্রহণ আছে

(৫) অসুস্থতার পর থেকে সামাজিক কর্মকাণ্ডে আপনার আগ্রহ কি বজায় আছে (যেমন-ধর্মীয় কাজে, কোন সমিতিতে বা সিনেমা দেখতে ইত্যাদি)?

[ ] ০ = আগের মতই সমান আগ্রহ আছে

[ ] ১ = আগের চেয়ে সামান্য কম

[ ] ২ = আগের থেকে উল্লেখযোগ্য ভাবে কম।

[ ] ৩ = খুব কম অথবা কোন আগ্রহ নেই।

(৬) আপনার বন্ধুদের সাথে এসকল কাজে অংশগ্রহণ কেমন? আপনি এখনও কি আপনার বন্ধুদের সাথে এসকল কাজে বাহিরে যান?

[ ] ০ = খুব কম অথবা বর্তমানে কোন অংশগ্রহণ নেই

[ ] ১ = অংশগ্রহণ উল্লেখযোগ্য ভাবে কম

[ ] ২ = অংশগ্রহণ সামান্য কমেছে

[ ] ৩ = আগের মতই অংশগ্রহণ আছে

অনুচ্ছেদ-৭ মানসিক যন্ত্রনা

(১) সম্প্রতি আপনি ভয়, চিন্তা, নার্ভাস ,বা উদ্বিগ্ন অনুভব করছেন কি?

[ ] ০ = একদম না

[ ] ১ = সামান্য রকম

[ ] ২ = একটু বেশি।

[ ] ৩ = অত্যন্ত বেশি

(২) আপনি দুঃখ, বিষণ্ন, কোন কিছু তে আগ্রহ হারিয়ে ফেলা বা আশাহীন এমন অনুভব করছেন কি?

[ ] ০ = অত্যন্ত বেশি
[ ] ১ = একটু বেশি
[ ] ২ = সামান্য রকম
[ ] ৩ = একদম না

(৩) সম্প্রতি আপনি কি রাগান্বিত, খিটখিটে, মেজাজ নিয়ন্ত্রণ অসুবিধা হয় এরকম অনুভব হয়েছে কি ?

[ ] ০ = একদম না
[ ] ১ = সামান্য রকম
[ ] ২ = একটু বেশি
[ ] ৩ = অত্যন্ত বেশি।

(৪) সম্প্রতি আপনি নিজেই নিজেকে কোন কিছুর জন্য দোষারোপ করছেন? নিজেকে দোষী মনে করা বা মানুষ কে ঠকিয়েছেন এ রকম মনে হয় কি ?

[ ] ০ = অত্যন্ত বেশি
[ ] ১ = একটু বেশি
[ ] ২ = সামান্য রকম
[ ] ৩ = একদম না

(৫) সম্প্রতি আপনি আপনার অসুস্থতা বা অন্যকোন বিষয় নিয়ে খুব চিন্তিত ছিলেন কি?

[ ] ০ = একদম না
[ ] ১ = সামান্য রকম
[ ] ২ = একটু বেশি
[ ] ৩ = অত্যন্ত বেশি

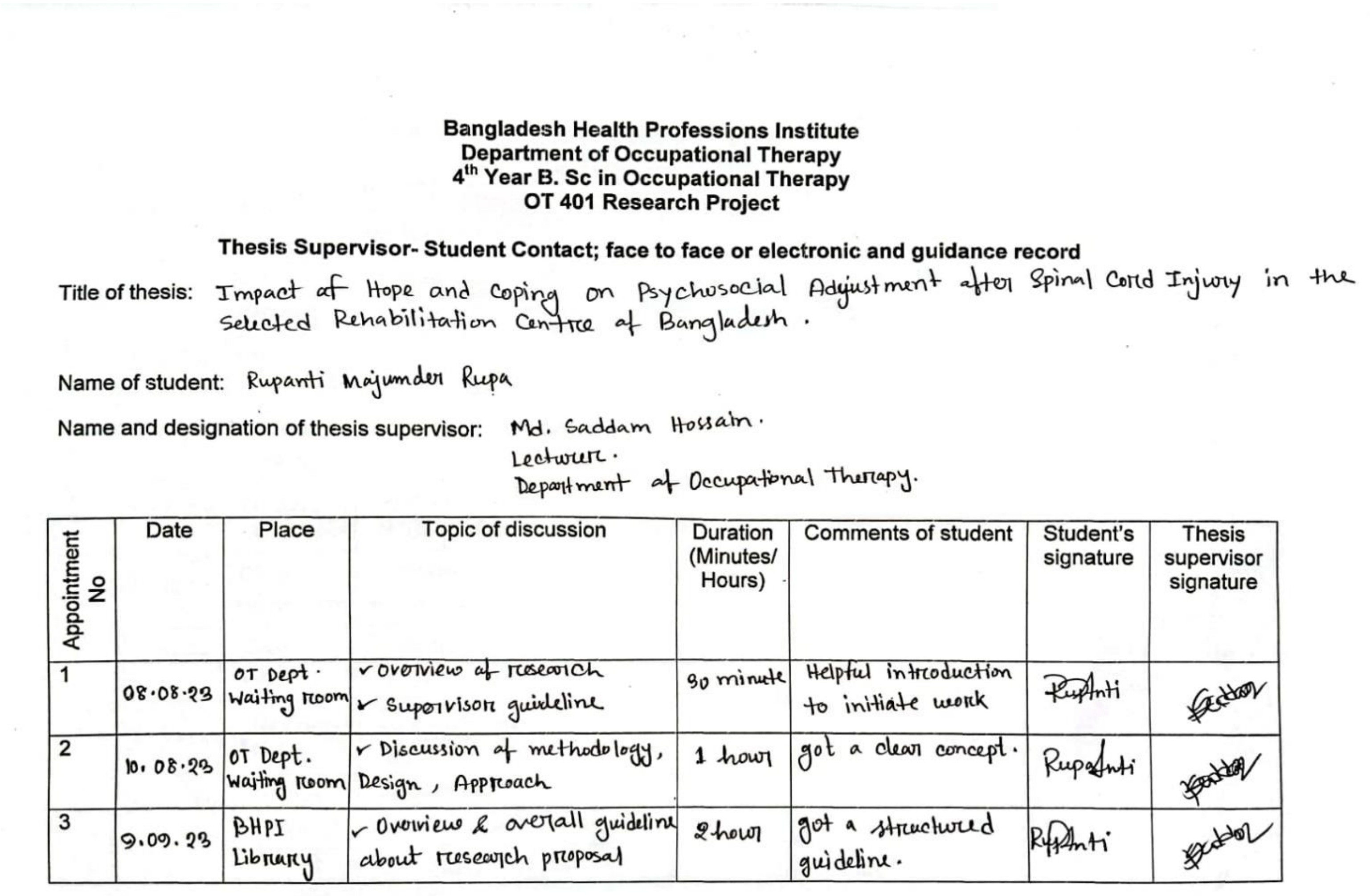
(৬) সম্প্রতি আপনি ব্যাক্তি হিসেবে নিজেকে ছোট বা মূল্যহীন মনে করছেন কি?

