

Lived Experience of Persons with Disabilities during the Transition from Manual to Power Wheelchair: A Qualitative Study



By
Moumita Sarker

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Bachelor of Science in Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Faculty of Medicine
University of Dhaka

Thesis completed by:**Moumita Sarker**4th year, B.Sc. in 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**Khadija Akter Lily**

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**Prof. Sk. Moniruzzaman**

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

Prof. Sk. Moniruzzaman

Professor & Head

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

CRP, Savar, Dhaka-1343, Bangladesh.


.....
Signature

Dr. Md. Shakhaoat Hossain, PhD

Chairman & Associate Professor

Department of Public Health and Informatics

Jahangirnagar University

Savar, Dhaka-1342, Bangladesh.


.....
Signature

Statement of Authorship

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Moumita Sarker

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

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Signature

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Dedication

**To my beloved parents and teachers
& my beloved Shota...**

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List of Abbreviations

BHPI	Bangladesh Health Professions Institute
CRP	Centre for the Rehabilitation of the Paralysed
EI	Emotional Intelligence
ICF	International Classification of Functioning, Disability and Health
IRB	Institutional Review Board
IQR	Interquartile Range
OT	Occupational Therapy
POSCI	Post Spinal Cord Injury
PWD	Persons with Disabilities
QOL	Quality of Life
RTAs	Road Traffic Accidents
SCI	Spinal Cord Injury
WHO	World Health Organization
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities

Abstract

Background: Power wheelchairs are increasingly prescribed to individuals with disabilities to enhance mobility and independence. In Bangladesh, approximately 10% of the population lives with a disability, and an estimated 1.6 million people require wheelchairs, yet access to appropriate assistive technology and accessible environments remains limited. Despite the benefits of power wheelchairs, qualitative evidence in Bangladesh on users' lived experiences during the transition from manual to power wheelchairs—particularly regarding physical health, participation, and occupational identity—remains scarce.

Aim: This study aimed to explore the lived experiences of persons with disabilities during the transition from manual to power wheelchairs, focusing on mobility, physical comfort, participation, psychosocial adjustment, and occupational identity.

Methods: A qualitative descriptive design was employed. Semi-structured, in-depth interviews were conducted with individuals with disabilities who had transitioned from manual to power wheelchairs. Data were analyzed using Braun and Clarke's six-step thematic analysis approach. Trustworthiness was ensured through systematic coding, reflexivity, and peer review.

Results: Six overarching themes emerged: (1) reclaiming independence through enhanced mobility, (2) transformation in mobility and occupational performance, (3) physical comfort, health concerns, and body management, (4) environmental and device-related barriers to participation, (5) reconstruction of occupational identity and psychosocial adjustment, and (6) user-led recommendations for sustainable mobility. Participants reported increased independence, reduced physical strain, and improved access to work and community environments. However, concerns related to reduced physical activity, environmental inaccessibility, device limitations, and long-term health were also highlighted.

Conclusion: The transition to power wheelchairs enhances independence and participation for individuals with disabilities; however, sustainable mobility depends on individualized prescription, accessible environments, and balanced use. User-centered occupational therapy interventions are essential to support meaningful participation and long-term well-being in Bangladesh.

Keywords: Power wheelchair; Manual wheelchair; Occupational identity; Mobility; Qualitative study.

CHAPTER I: INTRODUCTION

1.1 Background

An estimated 100–130 million disabled persons worldwide depend on wheelchairs. Over the next 10 years, experts estimate that the number of persons in need of wheelchairs would rise by 22%. Since it was invented in 1595 for Phillip II of Spain by an unidentified inventor, the wheelchair has remained the best mode of transportation for them. For this reason, this particular wheelchair is evolving into newer designs with the newest improvements after being converted to an electric one. Almost 200,000 people with physical disabilities in the United States rely on electric wheelchairs for their everyday need. However, because the majority of the people in this underprivileged nation cannot afford the prohibitive cost of an affordable electric wheelchair, disabled people throughout Bangladesh continue to rely on outdated, traditional wheelchairs (World Health Organization et al., 2011; Borg et al., 2012)

According to estimates from the World Health Organization (WHO), 10.5% of people are disabled, and this number is higher in rural areas of the nation. Physically challenged people make up 27.5% of the population overall. According to estimates, the prevalence of disability is 14% in the age group over 18 and 6% in children under 18. 3.4 million children and 10.2 million people with limitations can be considered part of this total (Nazmus Sakib et al. n.d.).

