

Exploring Experiences in Accessing Transportation Among Patients with Spinal Cord Injury.



By

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STATEMENT OF AUTHORSHIP

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DEDICATION

This study is wholeheartedly dedicated to my beloved family, who are source of my
inspiration and strength.

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LIST OF ABBREVIATIONS

Short Form	Abbreviation
BHPI	Bangladesh Health Professions Institute
COREQ	Consolidated Criteria for Reporting Qualitative Research
CRP	Centre for the Rehabilitation of the Paralysed
ICF	International Classification of Functioning, Disability, and Health
IRB	Institutional Review Board
LMICs	Low- and Middle-Income Countries
MOHO	Model of Human Occupation
PEOP	Person-Environment-Occupation Model
SCI	Spinal Cord Injury
SDG	Sustainable Development Goal
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
W/C	Wheelchair

ABSTRACT

Background: Accessible transportation is vital for independence and social participation among individuals with Spinal Cord Injury (SCI). In Bangladesh, transport systems remain largely inaccessible, limiting mobility and quality of life.

Aim: To gain insight into the subjective experiences of patients with Spinal Cord Injury regarding the accessibility of transportation systems.

Methodology: A qualitative phenomenological approach was adopted. Nine community-dwelling individuals with SCI who use wheelchairs were recruited through purposive and snowball sampling. Data were collected through face-to-face semi-structured interviews and analyzed using Braun and Clarke's six-step thematic analysis framework. Ethical approval was obtained from the Institutional Review Board of Bangladesh Health Professions Institute (BHPI).

Results: Five major themes emerged: negotiating inaccessibility in transport systems; vulnerability, health management and physical risk; social and emotional burden; adaptive strategies and skills; and aspirations for inclusion and systemic change. Participants described inaccessible vehicles, unsafe infrastructure, stigma, financial burdens, and health risks. Despite these challenges, they demonstrated resilience through adaptive strategies and expressed strong aspirations for accessible design, policy enforcement, and equal mobility rights.

Conclusion: Transportation barriers for individuals with SCI in Bangladesh are structural and systemic. Inclusive planning and effective policy implementation are crucial for equitable mobility.

Keywords: Spinal Cord Injury, Transportation Accessibility, Wheelchair Users, Social Inclusion, Qualitative Study, Bangladesh.

CHAPTER I: INTRODUCTION

1.1 Background

Global challenges and opportunities often manifest with distinct regional characteristics, underscoring the importance of context-specific research within broader international frameworks (Kett et al., 2020). Transport is more than a mere means of physical conveyance; it serves as a fundamental determinant of health, personal independence, and the capacity for full societal participation (Kett et al., 2020; Jónasdóttir et al., 2020). For individuals with mobility impairments, the availability of accessible transport is indispensable for engaging in essential life domains such as employment, education, healthcare, and recreational pursuits, thereby promoting social justice and equity (Kett et al., 2020). Globally, approximately 15% of individuals experience various degrees of disability, a demographic proportion projected to rise due to global population growth and an aging society (Kett et al., 2020).

Despite increasing international awareness and the establishment of conventions like the United Nations Convention on the Rights of Persons with Disabilities (CRPD), substantial challenges persist in achieving equitable mobility for this vulnerable population (Kett et al., 2020 ; Jónasdóttir et al., 2020). The CRPD emphasizes the fundamental human right to equal access across various life aspects, including services, physical environments, transportation, and information (Jónasdóttir et al., 2020). Furthermore, Sustainable Development Goal (SDG) 11, which aims to "Make cities and human settlements inclusive, safe, resilient and sustainable," includes a specific target (11.2) to ensure access to safe, affordable, accessible, and sustainable transport systems for all by 2030, explicitly prioritizing the needs of persons with disabilities (Kett et al., 2020). Accessibility, in this context, refers to the characteristic of an environment, product, or service that enables it to be reached or entered without

disabling hindrances, ensuring equal approach, entry, and navigation (Jónasdóttir et al., 2020). This aligns with the concept of Universal Design, which advocates for the "design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Jónasdóttir et al., 2020).

However, disabled people worldwide continue to experience multiple hindrances to accessing the built environment (Jónasdóttir et al., 2020). These barriers are often multi-faceted, encompassing physical infrastructure deficits, pervasive attitudinal biases, ambiguities in policy, and significant economic burdens (Kett et al., 2020). The social model of disability posits that disability is largely a construct of discriminatory societal processes, asserting that impairment is an external factor creating a disabling environment rather than an inherent individual deficit (Kamarudin et al., 2023). This perspective highlights the collective societal responsibility for cultivating inclusive environments.

In various global contexts, including low- and middle-income countries (LMICs) and higher-income nations, common challenges emerge. For instance, physical barriers often include poorly designed road systems, such as uneven pavements, lack of sidewalks, or obstructions from construction materials and vendors, compelling individuals with mobility impairments to navigate traffic lanes and heightening injury risks (Sajib, 2022; Tennakoon et al., 2020; Kamarudin et al., 2023). Public transport vehicles frequently feature inaccessible designs, such as high footboards, multiple steps, narrow interiors, and insufficient space for wheelchairs, making boarding and alighting arduous (Sajib, 2022; Tennakoon et al., 2020; Kamarudin et al., 2023). Technological limitations, such as malfunctioning mechanized ramps on buses or non-functional lifts at stations, also contribute to significant anxiety and hinder travel

(Velho, 2019; Kamarudin et al., 2023).

Beyond physical impediments, deeply ingrained attitudinal and social barriers significantly undermine transport accessibility. Service providers, such as bus drivers and conductors, may display impatience, reluctance to assist, or engage in unsafe driving practices (Velho, 2019; Sajib, 2022; Tennakoon et al., 2020; Kamarudin et al., 2023). Societal prejudice, exemplified by conflicts over priority seating on public transport or staring at individuals with disabilities, underscores a lack of understanding and respect (Velho, 2019; Sajib, 2022; Tennakoon et al., 2020). These interactions often lead to profound psycho-emotional distress, including heightened anxiety, frustration, insecurity, and feelings of diminished self-worth, frequently culminating in social isolation (Velho, 2019; Kamarudin et al., 2023; Tennakoon et al., 2020).

Systemic policy and institutional shortcomings further impede transport accessibility. Ambiguities and inconsistencies in legislation, such as loopholes allowing exemptions from universal design requirements without clear guidelines, are prevalent (Jónasdóttir et al., 2020). Despite international mandates, people with disabilities are often insufficiently involved in policymaking processes, or their suggestions are overlooked (Jónasdóttir et al., 2020; Tennakoon et al., 2020). Weak enforcement mechanisms, insufficient oversight, and a lack of specific data on accessible transport progress also hinder effective implementation of inclusive policies (Jónasdóttir et al., 2020; Kett et al., 2020; Tennakoon et al., 2020).

Economic factors impose significant and often prohibitive barriers. Travel expenses for people with disabilities are generally higher due to the necessity of hiring taxis or requiring companions for assistance (Velho, 2019; Sajib, 2022; Tennakoon et al., 2020). This exacerbates "transport poverty," a condition where individuals with disabilities, who often experience lower income levels, face disproportionate financial

burdens for mobility, limiting their access to essential services and opportunities (Velho, 2019; Kett et al., 2020; Tennakoon et al., 2020). The cumulative effect of these multi-dimensional barriers physical, attitudinal, policy, and economic frequently leads to significant delays, missed opportunities, and a self-imposed restriction on travel, profoundly impacting quality of life (Velho, 2019). Therefore, research that is grounded in both global understanding and regional specificities is crucial for generating evidence that directly informs policy, practice, and community-level action tailored to diverse needs and aspirations.

1.2 Justification of Research

Accessible transport is a fundamental determinant of health, independence, and full societal participation for individuals with mobility impairments. Despite international mandates such as the UN Convention on the Rights of Persons with Disabilities (CRPD) and the Sustainable Development Goals (SDGs), significant accessibility gaps persist globally, particularly in low- and middle-income countries (LMICs) (Kett et al., 2020; Jónasdóttir et al., 2020). These gaps extend beyond physical infrastructure and include attitudinal barriers, weak policy implementation, and economic constraints.

Although global attention to transport accessibility is increasing, important knowledge gaps remain. There is limited context-specific evidence from South Asia that captures the lived experiences of people with mobility impairments. Existing research largely relies on quantitative indicators and fails to adequately document psycho-emotional impacts, cumulative barriers, lost opportunities, and additional economic burdens associated with inaccessible transport (Velho, 2019; Kett et al., 2020). Furthermore, the voices of people with disabilities are often underrepresented in policymaking and governance processes, limiting the development of effective, user-centered interventions. This study is therefore justified in its aim to provide qualitative, user-

centered evidence from a South Asian context. By examining how multi-dimensional barriers are experienced in everyday life, this research seeks to generate contextually grounded insights that can inform more inclusive transport policies and sustainable interventions. The findings will contribute to bridging the gap between global accessibility commitments and the lived realities of people with mobility impairments, ultimately supporting the development of more equitable and rights-based transport systems.

1.3 Operational Definitions

Spinal Cord Injury

A medical condition resulting from damage to the spinal cord that causes partial or complete loss of movement and/or sensation below the level of injury.

Patients with Spinal Cord Injury

Individuals who have been diagnosed with spinal cord injury and are receiving medical care, rehabilitation, or follow-up services.

Transportation

Any means of travel used by patients with spinal cord injury to move from one place to another, including public transport, private vehicles, taxis, paratransit, or community transport services.

Accessing Transportation

The ability of patients with spinal cord injury to obtain, use, and benefit from available transportation services when needed.

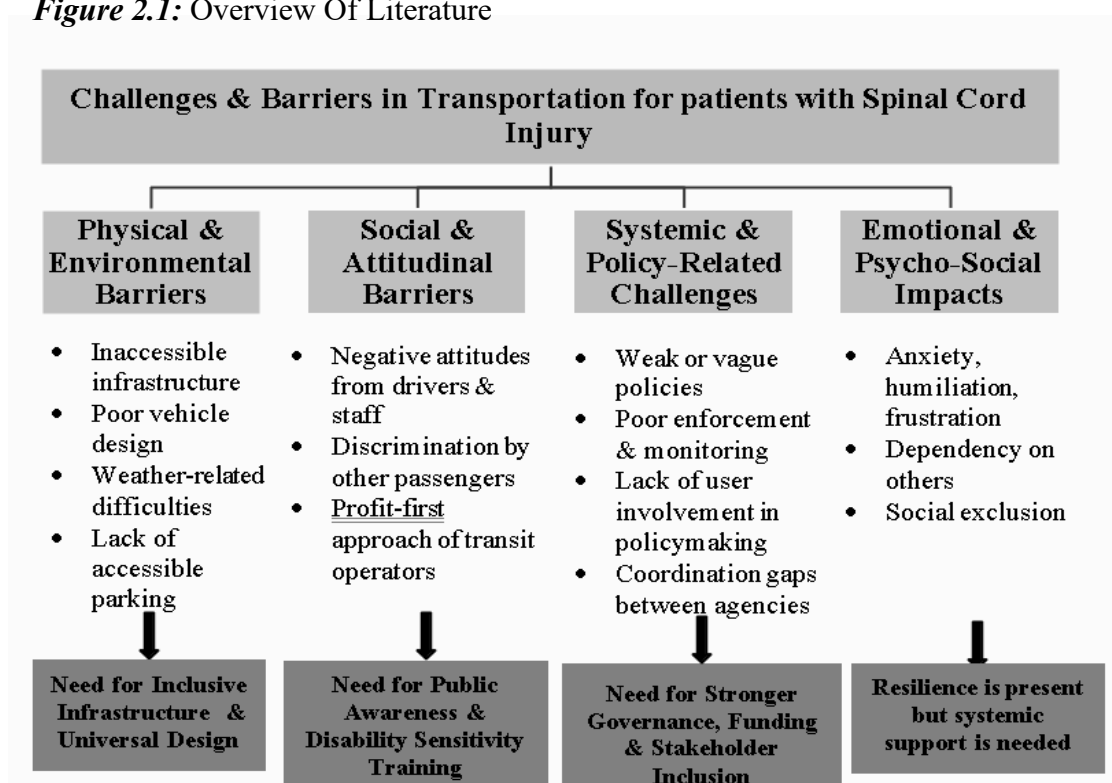
Experiences in Accessing Transportation

The personal perceptions, feelings, challenges, and overall encounters of patients with spinal cord injury when trying to access and use transportation services.