[ ] ০ = অত্যন্ত বেশি
[ ] ১ = একটু বেশি
[ ] ২ = সামান্য রকম
[ ] ৩ = একদম না

(৭) অসুস্থতার ফলে আপনার চেহারার আকর্ষণীয়তার পরিবর্তন হয়েছে এটা নিয়ে কি আপনি উদ্বিগ্ন?

[ ] ০ = একদম না
[ ] ১ = সামান্য রকম
[ ] ২ = একটু বেশি
[ ] ৩ = অত্যন্ত বেশি

Appendix D: Supervision Record Sheet



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: Impact of Hope and Coping on Psychosocial Adjustment after Spinal Cord Injury in the Selected Rehabilitation Centre of Bangladesh.

Name of student: Rupanti Majumder Rupa

Name and designation of thesis supervisor: Md. Saddam Hossain.
Lecturer.
Department of Occupational Therapy.

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	08.08.23	OT Dept. Waiting room	✓ Overview of research ✓ Supervisor guideline	90 minute	Helpful introduction to initiate work	Rupanti	
2	10.08.23	OT Dept. Waiting room	✓ Discussion of methodology, Design, Approach	1 hour	got a clear concept.	Rupanti	
3	9.09.23	BHPI Library	✓ Overview & overall guideline about research proposal	2 hour	got a structured guideline.	Rupanti	

4	11.9.23	OT Dept. waiting room	Scale feedback	15min	Helpful for reseach	RupAnti	
5	12.9.23	BHPI Library	Reseach proposal according to feedback	30 min	got clear feedback	RupAnti	
6	17.9.23	BHPI Library	Literature review	1 hour	got feedback about literature review	RupAnti	
7	10.10.23	BHPI library	Information sheet consent form withdrawal form	45 min	Data collection preparation	RupAnti	
8	17.10.23	Teachers room	Guideline for data collection	1 hour	Helpful for field test & data collection	RupAnti	
9	08.12.23	OT Dept. waitingroom	Discuss about data collection & number of participants	20min	helpful for carry on data collection	RupAnti	
10	20.12.23	OT Dept waiting room	Discussion about data input in SPSS	30min	Helpful for set variable	RupAnti	
11	02.01.24	Teachers room	Discussion about data input & participants numb	45 min	Helpful for data input	RupAnti	
12	03.01.24	Teachers room	feedback about data input	20min	Helpful for data	RupAnti	
13	10.01.24	OT Dept. wait room	Discussion about Analysis and 1st draft submission	1 hour	helpful for analysis	RupAnti	
14	17.01.24	OT Dept. waitingroom	Feed back about 1st draft.	1 hour	helpful for thesis	RupAnti	

15	29.1.24	OT Dept. waiting room	Discussion about result and discussion portion	1.5 hour	Prepare next draft	Rupanti	
16	1.02.24	OT Dept.	Ask for next draft (without appendix)	15 minute	Helpful for my thesis	RupAnti	
17	12.2.24	OT Dept.	Feedback for next draft	10 minute	helpful for Result and discussion	RupAnti	
18	20.3.24	OT Dept. waiting room	Feedback for 2nd draft	40 min	final correction	RupAnti	
19							
20							

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.