In order to promote independence, active aging, physical exercise, and aging in place, manual wheelchairs help adult and older adult users achieve their daily living activities and support their mobility. A user might struggle with upper limb strength and coordination, which are also necessary for self-propelling using a manual wheelchair, depending on their health condition. Additional limitations on manual

wheelchairs are caused by the environmental context, which includes things like distance, terrible weather, uneven or challenging environment, and wheelchair accessibility (Atoyebi et al. 2025).

The long-term use of manual wheelchairs (MWCs) has been associated with several chronic upper-limb problems, such as pain in the shoulders, arms, and wrists. The significant occurrence of shoulder pain and injury among manual wheelchair users (MWUs) is recognized. Between 30% and 73% of manual wheelchair users are presumed to experience shoulder pain (Mercer et al. 2006).

In contrast, powered wheelchairs (PWCs) require very minimal physical effort from the user. In a study using a datalogger, a comparison between 16 MWC users and 38 PWC users showed that PWC users traveled approximately 7% more distance per day and moved at an average speed that was 29% faster (Best et al. 2006).

Adult manual wheelchair users frequently have low wheelchair confidence; among community-dwelling manual wheelchair users, wheelchair confidence affects life-space mobility and participation. Furthermore, measuring confidence among PWC users has led to the adaptation of assessment tools like the WheelCon-PW, which focus on perceived capability, psychological readiness, and day-to-day navigation (Rushton et al. 2017). Evidence also points to differences in transfer ability, fear of falling, and levels of community participation between MWC and PWC users, particularly among those with conditions like multiple sclerosis or spinal cord injuries (Abou and Rice 2024).

Power wheelchairs require less user strength and endurance to move than manual chairs, which is particularly advantageous on carpeted surfaces, uneven terrain, and slopes. Power wheelchairs are lighter and possibly easier to travel than traditional power wheelchairs. Power wheelchairs should make it possible to participate in a variety of activities that might not be feasible otherwise by reducing the stress and energy required to

complete mobility-related daily living tasks. Power wheelchairs take less effort than conventional manual mobility, according to laboratory studies. This is shown by lower heart rates, less activation of the muscles in the upper limbs and trunk, less perceived strain, and less oxygen consumption (Giacobbi et al. 2010).

Despite the growing body of research on power mobility, the lived experience of transitioning from a manual to a power wheelchair remains underexplored. This transition often marks a significant turning point in an individual's life, influencing identity, autonomy, and social integration. Therefore, understanding the nuanced, subjective experiences during this period—particularly in terms of confidence, independence, and environmental interaction—is critical for informing rehabilitation practices, device provision, and policy development.

This study aims to explore these lived experiences, capturing the voices of individuals navigating the shift from manual to powered mobility, and identifying the factors that facilitate or hinder their functional and emotional adaptation.

1.2 Justification

The transition from manual to power wheelchair use is a major life event for persons with physical disabilities, influencing not only mobility but also emotional well-being, self-perception, and social participation. While power wheelchairs reduce physical effort and expand mobility, adapting to their use involves complex psychological and social adjustments that are often overlooked. Most existing research focuses primarily on physical outcomes such as speed, endurance, or reduced upper-limb strain, with limited attention to how users experience this transition in their daily lives. Understanding these lived experiences is essential to identify challenges related to confidence, dependence, stigma, role changes, and long-term health concerns, and to ensure that rehabilitation approaches address more than functional performance alone.