CHAPTER II: LITERATURE REVIEW

Mobility is crucial for independence, well-being, and access to essential opportunities like employment, education, and healthcare (Tennakoon et al., 2020). People with disabilities globally face significant transportation barriers, particularly in low- and middle-income countries where they are often overlooked in planning and policy (Tennakoon et al., 2020; Kett et al., 2020). In Dhaka, Bangladesh, public transport designs restrict the mobility freedom of individuals with disabilities (Sajib, 2022). This literature review aims to understand the subjective experiences of wheelchair users in Bangladesh regarding transportation accessibility. Objectives include: (a) exploring their perceptions and experiences in public and private transport; (b) identifying key physical, social, and systemic challenges; (c) examining strategies they use to navigate inaccessible systems; and (d) synthesizing insights for inclusive transport planning and policy.

Figure 2.1: Overview Of Literature



Research into transportation accessibility for wheelchair users has evolved from a narrow focus on basic physical access to a comprehensive understanding encompassing holistic inclusion, usability, and lived experience. Early initiatives concentrated on "minimum standards" for physical accessibility, examining elements like door widths and ramp gradients (Jónasdóttir et al., 2020; Unsworth et al., 2019). The discourse broadened to "universal design," advocating for usability by all, beyond mere compliance (Jónasdóttir et al., 2020). More contemporary themes emphasize "inclusive transport," recognizing that true accessibility extends beyond physical infrastructure to encompass social attitudes and policy coherence (Kett et al., 2020).

Methodologies have shifted from quantitative assessments to qualitative methods, capturing subjective experiences and psycho-emotional burdens like anxiety and frustration (Velho, 2019; Kamarudin et al., 2023; Sajib, 2022). While much foundational research originated from high-income countries, there is a growing body of work addressing unique LMIC challenges, such as dilapidated roads and attitudinal barriers (Tennakoon et al., 2020; Kamarudin et al., 2023; Sajib, 2022; Kett et al., 2020). This evolution signifies a critical paradigm shift: effective accessibility is a complex socio-technical challenge demanding interdisciplinary collaboration and profound user engagement, moving from isolated technical solutions to integrated, human-centered interventions.

2.1 Perceived Experiences

Wheelchair users in Bangladesh, as well as in other LMICs, encounter a complex array of barriers that significantly impede their access to transportation. These challenges manifest across physical and environmental aspects, social and attitudinal interactions, and systemic and policy-related deficiencies.

2.1.1 Physical and Environmental Barriers

Road infrastructure in Dhaka is often unsuitable, with rough surfaces, obstacles, and a lack of ramps or high kerbs at bus stops (Sajib, 2022; Kamarudin et al., 2023). Footpaths are frequently obstructed by construction materials or informal vendors (Sajib, 2022; Kamarudin et al., 2023). Public buses in Dhaka are not designed for physically challenged individuals, featuring high foot-boards and varying step shapes that make boarding difficult (Sajib, 2022; Tennakoon et al., 2020). Insufficient space for wheelchair maneuverability within vehicles is a recognized problem (Unsworth et al., 2019). Taxis often lack wheelchair storage due to NGV cylinders (Kamarudin et al., 2023). Train stations can be inaccessible, requiring climbing bridges, and mechanical aids like lifts are often non-functional, forcing physical lifting by passers-by (Kamarudin et al., 2023). Significant gaps between platforms and train doors pose considerable risk (Kamarudin et al., 2023). Accessible parking is scarce and often misused (Kamarudin et al., 2023). Adverse weather, like rain, severely disrupts travel, as users cannot hold umbrellas while operating mobility aids (Sajib, 2022).

2.1.2 Social and Attitudinal Barriers

Drivers in Dhaka often exhibit reluctance to pick up impaired individuals, perceiving them as time-consuming, and may show disregard for their safety (Sajib, 2022). In Sri Lanka, public bus drivers engage in dangerous driving practices and may physically or verbally abuse those with slower mobility (Tennakoon et al., 2020). Many attribute driver difficulties to a lack of awareness or training (Velho, 2019). Non-disabled passengers in Dhaka frequently occupy reserved seats and are reluctant to share space (Sajib, 2022). The "buggy wars" in London, a public debate over priority access to the wheelchair area on buses, has led to instances of verbal abuse (Velho, 2019). Profit-driven motives of transit bosses and drivers in Dhaka can lead them to avoid picking

up disabled individuals (Sajib, 2022).

2.1.3 Systemic and Policy-Related Challenges

Policy documents in Iceland are often inconclusive or incomplete, exhibiting limited clarity in legislation and guidelines, and a general lack of sufficient monitoring of services (Jónasdóttir et al., 2020). Loopholes frequently permit delayed compliance with universal design (Jónasdóttir et al., 2020). Limited involvement of disabled people in policymaking contravenes CRPD requirements for active user participation (Jónasdóttir et al., 2020; Kett et al., 2020). Poor coordination among authorities in Sri Lanka leads to continuous, uncoordinated road works (Tennakoon et al., 2020). Responsibility for environmental access to public transport stops can be contested between agencies (Unsworth et al., 2019). In LMICs, people with disabilities frequently experience "transport poverty" due to high costs, limited affordability, and restricted accessibility (Kett et al., 2020). Travel costs for disabled individuals in Dhaka are inflated by the necessity of additional assistance (Sajib, 2022).

2.2 Strategies for Navigating Inaccessible Transport Systems

In the face of pervasive transportation barriers, wheelchair users in Bangladesh and other contexts have developed a range of strategies to navigate inaccessible systems.

A common coping mechanism is reliance on others. In Dhaka, visually impaired individuals depend on drivers to announce stops, and disabled individuals often need a companion, increasing travel costs (Sajib, 2022). In Klang Valley, mobility-challenged travelers seek assistance from service providers or passers-by when mechanical facilities are out of order (Kamarudin et al., 2023). This reliance, while practical, undermines independence.

Individual Problem-Solving and Wheelchair Skills: Wheelchair users often devise personal problem-solving strategies. In London, users may ignore prescribed

conventions, like facing the opposite direction on a bus to alleviate travel sickness, or strategically maneuver their chairs to share limited space (Velho, 2019). Some develop "extreme" wheelchair skills, like jumping across platform gaps or utilizing escalators, or getting out of their wheelchair to disembark when ramps are unavailable (Velho, 2019). Some carry "tool-kits" with items like T-keys for secured ramps or personal portable ramps (Velho, 2019).

Wheelchair users often make strategic choices regarding transport modes based on perceived reliability and ease of use. In Klang Valley, participants expressed a strong preference for e-hailing services over traditional taxis due to ease of booking, predictable fares, improved driver service (influenced by in-app review facilities), and a heightened sense of security (Kamarudin et al., 2023).

2.3 Impacts of Inaccessibility

The cumulative impact of physical, social, and systemic barriers in transportation profoundly affects the lived experiences and social inclusion of wheelchair users.

Emotional and Psycho-Emotional Impacts: Wheelchair users frequently report negative emotions. In London, users describe pervasive feelings of stress, anxiety, frustration, and even profound worthlessness and heartbreak due to poor access (Velho, 2019). The unpredictability of journeys is a major stressor (Unsworth et al., 2019). In Klang Valley, being carried in public and observed by others during transfers leads to physical discomfort and deep humiliation (Kamarudin et al., 2023). In Sri Lanka, constant challenges result in mental exhaustion, fear of injury, and powerlessness (Tennakoon et al., 2020).

Missed Opportunities: Inadequacies of public transport directly translate into missed opportunities, including delays in accessing essential services like hospital appointments, and a general curtailment of participation in broader societal activities

(Tennakoon et al., 2020; Velho, 2019).

Dependency: Physical and financial dependency emerge as significant barriers. Many individuals with disabilities require companions due to mobility limitations, and a substantial number lack stable incomes, relying heavily on family and friends for transportation costs (Tennakoon et al., 2020). This high dependency, coupled with numerous barriers, exacerbates social isolation.

2.4 Conflicting Viewpoints

The discourse surrounding transportation accessibility for wheelchair users is marked by several conflicting viewpoints and ongoing debates.

Debates Between Universal Design and Targeted Services: A "twin-track" approach advocates for both mainstreaming disability through universal design and providing specialist targeted services (STS) (Kett et al., 2020). While universal design aims for universal accessibility (Jónasdóttir et al., 2020), STS are criticized for segregation and high costs (Kett et al., 2020). However, STS can be necessary where general access is non-existent (Kett et al., 2020).

Measuring Access Versus Measuring Inclusion: A significant challenge lies in quantifying the gap between the availability and actual use of transport systems, partly due to a lack of universally agreed definitions for "accessible travel" (Kett et al., 2020). Many guidelines focus on physical access, which is measurable, but "meaningful inclusion" remains largely undefined and unmeasured (Kett et al., 2020).

Effectiveness of Subsidies and Policy Implementation Challenges: The efficacy of subsidies as a solution is debated. In South Africa, despite heavily subsidized public transport for disabled individuals, access, rather than affordability, was the primary barrier (Kett et al., 2020). Some suggest limited funds would be better utilized to improve general accessibility for all (Kett et al., 2020). Even with progressive

legislation, implementing accessible transport services often faces significant challenges (Kett et al., 2020).

2.5 Key gaps in existing literature

- There is limited research that focuses specifically on the real-life experiences of wheelchair users in Bangladesh.
- Most studies concentrate more on physical barriers than on how individuals personally experience and interpret those barriers.
- The emotional and psychological effects of transportation challenges are not explored in enough depth.
- Little is known about how wheelchair users in Bangladesh manage and adapt to inaccessible transport systems in their daily lives.
- There is not enough research examining the gap between transportation policies and what wheelchair users actually experience in practice.