In Bangladesh, access to power wheelchairs is gradually increasing, yet users continue to face significant environmental, economic, and sociocultural barriers. Limited accessibility of public spaces, inadequate infrastructure, and contextual differences in service delivery shape wheelchair use in ways that differ from high-income settings. There is a clear lack of qualitative, context-specific evidence capturing how individuals in Bangladesh experience and adapt to power wheelchair use. Documenting user perspectives within this setting is critical for developing culturally appropriate wheelchair prescription practices, environmental modifications, and rehabilitation services. Such evidence can support policymakers, rehabilitation professionals, and service providers in designing inclusive mobility solutions that align with local needs and realities.

This research has important implications for occupational therapy practice by emphasizing a user-centered, participation-focused approach to wheelchair transition. The findings can guide occupational therapists in supporting not only skill development and device use, but also psychosocial adjustment, occupational identity reconstruction, and meaningful

engagement in daily roles. Furthermore, the study provides a foundation for future research, including longitudinal studies on long-term health and participation outcomes, comparative studies across environments, and intervention-based research promoting balanced mobility and physical well-being. By addressing an underexplored area in the literature, this study contributes to evidence-based occupational therapy practice and supports the development of sustainable, inclusive mobility strategies for persons with disabilities.

1.3 Operational Definitions

1.3.1 Persons with Disabilities (PWD)

PWD" stands for Persons with Disabilities, and its definition comes from international agreements like the UN Convention on the Rights of Persons with Disabilities (UNCRPD) and national laws, defining PWDs as individuals with long-term physical, mental, intellectual, or sensory impairments that, when facing societal barriers (attitudinal, environmental), hinder their full participation in society on an equal basis with others, shifting focus from impairment to societal exclusion (UNCRPD).

1.3.2 Manual Wheelchair

A manual wheelchair is a self-propelled mobility device operated through upper-limb effort. It enhances independence but often results in physical fatigue, shoulder strain, and joint pain during prolonged use (Samuelsson & Wressle, 2014).

1.3.3 Power Wheelchair

A power wheelchair (also called an electric wheelchair) is a battery-powered, joystick-controlled mobility device designed to reduce physical exertion and increase travel distance for individuals with mobility limitations (Mills et al., 2019).

1.3.4 Transition from Manual to Power Wheelchair

The transition refers to the period of adjustment during which a person with a disability shifts from using a manual wheelchair to operating a power wheelchair as their primary mobility device. This process involves learning, adaptation, and psychosocial change, influencing independence, self-image, and occupational performance (Mortenson et al., 2008).

1.3.5 Lived Experience

The term lived experience refers to the subjective understanding and meaning individuals attach to their everyday lives, derived from their direct, personal engagement with a phenomenon (van Manen, 1990).

1.3.6 Independence and Mobility

Independence is the ability to perform daily and community activities without physical assistance, while mobility refers to one's capacity to move freely within different environments (home, work, or community).

1.3.7 Environmental Accessibility

Environmental accessibility refers to the extent to which the built environment (ramps, roads, transport, and public infrastructure) supports or restricts the mobility of wheelchair users. In this study, it includes participants' experiences of navigating uneven roads, flooded areas, and inaccessible ramps, which affect participation and independence (Gray et al., 2018).

1.3.8 Occupational and Social Participation

Occupational participation denotes engagement in meaningful daily activities such as work, education, and recreation, while social participation reflects involvement in community and interpersonal relationships (Law, 2002).

1.3.9 Psychosocial Adjustment

Psychosocial adjustment refers to the emotional, cognitive, and behavioral adaptation individuals experience in response to new life circumstances (Livneh & Martz, 2012).

1.4 Aim of the Study

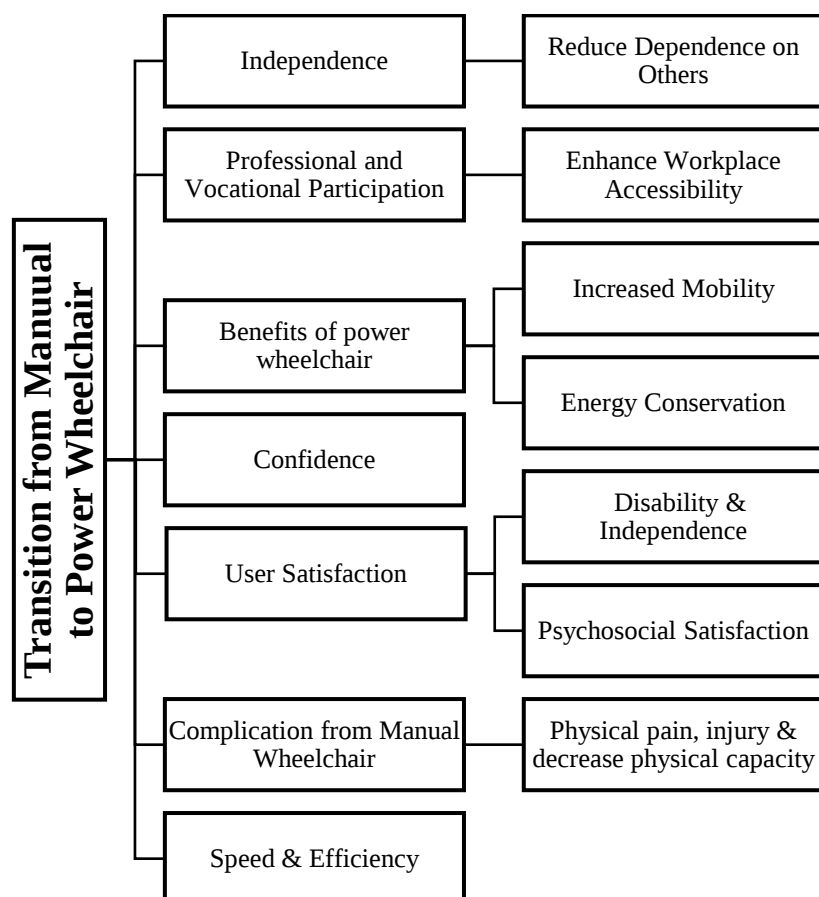
To explore and understand the lived experiences, perceptions, and adaptive processes of persons with disabilities during their transition from manual to power wheelchairs, with a focus on independence, confidence, and participation in daily life.

CHAPTER II: LITERATURE REVIEW

This chapter reviews the existing literature related to the lived experiences of persons with disabilities during the transition from manual to power wheelchairs. The researcher conducted a comprehensive search using databases such as PubMed, ResearchGate, and Google Scholar to identify relevant peer-reviewed articles, reports, and studies addressing mobility transitions, wheelchair use, and the psychosocial impacts of assistive technology.

Figure 2.1

Overview of the literature review



2.1. Benefits of Power Wheelchair

Wheelchairs play a vital role in enhancing the mobility, independence, and quality of life of persons with physical disabilities. They provide individuals with greater freedom of movement, enabling participation in daily activities, employment, education, and social engagement. Löfqvist et al. (2012) stated that powered wheelchairs provide individuals with greater freedom of movement, enabling participation in daily activities, employment, education, and social engagement because mobility-related participation becomes easier and more accessible in everyday life.

2.1.1 Increase Mobility

Participation in the activities and routines that comprise selected, valued roles is based on mobility. Performing important roles in a satisfactory manner fosters sentiments of competence and self-efficacy. People with mobility-impairing physical conditions are often denied this option (Hardy, 2004).

However, those with disabilities that impact their mobility now have access to a plethora of opportunities because to advancements in powered wheelchair technology.

2.1.2 Energy Conservation

When pushing a manual wheelchair requires too much effort or is not an efficient way to satisfy the time and space requirements of a work or routine, in the given environment, a powered wheelchair should be taken into consideration (Hardy, 2004). Giesbrecht et al. (2009) stated that power wheelchairs reduce the metabolic demands of propulsion compared to manual wheelchairs, leading to lower heart rate, oxygen consumption, and ventilation rate. They also reported that power wheelchair uses results in reduced joint range of motion and stroke frequency. Furthermore, based on subjective ratings of perceived exertion and ease of use, users responded more favorably to power wheelchairs than to manual wheelchairs on both measures.