CHAPTER III: METHODS AND MATERIALS

This chapter outlines the research design and methods employed in this study to uncover the experiences of individuals with SCI in the transport system of Bangladesh. It details the research paradigm, study design, participant selection, data collection methods, and data analysis techniques. Additionally, the chapter addresses ethical considerations, and the measures implemented to ensure the reliability and validity of the research findings.

3.1 Study question, aim, and objectives

3.1.1 Study Question

How do patients with Spinal Cord Injury experience accessibility in transportation systems?

3.1.2 Study Aim

To gain insight into the subjective experiences of patients with Spinal Cord Injury regarding the accessibility of transportation systems.

3.1.3 Study Objectives

- Explore how patients with Spinal Cord Injury perceive and experience accessibility in public and private transportation.
- To identify key physical, social, and systemic challenges to transportation accessibility for patients with Spinal Cord Injury.
- To identify the strategies patients with Spinal Cord Injury adopt to navigate inaccessible transport systems.
- To synthesize valuable insights that can inform inclusive transport planning and policy making.

3.2 Study Design

3.2.1 Study method

Qualitative research seeks to understand the depth and nuance of human experiences, prioritizing how individuals interpret their lives and the social contexts that shape those interpretations (Creswell, 2009). This study adopts a qualitative approach to explore the lived accessibility experiences of with wheelchair bound Spinal Cord Injury patients, focusing on the barriers they face, the strategies they employ to navigate day to day transit, and the conditions that hamper/foster their success. Qualitative methods are uniquely suited to this inquiry, as they allow participants to articulate their stories in their own words, revealing not just what happens to them but why and how it matters to them (Braun & Clarke, 2006).

3.2.2 Study Approach

Phenomenology emphasizes personal experiences, thus enabling a thorough investigation of the subjective elements of a phenomenon. Phenomenological research aims to uncover the essence of human experiences. The main goal of this study is to understand how patients with Spinal Cord Injury experience accessibility in transportation and the challenges they face while seeking or navigating transport systems, inquiring about their actual and personal experiences.

Furthermore, the study seeks to qualitatively examine factors such as perceived accessibility, physical and environmental barriers, attitudinal obstacles, systemic challenges, as well as the strategies and solutions identified by wheelchair users to improve overall accessibility.

3.3 Study settings and period

3.3.1 Study settings

This research will be conducted at community level, centered around the Centre for the Rehabilitation of the Paralysed (CRP), Savar, and its surrounding areas. This setting is home to a diverse population of individuals with mobility impairments, among whom patients with Spinal Cord Injury are particularly prominent. CRP serves people from across Bangladesh with conditions such as spinal cord injury (SCI), stroke, amputation, cerebral palsy, and other physical disabilities. The chosen location offers access to individuals who regularly use or attempt to use transportation systems in both urban and peri-urban contexts. Additionally, the site is conveniently accessible to the student researcher, facilitating consistent engagement and data collection.

3.3.2 Study period

Study period was from 15 June 2025 to 15 December 2025 and the data collection period was from 2 August, 2025 to 15 September, 2025.

3.4 Study participant(s)

3.4.1 Study Population

The study included 9 individuals with SCI, with the sample size guided by the point of data saturation.

3.4.2 Sampling Techniques

A mixed non-probability sampling technique was employed. As stated in the study sample section, a careful selection of sample goes a great length towards establishing themes in case of phenomenological approach, in that light, purposive sampling will prove to be a reinforcing element for this study. During the data collection process, according to the researchers' foresight, snowballing was combined with purposive sampling to minimize the pressure participants might feel from being directly

approached by the researcher while reducing the chances of data withdrawal and ensuring the best quality of data.

3.4.3 Inclusion criteria:

- Patients with Spinal Cord Injury who have completed formal rehabilitation program from CRP and are now living in the community for more than 1 year.
- Individuals who use wheelchairs permanently and as a primary means of mobility.
- Aged 20 to 50 years
- Provide informed consent to participate.

3.4.4 Exclusion criteria:

- Patients with Spinal Cord Injury who don't use a wheelchair.
- Individuals with severe cognitive impairment or speech difficulties that may hamper effective communication.
- Anyone unwilling to participate or provide consent.

3.4.5 Participant overview

The student researcher interviewed 9 participants who stayed in their communities for at least one year following their discharge and use a wheelchair.

[Please see the next page for participants overview]

Table 1 *Overview of the participants.*

Pseudo name	Age	Living Area	Duration Since injury (year)	Transport Modes Used	Type of W/C	Support Person need	Employment Status
Badrul	45	Semi urban	32	Rickshaw, Bus	power	Always	Retired
Nazmul	50	Urban	37	Rickshaw, Bus	power	No	Employed
Parvez	39	Semi urban	7	Microbus, Car	manual	Sometimes	Self-employed
Shahid	43	Semi urban	21	Microbus, Bus	power	Always	Employed
Jahangir	28	Semi urban	9	Microbus, Bus	manual	Always	Self-employed
Sumon	32	Rural	11	Microbus, Rickshaw	power	Always	Unemployed
Mahmud	35	Semi urban	25	Microbus, Car	power	Always	Employed
Rafiq	30	Semi urban	8	Bus, Microbus	power	Sometimes	Employed
Rakib	35	Semi urban	12	Bus, Rickshaw	manual	Always	Unemployed

3.5 Ethical consideration

3.5.1 Ethical clearance

Ethical clearance issues were sought from the Institutional Review Board (IRB) of the BHPI through the department of Occupational Therapy. The student researcher informed all the participants about the purpose and aim of the study. All the participants were informed that their information was used in the research, but their names and addresses were confidential. All ethics were followed by the ethical principles of the World Medical Association (WMA), which was created for medical research (World Medical Association, 2013).

3.5.2 Informed consent

The researcher will provide an Information Sheet, Consent Form, and Withdrawal Form

to the participants.

Information Sheet: The Information Sheet serves as a concise guide, providing participants with key details about the research study, including its objectives, procedures, and researcher contact information. Its purpose is to ensure transparency, enabling participants to make informed decisions about their involvement and reaffirm their rights and privacy throughout the research process.

Consent Form: A research consent form is a concise document that outlines the participant's voluntary agreement to participate in a study. The researcher will explain the information sheet and obtain written consent from participants. The purpose of the study being conducted is to explore the experiences of parents on pediatric SCI rehabilitation and family dynamics. I am interested in learning about the experiences of parents on pediatric SCI rehabilitation and family dynamics.

Withdrawal sheet: Withdrawal sheet will be provided to the participants. Participants will have the right to withdraw the given data within 2weeks.

3.5.2 Unequal relationship

The student researcher will choose subjects fairly depending on predetermined criteria; they will not personally know any of them. Everyone will be treated with equal respect and without bias.

3.5.3 Risk & Beneficence

It will be explained to the participants and documented that this research has no physical, social, or psychological risk to the participants. Participants will not get any benefit from the researcher. The student researcher will be mindful of potential discomfort and provide support as needed.

3.5.4 Confidentiality

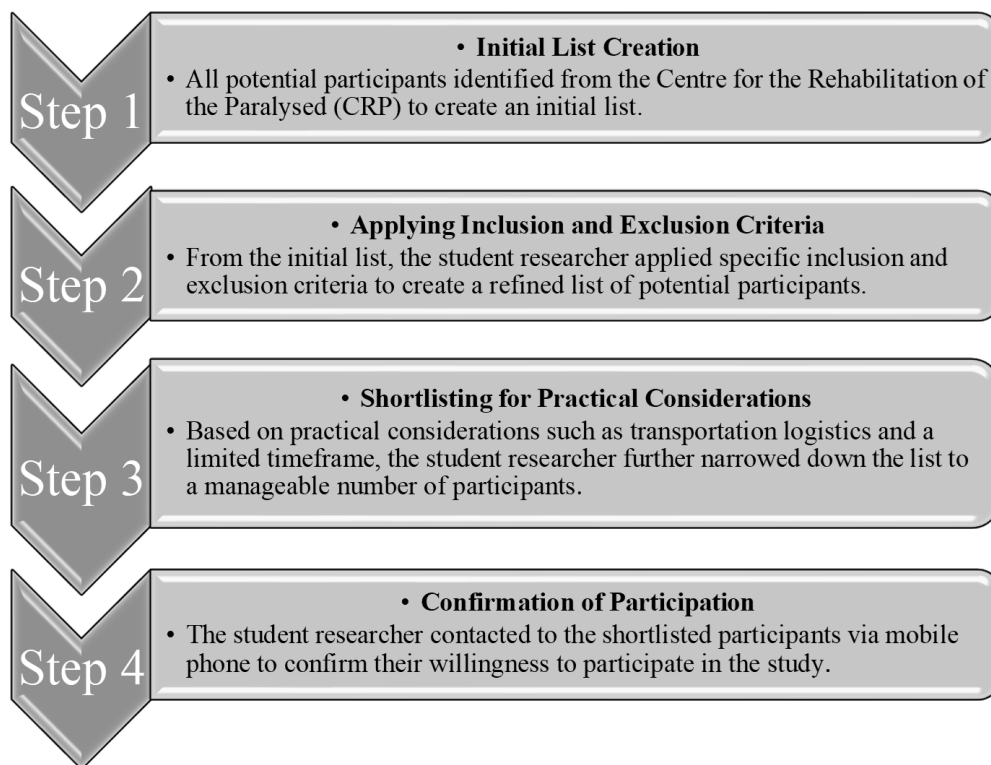
The explanatory statement for participants clearly indicates that only the researcher, supervisor, and subject teacher will have access to participant information. Neither the researcher nor anyone else is permitted to share any of this information. The researcher will guarantee to the participant that their information will be kept confidential for potential future uses, such as publications, conferences, or presentations.

3.6 Data Collection

3.6.1 Participant recruitment process

Figure 2

Participant recruitment process



3.6.3 Data Collection Method

The data collection method used for this study was face-to-face semi-structured interviews. The student researcher conducted in-depth interviews that lasted between 20 to 40 minutes. This format allowed the researcher to accurately assess participants

by observing their verbal and non-verbal cues, which helped create a comfortable environment. It also provided the opportunity to explore participants' experiences, perspectives, and opinions in greater depth. A quiet location was chosen for the interviews to ensure participants felt safe and at ease. The rapport established between the participants and the researcher fostered a trusting and harmonious environment. The researcher clearly explained the study's aim and purpose, as well as the interview procedure, including the use of audio recording. A semi-structured interview guide guided the interviews, which were conducted with both written and verbal consent from participants. The researcher audio-recorded the entire process using a high-quality mobile phone. Data collection continued until saturation was achieved, resulting in ten interviews. Semi-structured interviews offer a formal yet flexible approach, allowing the researcher to ask follow-up questions based on participants' responses. This flexibility contributed to a deeper understanding of the open-ended qualitative data collected.

3.6.3 Data Collection Instrument

The data collection instrument was a self-developed interview guide following the literature review. (Please see the Appendix D)

3.6.4 Field Test

The student researcher translated the questionnaire into Bengali, the native language of Bangladesh, with the supervisor's help. The student researcher conducted the field test with one participant. Through the field test, some language changes were made in the questions to improve clarity.

3.6.5 Data management and analysis

The data analysis used thematic analysis done by Braun & Clarke using six steps.

Step 1

Familiarization with the data In this stage, the student researcher listened to each interview recording actively. The data were transcribed verbatim in Bangla and then translated into English. All the transcriptions and translations were rechecked to ensure accuracy. Data were then read thoroughly, noting initial thoughts.

Step 2

Generating initial codes The student researcher read the data, obtained a general view, and identified relevant segments by reading data. Initial codes were developed and labeled. These were reviewed by the supervisor.

Step 3

Generating themes All meaningful codes were documented, and similar codes were grouped into potential themes. These themes were then organised by the student researcher and noted down systematically. All the data relevant to each theme were collected, and possible names assigned to the themes.

Step 4

Reviewing potential themes At this stage, all coding and themes were reviewed again, and the relationships between themes and sub-themes were developed. A thematic map of the analysis was developed, and the findings were discussed with the supervisor for further refinement.

Step 5

Defining and naming the theme Further analysis of the underlying data was done for each theme and sub-theme. To ensure precision, clear definitions and specific naming were developed for each theme.

Step 6

Writing the Report Finally, the student researcher wrote up an academic report for the dissertation by writing the results chapter, incorporating verbatim quotes from participants to support the findings.

3.7 Trustworthiness

The trustworthiness of this qualitative research is based on the evaluative framework proposed by Fossey et al. (2002). This framework comprises criteria for ‘methodological rigor’ and ‘interpretive rigor’, drawing emphasis on such aspects as congruence, responsiveness to social context, appropriateness, adequacy, transparency, authenticity, coherence, reciprocity, and typicality. The present consideration of all these criteria made the research inclusive and credible (Fossey et al., 2002).

3.7.1 Methodological Rigor

Congruence: The research design showed congruence in its choice of a phenomenological approach, which fits the aim to explore lived experiences. The chosen methodology ‘fit’ the research issue in that it provided a philosophical and theoretical framework for the study of social justice experiences among people with spinal cord injuries in Bangladesh. The selected methods, for example, in-depth interviews and thematic analysis, were appropriate to the phenomenological approach used. This was adhered to throughout the course of the research, from its conception to its analysis, consistently ensuring everything was in line (Refer to 3.2 Study Design).

Responsiveness to Social Context: Emergent research design provided an excellent platform for adapting to real-life social settings; consequently, this made it feasible for the researcher to be flexible and promptly respond to the needs and contexts presented by participants. Purposive sampling provided engagement with participants well placed

to provide insights into the research questions. Familiarity with the study context was achieved through rapport building and preliminary discussion prior to data collection (Refer to section 3.2 Study Participants)

Appropriateness: The sampling strategies used were appropriate in terms of identifying participants who could provide meaningful and relevant data: this included the use of purposive sampling informed by clear inclusion and exclusion criteria. Data collection methods: semi-structured, face-to-face interviews were selected to elicit detailed and nuanced accounts of the participants' experiences, which are in line with the aims of this study (Refer to section 3.4.2 Sampling Techniques).

Adequacy: An adequate sample size was used to reach data saturation such that a comprehensive understanding was reached about the phenomenon. Detailed descriptions of participant demographics, sampling criteria, and levels of participation were provided. Data collection and analysis were done in an iterative manner, that is, findings from initial interviews informed subsequent interviews as a means of refining and deepening the understanding. A number of different data gathering techniques were used, including field notes and interviews. These are sensitive to the language and perspective of participants and allow for corroborating, illuminating, and rival accounts. The written report provides a clear and detailed description of the methodology hence readers are able to understand the context in which the study was conducted.

Transparency: The data collection and analysis were transparent since there was an audit trail that has been maintained to record all the decisions and adjustments made in the course of the study. Rival and competing accounts were explicitly addressed in the analysis for the purpose of creating a balance in the interpretation. Participants' voices and perspectives were brought to the fore throughout the entire study to maintain an

analysis that remained grounded in the experiences of participants.

3.7.2 Interpretive Rigor

Authenticity: The student researcher ensured that verbatim quotes gave participants a place to express their views in their own voices to ensure that experiences were authentically represented. A diversity of standpoints, including dissenting and rival views, were documented and reported in order to present a comprehensive view of the phenomenon. Attempts were made to ensure that the findings would be recognizable to participants as reflective of their experience. While it was not possible to involve participants directly in data checking or analysis, due to time constraints, attempts were made to account for power dynamics in both data collection and analysis.

Coherence: Findings were derived directly from the data, with plausible linkages between raw data and interpretations. A large proportion of data was incorporated into findings to ensure comprehensiveness. Having a supervisor present added another perspective to the research in considering the corroborating and contesting elements that strengthen the analysis.

Reciprocity: In as much as not all stages of member checking and involvement of participants in presenting the study could be reached with the constraints indicated above respondents were greatly involved during the interviews. The researcher did reflect on interactions with participants out of ethical reciprocity and respect for them throughout.

Typicality: There was no claim about generalizability of findings. Quite the contrary; this study offered an in-depth look into very particular experiences the participants had regarding a phenomenon within this context.

Permeability of the Researcher's Intentions, Engagement, and Interpretations:

The student researcher's role in the interpretive process was openly acknowledged, and

reflexivity was maintained through field notes. This placed the student researcher in a position where assumptions and biases could be critically examined. The study process deepened the researcher's understanding of the participants' social worlds, which in turn influenced and refined the initial conceptualisation of the research problem. The written report is transparent about the researcher's intentions, values, and theoretical perspectives, thus clarity in the interpretive process is assured.

CHAPTER IV: RESULTS

This chapter presents the findings of the study exploring how individuals with spinal cord injury (SCI) experience and navigate accessibility within transportation systems in Bangladesh. Through thematic analysis of nine in-depth interviews, five overarching themes were generated. These themes reflect the structural barriers embedded in transport systems, the embodied vulnerabilities of traveling with SCI, the social and emotional dimensions of mobility, the strategies participants adopt to navigate inaccessible environments, and their aspirations for a more inclusive transportation future. Each theme is supported by sub-themes and direct participant quotations to maintain authenticity and ensure the lived experiences are presented in the participants' own words.

Table 4.1.1

Overview of Themes

Theme	Sub-themes
Negotiating Inaccessibility in Transport System	Structural barriers in vehicles and infrastructure
	Environmental and journey-level barriers
Vulnerability, Physical Risk and Health Management	Physical risk in transit
	Managing bowel, bladder, and bodily needs
	Health consequences
Social & Emotional Burden	Stigma and misrecognition
	Emotional consequences
	Mixed social experiences
Adaptive Strategies & Skills	Practical adaptive strategies
	Internal and personal strategies
	Agency and travel decisions
Aspirations for Inclusion and Systemic Change	Accessible transport design
	Policy enforcement and awareness
	Inclusive society and equal mobility

4.2 Theme One: Negotiating Inaccessibility in Transport System

Mobility for participants with SCI was shaped by multiple layers of structural and environmental challenges. Their accounts highlighted persistent difficulties when interacting with public transport, vehicle designs, and journey conditions. These barriers often dictated whether, when, and how they could travel, revealing the constant negotiation required to participate in everyday life.

4.2.1 Sub-theme: Structural barriers in vehicles and infrastructure

Participants frequently reported difficulty when entering or exiting vehicles. Rakib expressed this clearly, saying, “Bus, train... we travel with much difficulty.” Mahmud shared with visible concern, “Public transport drivers don’t really care. When you get on the bus, they leave immediately and there’s a risk of falling.”

Badrul also shared his discomfort, explaining, “I cannot get on the bus by myself... the supervisor lifts me and other people stare at me.” Parvez added that even with smaller vehicles, support was necessary: “At the start... two people help lift me into the car.” These accounts reflect a transport environment lacking basic accessibility features such as ramps, low steps, or stable boarding mechanisms.

Wheelchair storage was another recurring issue. Rafiq explained, “They say— ‘Where will we keep the wheelchair? It will take space. It will take extra fare.’” He continued, “Many times they do not want to take the wheelchair because it is trouble for them.” Nazmul shared that acceptance was inconsistent, stating, “As long as they can keep my wheelchair, I manage fine this is very important.” Rafiq also reported damage to his device: “My new wheelchair was damaged when they were taking it out of the bus.”

4.2.2 Sub-theme: Environmental and journey-level barriers

Participants described environmental obstacles such as rough roads and uneven surfaces. Mahmud commented, “The transportation system in our country is very unreliable... I often had to endure many bumps and shakes.” Shamsun added, “Roads with tree branches, uneven levels... the wheelchair hits the tree.” Parvez described additional safety risks, saying, “Sometimes roads are very rough... areas where accidents happen frequently are not safe.”

Time and weather significantly influenced participants’ travel choices. Sumon explained, “I do not travel at night... if I get down at 2 or 3 AM, I may face danger.” Mahmud noted, “When the weather is bad, getting on and off becomes difficult and there is always a risk of falling.” Nazmul shared, “Weather is very important... I avoid traveling before 8 AM.” Badrul added, “I go out early to avoid traffic and be ready before the scheduled time.”

4.3 Theme Two: Vulnerability, Health Management and Physical Risk

Participants spoke extensively about the physical demands of traveling with SCI. Their bodies were central to the mobility experience, with risks of injury, pain, fatigue, and bowel and bladder concerns shaping decisions about when and how to travel.

4.3.1 Sub-theme: Physical risk in transit

Injuries during travel were common. Mahmud shared, “When you get on the bus, they leave immediately, and there’s a risk of falling.” He further recalled, “I have fallen before when the bus moved suddenly.” Sumon added, “When getting down, I hit my head on the rod because the bus braked suddenly.” Rafiq also described equipment damage: “My new wheelchair was damaged when they were taking it out of the bus.” Pain and fatigue were constant concerns, especially during long journeys. Sumon stated, “We have to sit for 7–8 hours. There is a risk of getting sores on my back.” Rakib

added, “Traveling long distance increases tiredness and pressures on the body.”

4.3.2 Sub-theme: Managing bowel, bladder, and bodily needs

Bowel and bladder issues were significant concerns. Mahmud explained, “As we are SCI patients, our bowel management becomes an issue.” Badrul recalled, “Because of bathroom problems I even missed a flight.”

Sumon described his distressing experience, saying, “I have had accidents during travel... by God’s grace no one noticed.” Participants developed strict routines. Sumon stated, “I keep my food and medicine controlled... during long journeys if the vehicle stops, I lie down.” These strategies show the extensive bodily preparation required for mobility.

4.3.3 Sub-theme: Health consequences

Rafiq described a severe incident: “I got a wound on my leg from the iron part under the seat and spent eight thousand taka treating it.” This underscores the medical and financial vulnerabilities associated with inaccessible transport.

4.4 Theme Three: Social & Emotional Burden

Alongside physical barriers, participants experienced social stigma and emotional strain during travel. Their accounts highlight how attitudes of drivers, helpers, and the public shaped their feelings of dignity, comfort, and belonging.

4.4.1 Sub-theme: Stigma and misrecognition

Mahmud described feeling unwelcome: “Drivers do not want to take me because helping me get on and off is trouble for them.” He added, “Bus drivers think if they take a disabled person it will waste their time.”