2.2 Independence

Independence is one of the most frequently cited benefits of using wheelchairs, particularly powered ones, because they enhance mobility and enable people with disabilities to engage more fully in daily activities, social participation, work, and community life (Mortenson et al., 2015).

2.2.1 Reduce dependence on others

Manual wheelchairs might not be sufficient to improve functionality or facilitate access to activities of daily living. The high-tech assistive technology that individuals with disabilities could want to consider is the powered wheelchair. Power wheelchairs go through constant development to increase their efficiency and enable individuals perform on daily activities with comfortably (Lersilp et al., 2022).

2.3 Confidence

According to Social Cognitive Theory, confidence varies depending on the task. A high level of confidence leads to a strong, sustained effort in a task or activity, whereas a low level of confidence causes avoidance of a work or activity. According to Bandura, even if a person demonstrates the skills required to complete a task, confidence is the most significant predictor of future behavior (Rushton et al., 2017)

2.4 Speed and Efficiency

When Hoover et al, compared 16 MWC and 38 PWC users using a datalogger, they discovered that PWC users traveled ~7% more distance daily at a 29% quicker average speed (Best et al., 2006).

2.5 Complication from Manual Wheelchairs

Jayaraman et al. (2015) stated that repetitive upper-limb loading during manual wheelchair propulsion plays a significant role in the development of shoulder pain and musculoskeletal complications among wheelchair users, which can negatively impact functional independence and mobility.

2.5.1 Physical Pain and Injury

More than half of manual wheelchair users will develop upper extremity overuse injuries or pain during their lifetime, largely due to the high physical demands and repetitive motions associated with wheelchair propulsion (Rankin et al., 2012). Due to prolonged and excessive use, people who use manual wheelchairs frequently suffer injuries to their upper limbs. The rotator cuff muscles are the most frequently reported injury, and the incidence of shoulder pain is estimated to range between 42% and 66%. Another frequent adverse effect of handrim manual wheelchair propulsion is bilateral carpal tunnel syndrome. Reducing the frequency of wheelchair use, lowering the wheelchair's and the user's weight, and installing a power assist device can all help prevent those injuries (Zuleima et al., 2017).

2.5.2 Decrease Physical capacity

Abou and Rice et al., (2024) stated that the cyclical and repetitive nature of manual wheelchair propulsion can lead to upper-limb injuries such as tendinitis, carpal tunnel syndrome, and shoulder impingement, which may result in chronic wrist and shoulder pain and can ultimately limit an individual's ability to function independently.

2.6 Professional & Vocational Participation

Professional and vocational participation refers to the active engagement of persons with disabilities (PWDs) in employment, education, training, and other work-related activities that contribute to financial independence, self-worth, and social inclusion.

Shaw et al. (2022) stated that employment is a key component of occupational participation for persons with disabilities, as it provides not only financial independence but also structure, identity, self-worth, and opportunities for social inclusion.

Employment is a key component of **occupational participation**, providing not only income but also structure, identity, and a sense of contribution to society.

2.6.1 Enhance Workplace Accessibility

Individuals with a range of medical issues who switched to a PWC reported a notable improvement in their work performance, which was mostly attributed to increased involvement in tasks, interests, and responsibilities that they genuinely valued. To guide occupational therapy practice, it is necessary to investigate such transition and its effects on occupational involvement, particularly in PwMS. the results of switching to PWC through interviews with PwMS and their families. They mentioned both advantages like increased mobility and a sense of independence as well as disadvantages like dealing with stigma and the damaging power of PWC (Lekkas, n.d.)

2.7 User Satisfaction

Particularly, powered wheelchairs (PW) appear to enhance daily routines, the capacity to participate in mobility-related activities and social interactions, and the independence, safety, and self-worth of individuals. PW increase the independence of people with disabilities in their everyday activities. Furthermore, it appears that people with severe disabilities' performance at work, competence, adaptability, and self-esteem improved when they switched from manual wheelchairs (MW) to PWs (Domingues et al., 2019).