Negative attitudes were common. Mahmud explained, “People think our life is finished, that we have nothing left to do.” Badrul described being stared at: “They stare when the supervisor lifts me.” Parvez recounted a hurtful comment: “People say, ‘He’s

already sick and on top of that he acts proud.””

4.4.2 Sub-theme: Emotional consequences

These social reactions shaped participants’ emotional well-being. Shamsun stated, “I could never feel respected after my spinal cord injury.” Mahmud added, “It makes me uncomfortable.” These reflections illustrate the emotional burden that accompanies public mobility.

4.4.3 Sub-theme: Mixed social experiences

Experiences with others were inconsistent. Rakib noted, “Sometimes people help, sometimes they don’t.” Mahmud shared, “Outside CRP, people often neglect us.” Yet some found supportive environments. Nazmul explained, “In private cars I always received good behaviour.”

4.5 Theme Four: Adaptive Strategies & Skills

Despite systemic barriers, participants developed creative and purposeful strategies to maintain mobility. Their narratives reflect resilience, agency, and a strong desire to remain engaged in daily life.

4.5.1 Sub-theme: Practical adaptive strategies

Participants chose vehicles that supported their needs. Parvez explained, “I use auto and micro because they stop whenever I say.” Rakib said, “I do not use public buses.” Nazmul shared, “Four-wheeled private cars... they take special care.”

Negotiating support with drivers was common. Shamsun stated, “I tell the driver to drive slowly.” Rafiq added, “I ask the driver if he can lift me properly before I get in.” Badrul explained, “I talk to them beforehand so that getting on and off becomes easier.” Participants also planned around time and weather. Badrul said, “I leave early so I can avoid trouble and be ready on time.” Rakib shared, “I avoid going out at night.” Nazmul added, “Weather is very important.”

4.5.2 Sub-theme: Internal and personal strategies

Mahmud reflected thoughtfully, “I have adjusted myself mentally.” He added, “I have become used to this.”

Self-management routines were also central. Sumon explained, “I keep my food and medicine controlled... I lie down during breaks.”

4.5.3 Sub-theme: Agency and travel decisions

Rakib explained, “Sometimes we change the place, we go somewhere closer.” Mahmud added, “If I feel I cannot manage, then I do not go.”

4.6 Theme Five: Aspirations for Inclusion and Systemic Change

Despite ongoing challenges, participants expressed clear and thoughtful visions of a transport system that acknowledges and supports their needs. These aspirations reflect their desire for safety, autonomy, dignity, and equal rights.

4.6.1 Sub-theme: Accessible transport design

Participants emphasized the need for accessible features. Rakib stated, “Ramp and lift systems would make it easy for us.” He added, “If there was a specific place for us to sit, then it would be easy.” Parvez shared, “Ramps on roads. Accessible seats in buses.” Specialized transport services were also desired. Rakib explained, “If every area had a specific bus for disabled passengers, it would help.” Sumon noted, “There is no separate system for disabled people.”

4.6.2 Sub-theme: Policy enforcement and awareness

Participants highlighted gaps in policy implementation. Shamsun stated, “There are rules but no enforcement.” Rakib added, “Facilities will come only when accessibility becomes mandatory.”

Awareness among transport workers and society was also emphasized. Rakib said, “Drivers should know how to handle disabled passengers.” Mahmud added, “People outside do not understand us.”

4.6.3 Sub-theme: Inclusive society and equal mobility

Participants articulated aspirations for dignity and equality. Badrul stated, “We should have equal rights to move like everyone else.” Jahangir added, “I hope the problems we face now will be solved in the future.”

CHAPTER V: DISCUSSION

This study explored the transportation challenges faced by individuals with spinal cord injury (SCI) in Bangladesh, focusing on their experiences navigating public and private transport systems. The findings shed light on a series of physical, social, and systemic barriers that prevent individuals with SCI from accessing transportation freely and safely. These barriers range from infrastructural deficiencies and inaccessible vehicles to social stigma and exclusion, all of which compound the difficulties faced by individuals with SCI in their daily lives.

The results of this study align with existing research that has documented the physical barriers individuals with disabilities face in transportation. Participants in this study reported frequent issues with the lack of accessible vehicles, the absence of ramps and lifts, and inadequate wheelchair spaces in public transportation. These structural deficiencies severely limit mobility, often forcing individuals with SCI to rely on others for physical assistance. Previous studies, such as those by Gonzalez-Viejo et al. (2023), emphasize that these infrastructural issues not only restrict physical access to transportation but also perpetuate social exclusion. In line with these findings, the participants in this study expressed frustration with the lack of infrastructure that facilitates independent mobility, thereby emphasizing the urgent need for comprehensive reforms to public transport systems.

Beyond the physical challenges, participants in this study also experienced significant social barriers, particularly in the form of stigma and discrimination. Many participants reported feeling judged or treated as burdens by others when using public transport. This aligns with Ownsworth et al.'s (2023) findings, which highlighted that individuals with SCI often face negative societal perceptions that impact their emotional well-being and social participation. The emotional toll of stigma was evident

in the accounts of several participants, who described feelings of humiliation, frustration, and isolation. These emotional responses highlight the broader societal challenge of overcoming attitudes of pity and exclusion that accompany disability.

The psychological burden of stigma adds another layer of difficulty to an already challenging situation. As participants in this study noted, the negative social attitudes they faced not only affected their travel experiences but also their overall quality of life. This underlines the importance of addressing social perceptions alongside physical infrastructure improvements to create a more inclusive and supportive environment for individuals with SCI.

Despite these challenges, participants in this study demonstrated remarkable resilience and resourcefulness in developing adaptive strategies to manage their mobility. Many participants relied on family members for assistance, while others sought out alternative transport modes, such as autos or private vehicles. These strategies illustrate the agency of individuals with SCI in adapting to an inaccessible environment, though they also highlight the failure of the transport system to meet their needs. While such personal adaptations allow for some mobility, they underscore the ongoing need for systemic change to ensure that individuals with SCI can move independently and with dignity.

The findings of this study reflect the need for inclusive design in transportation planning. Middleton et al. (2022) and Bhattarai et al. (2018) argue that creating an accessible transport environment requires more than just accommodating individuals with disabilities in a tokenistic way. It requires a holistic approach that integrates universal design principles into urban and transport planning.

One of the most striking findings from this study was the strong desire expressed by participants for a more inclusive and accessible transport system. The participants'

visions for accessible transport included the installation of ramps, lifts, and reserved seating for wheelchair users, as well as the establishment of disability-specific transport services. These aspirations align with global movements for inclusive transport systems as outlined in the United Nations Sustainable Development Goals (SDG 11), which calls for ensuring access to safe, affordable, accessible, and sustainable transport systems for all.

While participants voiced these aspirations, they also emphasized that systemic change requires more than just infrastructure upgrades. Policy enforcement, legal protections, and public awareness campaigns are equally critical to fostering an inclusive society. LaVela et al. (2022) and Earle et al. (2020) argue that changes in social attitudes are just as crucial as changes in infrastructure, and this study supports that view. Policies must be enforced to ensure that transport providers adhere to accessibility standards and that individuals with SCI are not marginalized due to systemic shortcomings.

CHAPTER VI: CONCLUSION

6.1 Strengths and Limitations

6.1.1 Strengths

- Data was collected ensuring that the most disabling stories and narratives regarding transport inaccessibility could be uncovered.
- The study followed a qualitative method to achieve the aim and objectives that were best suited for the study.
- The student researcher followed the COREQ (Consolidated criteria for reporting Qualitative research) checklist in this study.
- Maintained ethical guidelines.
- Provides a valuable insight into the experiences of a specific group.

6.1.2 Limitations

- Couldn't interview participants in relevant contexts
- Non-participants affect some data in one interview.
- Only explains the lived experience of a specific community.
- Only assessed the qualitative impact .
- As this is the student researcher's first experience conducting a study, mistakes can impact the quality of the study.

This study highlights the significant barriers individuals with spinal cord injury (SCI) face when accessing transportation systems in Bangladesh. The findings suggest that these barriers are not solely physical but are compounded by societal stigma, inadequate infrastructure, and systemic neglect. Participants described how inaccessible vehicles, poor infrastructure, and social exclusion limit their ability to participate fully in society. The study underscores the critical need for inclusive transport systems that cater to the

needs of individuals with disabilities, particularly SCI. Key recommendations include the implementation of universal design principles, the enforcement of disability rights policies, and a societal shift toward greater acceptance and inclusion. This will require concerted efforts from policymakers, transport authorities, and civil society organizations to ensure that people with SCI have equal opportunities to engage in everyday activities without the constant struggle for accessibility.

Further research is needed to evaluate the effectiveness of current disability-related policies and the impact of infrastructure reforms on improving mobility for individuals with SCI. The findings from this study also contribute to the broader understanding of social inclusion and equity, highlighting that mobility is not just a matter of physical movement but also of participation in social, educational, and economic life.

In conclusion, while individuals with SCI in Bangladesh demonstrate remarkable resilience in navigating the barriers they face, the systemic changes needed to promote their full inclusion remain insufficient. Only through collaborative action and comprehensive reform can we hope to create a transportation system that is equitable, inclusive, and accessible for all.

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APPENDICES

Appendix A: IRB Approval and Permission Letter



বাংলাদেশ হেলথ প্রফেশন ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

Ref: CRP-BHPI/IRB/07/2025/1123

Date: 21.07.2025

To
 Mostafa Golam Mahmood
 4th Year B.Sc. in Occupational Therapy
 Session: 2020-2021, Student ID: 122200429

Subject: Approval of the thesis proposal Exploring Experiences in Accessing Transportation among Patients with Spinal Cord Injury by ethics committee.

Dear Mostafa Golam Mahmood,
 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 Assistant Professor **Nayan Kumer Chanda**, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP as thesis supervisor. The Following documents have been reviewed and approved:

Sl. No.	Name of the Documents
1	Research Proposal
2	Self-developed Interview Guide
3	Information sheet & consent form.

The purpose of the study is to gain insight into the subjective experiences of individuals with SCI regarding the accessibility of transportation systems. The study involves use of a self-developed interview guide to understand how individuals with SCI experience and navigate accessibility in transportation systems that may take 30 to 45 minutes to answer the Interview Guide and there is no likelihood of any harm to the participants. There is no benefit to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 8:30 AM on 17 June 2025 at BHPI (50th IRB Meeting).

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

Best regards,


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

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

Participant Information Sheet

Title of the Study:

Exploring experiences in accessing transportation among patients with Spinal Cord Injury

Student Investigator:

Mostafa Golam Mahmood
Undergraduate Student, Occupational Therapy
Bangladesh Health Professions Institute (BHPI)

Academic Supervisor:

Nayan Kumer Chanda
Assistant Professor
BHPI, CRP, Savar, Dhaka
Department of Occupational Therapy
Email: nayanchanda2020@gmail.com

Purpose of the Study:

The purpose of this study is to learn about the real-life experiences of people who have spinal cord injuries and use a wheelchair, especially related to using transportation (such as buses, rickshaws, or private vehicles). Your stories and opinions will help us better understand the difficulties you may face and what could be improved in transport systems for wheelchair users in Bangladesh.

Why You Have Been Invited:

You have been invited to take part in this study because you are living in the community after receiving rehabilitation for spinal cord injury. Your experience is important to help us understand the challenges and support needs of others in similar situations.

Voluntary Participation:

Your participation is completely voluntary. You can choose to stop or withdraw from the study at any time without giving a reason and without any negative consequences.

What Participation Involves:

If you agree to take part, you will be invited to a one-on-one interview that will last about 45 to 60 minutes. The interview will be done in a place and time that is comfortable for you. With your permission, we will audio-record the conversation so that your words are captured accurately. About 10 to 12 people will take part in this study.

Risks and Benefits:

There are no known risks in taking part in this study. You may not receive direct personal benefits, but your participation will help in making transportation more accessible for others who use wheelchairs in the future.

Confidentiality:

Everything you share will be kept private. Your name or any personal details will not be used in any report. We will use a false name (pseudonym) so that no one can identify you. All information will be securely stored and only the student researcher and supervisor will have access to it.

Use of Information:

The information you share will only be used for research purposes. It may be published in educational journals or presented at events, but your identity will always remain anonymous.

Contact Information:

If you have any questions or concerns, feel free to contact:

Mostafa Golam Mahmood

Email: mostofamahmoodnn@gmail.com

Phone: 01960183854

Or contact the academic supervisor:

Nayan Kumer Chanda

Email: nayanchanda2020@gmail.com

অংশগ্রহণকারীর তথ্যপত্র

গবেষণার শিরোনাম:

স্পাইনাল কর্ড ইনজুরি আক্রান্ত রোগীদের পরিবহন ব্যবস্থায় প্রবেশাধিকারের অভিজ্ঞতা

গবেষক শিক্ষার্থী:

মোস্তফা গোলাম মাহমুদ
স্নাতক শিক্ষার্থী, অকুপেশনাল থেরাপি
বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই)

একাডেমিক সুপারভাইজার:

নয়ন কুমার চন্দ
সহকারী অধ্যাপক
বিএইচপিআই, সিআরপি, সাভার, ঢাকা
অকুপেশনাল থেরাপি বিভাগ
ইমেইল: nayanchanda2020@gmail.com

গবেষণার উদ্দেশ্য:

এই গবেষণার উদ্দেশ্য হলো হুইলচেয়ার ব্যবহারকারী স্পাইনাল কর্ড ইনজুরি আক্রান্ত ব্যক্তিদের বাস্তবজীবনের অভিজ্ঞতা জানা, বিশেষত পরিবহন (যেমন: বাস, রিকশা, বা ব্যক্তিগত যানবাহন) ব্যবহারের ক্ষেত্রে। আপনাদের অভিজ্ঞতা ও মতামত আমাদের বুঝতে সাহায্য করবে কী ধরনের সমস্যা বা প্রতিবন্ধকতার মুখোমুখি হতে হয় এবং কীভাবে বাংলাদেশে হুইলচেয়ার ব্যবহারকারীদের জন্য পরিবহন ব্যবস্থা আরও সহজ করা যায়।

আপনাকে কেন আমন্ত্রণ জানানো হয়েছে:

আপনাকে এই গবেষণায় অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে কারণ আপনি পুনর্বাসন প্রক্রিয়ার পর সমাজে বসবাস করছেন এবং আপনার অভিজ্ঞতা আমাদের জানতে সাহায্য করবে এই ধরনের অন্যান্য ব্যক্তিদের চাহিদা ও সমস্যা সম্পর্কে।

স্বেচ্ছাসেবী অংশগ্রহণ:

এই গবেষণায় অংশগ্রহণ সম্পূর্ণ স্বেচ্ছাসেবী। আপনি যেকোনো সময় কারণ না জানিয়ে গবেষণা থেকে সরে যেতে পারেন এবং এতে আপনার ওপর কোনো নেতিবাচক প্রভাব পড়বে না।

অংশগ্রহণের ধরণ:

আপনি যদি অংশগ্রহণে সম্মতি দেন, তাহলে আপনার সাথে ৪৫ থেকে ৬০ মিনিটের একটি একান্ত সাক্ষাৎকার নেওয়া হবে। সাক্ষাৎকারটি এমন স্থান ও সময়ে হবে যেটি আপনার জন্য সুবিধাজনক। আপনার অনুমতি সাপেক্ষে, আমাদের কথোপকথন অডিও রেকর্ড করা হবে যেন আপনি যা বলেছেন তা সঠিকভাবে সংরক্ষণ করা যায়। এই গবেষণায় মোট ১০ থেকে ১২ জন অংশগ্রহণ করবেন।

ঝুঁকি ও উপকারিতা:

এই গবেষণায় অংশগ্রহণের কোনো পরিচিত ঝুঁকি নেই। আপনি ব্যক্তিগতভাবে সরাসরি কোনো উপকার নাও পেতে পারেন, তবে আপনার অংশগ্রহণ ভবিষ্যতে হাইলচেরার ব্যবহারকারীদের জন্য পরিবহন ব্যবস্থাকে আরও সহজ ও সহায়ক করতে সাহায্য করবে।

গোপনীয়তা:

আপনার শেয়ার করা সকল তথ্য গোপন রাখা হবে। কোনো প্রতিবেদনে আপনার নাম বা ব্যক্তিগত তথ্য প্রকাশ করা হবে না। আপনার পরিচয় গোপন রাখতে একটি ছদ্মনাম (pseudonym) ব্যবহার করা হবে। সকল তথ্য নিরাপদভাবে সংরক্ষণ করা হবে এবং শুধুমাত্র শিক্ষার্থী গবেষক ও তত্ত্বাবধায়ক এই তথ্যের অ্যাক্সেস পাবেন।

তথ্য ব্যবহার:

আপনার দেওয়া তথ্য শুধুমাত্র গবেষণার উদ্দেশ্যে ব্যবহৃত হবে। এটি শিক্ষামূলক জার্নালে প্রকাশিত হতে পারে অথবা কোনো অনুষ্ঠানে উপস্থাপন করা হতে পারে, কিন্তু আপনার পরিচয় সর্বদা গোপন রাখা হবে।

যোগাযোগের তথ্য:

আপনার কোনো প্রশ্ন বা উদ্বেগ থাকলে নিচের ঠিকানায় যোগাযোগ করতে পারেন:

মোস্তুফা গোলাম মাহমুদ

ইমেইল: mostofamahmoodnn@gmail.com

ফোন: ০১৯৬০১৮৩৮৫৪

অথবা একাডেমিক তত্ত্বাবধায়কের সাথে যোগাযোগ করুন:

নয়ন কুমার চন্দ

ইমেইল: nayanchanda2020@gmail.com

Consent Form (English version)

Informed Consent Form for Patients with SCI

Study Title: Exploring Experiences in Accessing Transportation among Patients with Spinal Cord Injury

Study objectives: This study aims to gain insight into the subjective experiences of patients with spinal cord injury (SCI) regarding the accessibility of transportation systems. More specifically, it will a) explore how patients with SCI perceive and experience accessibility in public and private transportation, b) identify key physical, social, and systemic challenges to transportation accessibility for patients with SCI, c) identify the strategies patients with SCI adopt to navigate inaccessible transport systems, and d) synthesize valuable insights that can inform inclusive transport planning and policy making.

Procedures: As a participant in this study, you will be asked to take part in a face-to-face semi-structured interview. The interview will focus on your experiences of transportation and the challenges or opportunities you have encountered while using different transport systems. The interview is expected to take approximately 45 minutes. With your permission, the interview will be audio-recorded to ensure the accuracy of your responses.

Voluntary Participation: Your participation in this study is entirely voluntary. Refusal to participate will not affect your access to healthcare, transportation services, or any other support you currently receive. You may also withdraw from the study at any time without giving any reason.

Confidentiality: All information you provide will be treated with strict confidentiality. Your responses will be de-identified, meaning that any personal information linking you to your responses will be removed. The data will be securely stored and only accessible to the research team. No identifying information will appear in any reports or publications resulting from this study.

Potential Benefits and Risks: This study does not provide any direct benefits to you. However, your participation will help generate knowledge about the barriers and challenges that people with SCI face when accessing transportation, and these insights may contribute to future improvements in inclusive transport services and policies. There are no anticipated risks associated with participation, but if any questions make you uncomfortable, you may skip them or stop the interview at any time.

Consent Statement: By signing below, you confirm that you have read and understood this consent form and voluntarily agree to participate in this study. You also give permission for the interview to be audio-recorded.

Participant's Signature: _____
Fingerprint for patients who are Illiterate:

Date: _____

Interviewer's Signature: _____

Date: _____

Consent Form (Bangla version)

সম্মতিপত্র

গবেষণার শিরোনাম: মেরুদণ্ডে আঘাতপ্রাপ্ত রোগীদের পরিবহন ব্যবস্থায় প্রতিবন্ধকতার অভিজ্ঞতা অনুসন্ধান

গবেষণার উদ্দেশ্য: এই গবেষণার লক্ষ্য হলো মেরুদণ্ডে আঘাতপ্রাপ্ত রোগীদের পরিবহন ব্যবস্থায় প্রতিবন্ধকতার বিষয়ে তাদের ব্যক্তিগত অভিজ্ঞতা বোঝা। বিশেষভাবে- ক) রোগীরা কীভাবে সরকারি ও বেসরকারি পরিবহন ব্যবস্থার অভিজ্ঞতা অনুসন্ধান করেন, খ) শারীরিক, সামাজিক ও প্রাতিষ্ঠানিক বাধা নিরূপণ করা, গ) রোগীরা কীভাবে অপ্রতিবন্ধী যাত্রীদের সাথে পরিবহন ব্যবস্থার সাথে খাপ খাইয়ে নেন তা বিশ্লেষণ করা, ঘ) অন্তর্ভুক্তিমূলক পরিবহন পরিকল্পনা ও নীতিনির্ধারণে সহায়ক তথ্য প্রদান করা।

প্রক্রিয়া: এই গবেষণায় অংশগ্রহণকারী হিসেবে আপনাকে মুখোমুখি সাক্ষাৎকারে অংশ নিতে অনুরোধ করা হবে। সাক্ষাৎকারে আপনার পরিবহন ব্যবহারের অভিজ্ঞতা এবং যে সব বাধার সম্মুখীন হয়েছেন এবং আরও আনুষঙ্গিক বিষয় আলোচিত হবে। সাক্ষাৎকারটি আনুমানিক ৪৫ মিনিট সময় নেবে। আপনার সম্মতিপ্রাপ্ত হলে এটি অডিও রেকর্ড করা হবে এবং পরে আপনার বক্তব্য পুঙ্খানুপুঙ্খভাবে বিশ্লেষণ করা হবে।

স্বেচ্ছায় অংশগ্রহণ: এই গবেষণায় আপনার অংশগ্রহণ সম্পূর্ণ স্বেচ্ছায়। অংশগ্রহণে সম্মতি না দিলে আপনার স্বাস্থ্যসেবা, পরিবহন বা অন্যান্য কোনো সহায়তায় কোনো প্রভাব পড়বে না। আপনি চাইলে যেকোনো সময়ে কোনো কারণ ছাড়াই গবেষণা থেকে সরে যেতে পারবেন।