2.7.1 Disability & Independence

Disability and Independence- for this heading Power mobility increases users' ability to move independently without relying on caregivers, which significantly improves autonomy and perceived control over daily life. Users of powered wheelchairs report greater freedom to perform everyday activities such as travelling in the community, visiting friends, and managing personal routines without assistance, reflecting higher independence and self-determination (Domingues et al., 2019).

2.7.2 Psychosocial Satisfaction

Mortenson et al. (2015) reported that power wheelchair use is associated with improved mobility, increased social participation, and enhanced quality of life for users, including positive effects on confidence and engagement in daily activities.

Summary of Key Gaps

- Most previous studies have explored either manual or power wheelchair use in isolation, emphasizing device performance or user satisfaction. However, there is limited research examining the actual transition process—how users adapt physically, emotionally, and socially when shifting from manual to power mobility. This creates a critical knowledge gap about the adjustment period, including challenges, expectations, and coping mechanisms.
- The majority of available studies on wheelchair use and user experience originate from high-income Western countries, where accessibility, infrastructure, and healthcare systems differ greatly from those in low-resource settings.
- While the physical and functional benefits of power wheelchairs have been well documented, there is insufficient exploration of their psychosocial impact—including self-identity, confidence, social stigma, and emotional well-being.
- Few studies address how the transition changes the user's sense of independence, dignity, or belonging, or how they negotiate new social roles and family expectations post-transition.
- Although manual wheelchairs are associated with repetitive strain injuries and fatigue, there is insufficient evidence on the long-term physical outcomes of power wheelchair use, such as muscle deconditioning, weight gain, or cardiovascular changes.
- Much of the literature adopts a clinical or engineering-centered perspective that emphasizes technical functionality over users' lived realities, with few phenomenological or narrative-based studies capturing first-person accounts of daily experiences, perceptions, and challenges during the transition—highlighting the need for research grounded in user voice, context, and social meaning.

- Existing literature seldom explores training, maintenance, or policy supports that enable successful transitions, particularly in low-resource settings where such factors critically affect sustained independent mobility.

CHAPTER III: METHODS

3.1 Study Question, Aim, Objective

3.1.1 Study Question

What are the lived experiences of persons with disabilities during the transition from manual to power wheelchairs and how do users perceive the impact of this transition on their independence, confidence, and quality of life?

3.1.2 Aim

To explore and understand the lived experiences, perceptions, and adaptive processes of persons with disabilities during their transition from manual to power wheelchairs, with a focus on independence, confidence, and participation in daily life.

3.1.3 Objectives:

- To identify the functional changes in daily tasks, mobility, and occupational participation following the transition to a power wheelchair.
- To examine the difficulties encountered during the transition.
- To investigate how the transition influences occupational identity and engagement in meaningful roles and activities.
- To investigate the environmental factor that enhance or decreased participation.

3.2 Study Design

3.2.1 Study Method

In this study, the student researcher used a qualitative research design to explore the lived experiences of persons with disabilities during their transition from manual to power wheelchairs. This approach allowed me to understand participants' feelings, perceptions, and challenges in depth, capturing the personal and social meanings behind their experiences that could not be revealed through quantitative methods (Creswell & Poth, 2018; Patton, 2015).

3.2.2 Study Approach

Persons with physical disabilities experienced diverse changes during their transition from manual to power wheelchairs. To gain a deeper understanding of these first-hand experiences, the student researcher adopted a phenomenological research approach, which focuses on uncovering the meanings, emotions, and perceptions that individuals attach to significant life transitions (Moustakas, 1994). This approach enabled me to capture the essence of participants' lived experiences, allowing for a rich exploration of how they perceived, adapted to, and made sense of using a power wheelchair in their daily lives. Through this method, the student researcher was able to identify recurring themes, challenges, and facilitators that shaped users' adaptation processes. The insights derived from this study contributed to enhancing occupational therapy practices, improving rehabilitation strategies, and informing policy development related to assistive mobility technologies (Creswell & Poth, 2018).