গোপনীয়তা: আপনার প্রদত্ত সকল তথ্য কঠোরভাবে গোপন রাখা হবে। আপনার উত্তর শুধুমাত্র ব্যক্তিগতভাবে বিশ্লেষণ করা হবে। তথ্য নিরাপদে সংরক্ষণ করা হবে এবং কেবল গবেষকের কাছেই উন্মুক্ত থাকবে। কোনো প্রতিবেদন বা প্রকাশনায় আপনার নাম বা পরিচয় প্রকাশ করা হবে না।

সম্ভাব্য উপকারিতা ও ঝুঁকি: এই গবেষণা থেকে আপনার সরাসরি কোনো উপকার হবে না। তবে এতে আপনার অংশগ্রহণ মেরুদণ্ডে আঘাতপ্রাপ্ত রোগীদের পরিবহন ব্যবস্থার প্রতিবন্ধকতা ও চ্যালেঞ্জ সম্পর্কিত জ্ঞান বৃদ্ধি করবে, যা ভবিষ্যতে অন্তর্ভুক্তিমূলক পরিবহন নীতি ও সেবা উন্নত করতে সহায়তা করবে। এতে কোনো ঝুঁকি নেই। তবে কোনো সময় যদি আপনি অস্বস্তি বোধ করেন, তাহলে সাক্ষাৎকার বন্ধ করতে পারবেন।

সম্মতির ঘোষণা: নিচে স্বাক্ষর করার মাধ্যমে আপনি নিশ্চিত করছেন যে আপনি এই সম্মতিপত্রটি পড়েছেন এবং বুঝেছেন এবং স্বেচ্ছায় অংশ নিতে রাজি হয়েছেন। এছাড়াও, আপনি সাক্ষাৎকারটি অডিও রেকর্ড করার অনুমতি দিচ্ছেন।

অংশগ্রহণকারীর স্বাক্ষর: _____

তারিখ: _____

অশিক্ষিত অংশগ্রহণকারীর জন্য আঙুলের ছাপ:

সাক্ষাৎকারগ্রহণকারীর স্বাক্ষর: _____

তারিখ: _____

Withdrawal Form (English Version)

Withdrawal of consent form

Research title: **Exploring experiences in accessing transportation among patients with Spinal Cord Injury.**

Student investigator: **Mostafa Golam Mahmood**

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

Name of participant: _____

Signature of

participant/ thumb print: _____

Date:

Withdrawal Form (Bangla Version)

সম্মতি প্রত্যাহারপত্র

গবেষণার শিরোনাম: মেরুদণ্ডে আঘাতপ্রাপ্ত (ঝড়রহস্য ঈডুৎফ ওহলু) ব্যক্তিদের পরিবহন ব্যবস্থায় প্রবেশাধিকারের অভিজ্ঞতা

ছাত্র গবেষক: মোস্তফা গোলাম মাহমুদ

আমি, (অংশগ্রহণকারী), এই মর্মে ঘোষণা করছি যে আমি এই গবেষণা কার্যক্রমে অংশগ্রহণের মাধ্যমে যে তথ্য প্রদান করেছি, তা ব্যবহারের জন্য পূর্বে দেওয়া সম্মতি প্রত্যাহার করছি।

আমার অংশগ্রহণ থেকে প্রাপ্ত কোনো তথ্য ও সম্মতিপত্রেবর্ণিত গবেষণার উদ্দেশ্যব্যবহারযোগ্য নয়। আমি অবগত আছি যে আমার অংশগ্রহণ শেষ হওয়ার চার সপ্তাহের মধ্যে যদি এই অনুরোধ গৃহীত হয়, তবে আমার প্রদত্ত তথ্য সম্পূর্ণরূপে ধ্বংস করা হবে।

আমি আরও জানি যে, এই প্রত্যাহারপত্রটি আমার পূর্বের সম্মতিপত্রের সঙ্গে সংরক্ষিত থাকবে এবং এটি গবেষণায় প্রদত্ত তথ্যে আমার সম্মতি প্রত্যাহারের প্রমাণস্বরূপ বিবেচিত হবে।

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর স্বাক্ষর / আঙুলের ছাপ:

তারিখ:

Appendix C: Interview Guide (English and Bangla Version)

Section 1: Sociodemographic Information

Name:

Age: _____

Gender:

☐ Male

☐ Female

Marital Status:

☐ Unmarried

☐ Married

☐ Separated

☐ Divorced

☐ Widowed

Living Status	
Living Situation: ☐ Living alone ☐ With family ☐ Other: _____	Living Condition: ☐ Urban ☐ Semi-Urban ☐ Rural
Injury Status	
Neurological Level: _____ Duration Since Injury: _____	Type of Injury: ☐ Traumatic ☐ Non-traumatic

Employment Status: ☐ Employed ☐ Unemployed	Education Level: ☐ No formal education ☐ Primary ☐ Secondary ☐ Higher Secondary ☐ Bachelor ☐ Masters	Monthly Household Income: ☐ <10,000 BDT ☐ 10,000–30,000 BDT ☐ 30,000–50,000 BDT ☐ >50,000 BDT
Type of Wheelchair Used: ☐ Manual ☐ Powered	Use of Support Person for Travel: ☐ Yes ☐ No ☐ Sometimes	
Access to Private Vehicle: ☐ Yes ☐ No	Monthly Travel Frequency: (Monthly) ☐ Rarely ☐ 1–2 times ☐ 3–5 times ☐ More than 5 times	

Section 2: Semi-structured Interview

Warm-Up Ques.	Can you tell me about your life since injury and what transport means to you in your daily life?
Objective 1: Explore how patients with Spinal Cord Injury perceive and experience transportation accessibility	
1.1	Can you walk me through what a typical journey looks like when you use public or private transport? ICF (Activities & Participation) <i>Probes:</i> • What type of transport do you prefer when travelling, and why? • What types of journey/routes do you avoid, and what makes you avoid them?
1.2	Can you describe a specific journey that stands out in your memory? WHOQOL <i>Probes:</i> • Can you elaborate what made that experience different? • Can you briefly describe how it made you feel?
1.3	Have your experiences with transport changed over time since your injury? MOHO – Habituation & Adaptation <i>Probes:</i> • What were things like when you first started using a wheelchair? how are things going now? • How have things changed compared to the first experience? • How has your ability or inability to travel affected how you see yourself — for example, your independence, dignity, or role in your family/society? (PEOP – Person factors, identity & dignity)
Objective 2: Identify physical, economic, social, cultural and systemic barriers to transport	
2.1	What physical or design challenges do you face while getting into or out of vehicles or navigating streets? Universal Design <i>Probes:</i> • Which one(s) hampers your transport experience the most and how? • Has any of these ever led you to cancel or delay an important journey?

	• Has any of this led to an injury or close call? • How do these challenges make you feel when you face them?
2.2	How does the cost of transport (for example, using private cars, rickshaws, or hiring support) affect your ability to travel? (PEOP – Economic environment) <i>Probes:</i> • How does cost influence your decisions about when and how to travel? • What does it mean for you if you must depend on others financially for transport?
2.3	Have services, policies, laws, or transport regulations ever influenced your experience of using transport? (PEOP – Institutional/systemic environment) <i>Probes:</i> • Can you share an example of when a rule, policy, or service helped you or made things harder?
2.4	Do cultural or religious beliefs in your area affect how people treat you when you travel? (Cultural lens) <i>Probes:</i> • Can you give an example? • How did it make you feel?
2.5	How do other people — like drivers, conductors, or passengers — typically respond when you travel? (Social Model of Disability) <i>Probes:</i> • Can you recall a specific interaction that made you feel supported — or rejected? • How do these behaviours affect your transport experience?
2.6	How do you think societal attitudes toward wheelchair users in Bangladesh influence your overall transport experience? (Social Model of Disability) <i>Probes:</i> • Have you faced different attitudes because of your gender, age, or disability
Objective 3: Understand coping strategies and adjustments	

3.1	To cope with inaccessible transport what personal strategies or tools have you developed/used? Self-efficacy Theory, Bandura <i>Probes:</i> • Can you describe a time when a strategy worked — or failed? • How did that situation make you feel — empowered, frustrated, anxious? • Can you describe specific techniques that has helped you the most?
Objective 4: Generate insights for inclusive planning and policy	
4.1	If you could change some things in the transport system to make it more accessible, what would they be? UNCRPD <i>Probes:</i> • What realistic changes do you think could work in our local context? • Can you describe a rough plan that you think is viable here?
Closing Ques.	Do you feel your right to move freely is respected or denied in our transport system? Can you share an example? (Occupational Justice)
	Is there anything else you'd like to share about your travel experiences that we haven't covered? <i>Probes:</i> • What is your hope for future transport systems in Bangladesh?

মূলপ্রশ্নপত্র

প্রশ্ন:আঘাতের পর থেকে আপনার জীবন কেমন যাচ্ছে, আর আপনার দৈনন্দিন জীবনে যাতায়াত বা পরিবহন কতটা গুরুত্বপূর্ণ – সেটা একটু বলবেন?

উদ্দেশ্য ১:

প্রশ্ন ১.আপনি যখন গণপরিবহন বা ব্যক্তিগত পরিবহন ব্যবহার করেন, তখন আপনার একটি সাধারণ যাত্রা কেমন হয় সেটা কি বর্ণনা করতে পারবেন?

- কোন ধরনের যানবাহন আপনি বেশি ব্যবহার করেন? কেন?
- একটি যাত্রার ক্ষেত্রে আপনি কোন কোন বিষয় গুলো এড়িয়ে চলার চেষ্টা করেন? যেমন: রাস্তা, রুট, সময়, আবহাওয়া ইত্যাদি।

প্রশ্ন ২.আপনার এমন কোনো যাত্রার অভিজ্ঞতা কি মনে পড়ে যা একজন এসসিআই রোগী হিসেবে আপনার মনে গেঁথে আছে?

- কী কারণে সেই অভিজ্ঞতা আলাদা ছিল? ভালো নাকি খারাপ? ঘটনাটি সম্পর্কে বলুন।
- তখন আপনার অনুভূতিটা কেমন ছিলো? একটু যদি সংক্ষিপ্ত বর্ণনা দিতেন।

প্রশ্ন ৩.আঘাতের পর থেকে পরিবহন ব্যবহারের অভিজ্ঞতা কি সময়ের সাথে বদলেছে?

- যখন প্রথম হুইলচেয়ার ব্যবহার শুরু করেছিলেন, তখন অভিজ্ঞতা গুলো কেমন ছিল? এখন কেমন লাগছে?
- প্রথম অভিজ্ঞতার সাথে এখনকার অভিজ্ঞতার পার্থক্য কী?
- যাতায়াত করতে পারা বা না পারা এই বিষয়টি আপনার নিজের প্রতি যে ধারণা সেটাকে কিভাবে প্রভাবিত করেছে? -স্বাধীনতা, আত্মসম্মান বা পরিবার/সমাজে আপনার ভূমিকার উপর কী প্রভাব ফেলেছে?

উদ্দেশ্য ২:

প্রশ্ন ৪.যানবাহন পর্যন্ত পৌঁছাতে এবং যানবাহনে ওঠা-নামা করতে ও যানবাহনের ভিতরে আপনি কি কি সমস্যার সম্মুখীন হন? বিস্তারিতভাবে যদি একটু বলতেন।

- কোন সমস্যাগুলো আপনাকে সবচেয়ে বেশি ভোগায়?
- এইগুলো কি কখনো আপনার কোনো যাতায়াত বাতিল বা দেরি হওয়ার কারন হয়েছে? এমন একটি ঘটনা বর্ণনা করুন।
- এগুলোর ফলে কি কখনো কোনো আঘাত বা দুর্ঘটনা হওয়ার অবস্থায় পড়েছেন?
- এসব চ্যালেঞ্জের মুখোমুখি যখন হন তখন আপনার অনুভূতি কেমন হয়? বর্ণনা করুন।

প্রশ্ন ৫. যাতায়াতের খরচ (যেমন ব্যক্তিগত গাড়ি, রিকশা বা লোক ভাড়া করা) আপনার ভ্রমণের সক্ষমতায় কীভাবে প্রভাব ফেলে?

- খরচ কীভাবে আপনার যাতায়াতের সিদ্ধান্তে প্রভাব ফেলে?
- যাতায়াতের জন্য আর্থিক নির্ভরতা - এই বিষয়ে নিজের দিক থেকে কিছু বলুন।

প্রশ্ন ৬. কোনো সেবা, নীতি, আইন বা পরিবহন নিয়ম কি কখনো আপনার যাতায়াতের অভিজ্ঞতায় প্রভাব ফেলেছে?

- এক্ষেত্রে এমন কোনো উদাহরণ দেবেন যেটা আপনাকে সহায়তা করেছে বা অসুবিধায় ফেলেছে?
- কখনও কি মনে হয়েছে যে এই নিয়ম টা একটু অন্যরকম হলে কিংবা না থাকলে আমার জন্য ভালো হতো?

প্রশ্ন ৭. ভ্রমণ করতে গিয়ে কখনও কি ধর্মীয় বা সাংস্কৃতিক দিক থেকে বিরূপ মনোভাবের শিকার হয়েছেন?

- কোনো নির্দিষ্ট উদাহরণ দেবেন?
- তখন আপনার কেমন লেগেছিল? আপনার অনুভূতি বর্ণনা করুন।

প্রশ্ন ৮. আপনি ভ্রমণ করার সময় চালক, কন্ডাক্টর বা যাত্রীরা সাধারণত কেমন প্রতিক্রিয়া দেখায়?

- কোনো বিশেষ অভিজ্ঞতা মনে পড়ে যখন আপনার মনে হয়েছে যে না, এরা আমাকে নরমালি নিচ্ছে বা এরা আমাকে ভিন্ন ভাবে নিচ্ছে?
- এসব আচরণ আপনার যাতায়াতের অভিজ্ঞতায় কীভাবে প্রভাব ফেলে?

প্রশ্ন ৯. বাংলাদেশে হুইলচেয়ার ব্যবহারকারীদের প্রতি সামাজিক যে দৃষ্টিভঙ্গি, এটি আপনার যাতায়াতের সামগ্রিক অভিজ্ঞতায় কীভাবে প্রভাব ফেলে?

- আপনার লিঙ্গ, বয়সের ভিত্তিতে কি সামাজিক বৈষম্যের বা ভিন্ন আচরণের শিকার হয়েছেন?

উদ্দেশ্য ৩:

প্রশ্ন ১০. অপ্রবেশযোগ্য পরিবহনের সাথে মানিয়ে নিতে আপনি কী ধরনের ব্যক্তিগত কৌশল বা উপায় বের করেছেন?

- কোনো কৌশল কাজ করেছে বা ব্যর্থ হয়েছে - এমন অভিজ্ঞতা শেয়ার করবেন?
- তখন আপনার কেমন লেগেছিল - মনে সাহস বেড়েছিল? , বিরক্ত, নাকি হতাশ?
- কোন কৌশলগুলো আপনার কাছে সবচেয়ে বেশি কার্যকর মনে হয়েছে?

উদ্দেশ্য ৪:

প্রশ্ন ১১. যদি আপনার সুযোগ থাকত, পরিবহন ব্যবস্থায় কী ধরনের পরিবর্তন করতেন যাতে এটি আরও সহজপ্রবেশযোগ্য হয়?

- বাংলাদেশের প্রেক্ষাপটে কোন পরিবর্তনগুলো বাস্তবসম্মত বলে মনে করেন?
- আপনার চিন্তা থেকে একটা রাফ পরিকল্পনা বর্ণনা করবেন যা আমাদের প্রেক্ষাপটে কার্যকর হতে পারে?

সমাপ্তি

প্রশ্ন ১২. আপনি কি মনে করেন বাংলাদেশের পরিবহন ব্যবস্থায় আপনার স্বাধীন চলাফেরার অধিকার রক্ষিত নাকি অরক্ষিত? কোনো উদাহরণ দেবেন?

প্রশ্ন ১৩. আপনার যাতায়াতের অভিজ্ঞতা সম্পর্কে এখন পর্যন্ত যা জিজ্ঞেস করেছি তার বাহিরে কি আরও কিছু শেয়ার করতে চান?

- ভবিষ্যতে বাংলাদেশের পরিবহন ব্যবস্থার জন্য আপনার আশা কী?

Appendix D: Application to Access Discharge Patient data CBR dept. of CRP

Date:23/08/2025
 To
 Head of Rehabilitation wing
 Centre for the Rehabilitation of the Paralysed (CRP)
 Chapain, Savar, Dhaka-1343
 Through: Research & Evaluation Department
Subject: Application for access to discharged patient data from the CBR Department

Sir,

With due respect, I am a student of B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI) which is an academic institute of Centre for the Rehabilitation of the Paralyzed (CRP), affiliated to Faculty of Medicine, University of Dhaka and wish to conduct my thesis titled, **"Exploring experiences in accessing transportation among patients with Spinal Cord Injury"** with myself as the principal investigator and Nayan Kumer Chanda as my thesis supervisor. The purpose of my study is to gain insights into the subjective experiences of patients with Spinal Cord Injury regarding the accessibility of transportation systems. A **Self-developed Interview Guide** will be used to collect data for the study. The study has received ethical clearance from the Institutional Review Board (IRB) of BHPI under reference number CRP-BHPI/IRB/07/2025/1123

To fulfill the objectives of this study, I need some information such as name, age, address, contact number, occupational status, date of admission and discharge about the potential participants from SCI-database of CBR Department -CRP, Savar. I assure you that collected information that will be used solely for academic purposes and confidentiality will be maintained in accordance with ethical guidelines. As part of my study, I require information on individuals who are staying in the community for at least one year following their discharge from CRP. I am seeking your kind approval to obtain the details of the initial list of potential participants from August 2022 to August 2024.

I sincerely appreciate your consideration of this request and would be grateful if you could guide me on the necessary steps to obtain this information. Thank you for your time and assistance.

Sincerely yours,

Mostafa
 Mostafa Golam Mahmood
 4th Year, B.Sc. in Occupational Therapy
 Session: 2020-21, Student ID: 122200429
Recommendation from the Head of the Department:

Prof. Sk. Moniruzzaman
 Prof. Sk. Moniruzzaman
 Professor & Head
 Department of Occupational Therapy
 Bangladesh Health Professions Institute(BHPI)
 CRP, Savar,Dhaka-1343

Attachments: Copy of IRB Approval Letter.

"Forwarded to the head of RW dept. and for his consent and approval."
19/08/25

*Dear CRP Coordinator
 Please assist Mostafa for his study data
 Sanjida
 25/8/25*

Appendix E: Supervisor Contact 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: *Exploring experiences in accessing transportation among patients with spinal cord injury*

Name of student: *Mostafa Golam Mahmood*

Name and designation of thesis supervisor: *Nayan Kumar Chandra*
Assistant Professor
Department of Occupational Therapy, BHP-I

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	02.05.25	Teachers Room	General discussion on research project & supervision	2 hours	Gained initial understanding	Mostafa	Nayan
2	08.05.25	Teachers Room	Discussion regarding title & Methodology Change	1 hours 45 min	Reoriented study design	Mostafa	Nayan
3	09.05.25	Teachers Room	Guidance & discussion on proposal presentation	2 hours 15 min	Mentally prepared for presentation	Mostafa	Nayan

4	25.06.25	Teachers Room	Feedback on proposal presentation & title modification	1 hours 45 min	Realized gaps & problems in process	Mostafa	Nayir
5	25.06.25	Teachers Room	Feedback & correction on IRB approval letter	1 hour 30 min	Finalized IRB approval letter	Mostafa	Nayir
6	25.06.25	Teachers Room	Discussion about methodology	2 hours 20 min	Better vision of methods & approach	Mostafa	Nayir
7	25.07.25	Teachers Room	Feedback on aim, objectives & guidance on data collection	1 hours 30 min	Correction, reorientation of methods	Mostafa	Nayir
8	25.07.25	Teachers Room	Guidance regarding data collection approval	2 hours 40 min	Gained confidence for data collection	Mostafa	Nayir
9	25.08.25	Teachers Room	Feedback & guidance on literature review	2 hours 30 min	Correction of problems & gaps	Mostafa	Nayir
10	25.08.25	Teachers Room	Guidance on developing interview guide	2 hours 15 min	Gained understanding about tool developing	Mostafa	Nayir
11	25.08.25	Teachers Room	Feedback & correction on interview guide	1 hours 30 min	Addressed problems of interview guide	Mostafa	Nayir
12	25.09.25	Teachers Room	Guidance on writing methodology part	2 hours 30 min	Understood gaps & problems	Mostafa	Nayir
13	25.11.25	Teachers Room	Routine update on data collection process	2 hours 15 min	Updated supervisor on research status	Mostafa	Nayir
14	25.11.25	Teachers Room	Feedback on transcription, management	2 hours 30 min	Identified gaps & problems	Mostafa	Nayir

15	05.11.25	Teachers Room	Detailed discussion on data management & analysis	2 hours 15 min	Better understanding about analysis	Mostafa	Nayef
16	11.12.25	Teachers Room	Guidance on writing results, discussion & abstract	2 hours 30 min	Prepared for write up	Mostafa	Nayef
17	03.12.25	Teachers Room	Feedback & correction on results section write up	2 hours 45 min	Identified gaps in write up	Mostafa	Nayef
18	05.01.26	Teachers Room	Feedback & connection on discussion & abstract	2 hours 30 min	Identified gaps in write up	Mostafa	Nayef
19	10.01.26	Teachers Room	Comprehensive feedback on first draft	2 hours 30 min	Detailed understanding for 2nd draft	Mostafa	Nayef
20	18.01.26	Teachers Room	Follow up on feedback regarding first draft	1 hour 30 min	Prepared for submission of 2nd draft	Mostafa	Nayef

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.