3.3 Study Setting and Period

3.3.1 Study Setting

The study was conducted at the Centre for the Rehabilitation of the Paralysed (CRP) in Bangladesh. Data were collected from CRP staff members who have personal experience using a manual wheelchair prior to transitioning to a power wheelchair. These individuals not only use assistive devices in their daily lives but also contribute professionally within the rehabilitation setting, offering a unique dual perspective. Their experiences provide valuable insight into both personal adaptation and the broader implications for assistive technology use in rehabilitation contexts.

3.3.2 Study Period

The Period of the study was June 2025 to January 2026.

3.4. Study Participants

3.4.1 Study Population

The study population consisted of staff members at the Centre for the Rehabilitation of the Paralysed (CRP) in Bangladesh who have physical disabilities and have personally transitioned from using a manual wheelchair to a power wheelchair. These individuals were selected using purposive sampling based on their direct experience with both types of mobility devices. Their dual role as assistive technology users and rehabilitation professionals provided rich, first-hand insights into the challenges and enablers of this transition.

3.4.2 Sampling Techniques

Purposive sampling was used to identify participants who had direct experience relevant to the study objectives. This non-probability method allowed me to intentionally select individuals who could provide rich, detailed insights into the transition from manual to power wheelchairs based on their lived experiences (Patton et al, 2015). Participants were chosen according to specific inclusion criteria, such as having a physical disability, experience with both types of wheelchairs, and the ability to express their perceptions clearly (Palinkas et al., 2015). This sampling approach ensured that information-rich cases were included, enabling an in-depth understanding of personal adaptations, emotions, and challenges associated with the transition. Purposive sampling was particularly suitable for this qualitative phenomenological research, as it emphasized depth, meaning, and contextual understanding rather than numerical representation (Creswell & Poth, 2018).

3.4.3 Inclusion Criteria

- Adults (18 years and older) with physical disabilities.
- Staff members of CRP who have used a manual wheelchair for at least six months.
- Currently using a power wheelchair for a minimum of one months.
- Willing and able to provide informed consent and participate in an interview.

3.4.4 Exclusion Criteria

- Individuals who are not staff members of CRP, as the study focuses on those with both lived and professional experiences within the rehabilitation setting.
- Individuals who have not personally used both manual and power wheelchairs.
- Individuals who have used a power wheelchair for less than one months, as they may not have sufficient experience to reflect on the transition.\

3.4.5 Sample Size

The sample size of this study are 10 participants

3.4.6 Participant Overview

A total of 10 individuals with physical disabilities participated in this study. The group included both males and females with varied conditions such as spinal cord injury (SCI), post-polio paralysis, and transverse myelitis, representing a range of functional abilities and durations of disability. All participants had prior experience using manual wheelchairs and were currently using power wheelchairs, making their lived experiences central to the objectives of this study. To maintain confidentiality, pseudonyms were used in place of participants' real names. A detailed overview of participant characteristics is presented in Table 3.1.

Table 3.1*Participant's overview*

Pseudonyms	Age	Sex	Employment Status	Type of Disabilities	Settings
Rina	32 Y	Female	Employed	SCI	CRP
Kobita	33 Y	Female	Employed	SCI	CRP
Sumon	23 Y	Male	Employed	SCI	CRP
Ishita	26 Y	Female	Employed	TM	CRP
Joshna	40Y	Female	Employed	SCI	CRP
Monir	30Y	Male	Employed	TM	CRP
Nirjhor	28Y	Male	Employed	SCI	CRP
Akash	42Y	Male	Employed	Polio	CRP
Midori	34 Y	Female	Employed	TM	CRP
Nishu	26Y	Female	Employed	Myopathy	CRP

3.5 Ethical Consideration

The ethics were maintained by following ethical issues as stated by the World Medical Association (WMA) created for medical research involving human subjects (Assembly et al., 2022).

3.5.1 Ethical Clearance

Ethical clearance was obtained from the Institutional Review Board of Bangladesh Health Professions Institute through the Department of Occupational Therapy, along with a brief description of the aim and objectives. The IRB clearance number is CRP-BHPI/IRB/07/2025/1115.

3.5.2 Informed Consent

- **Information sheet:** The student researcher provided each participant with an information sheet that clearly and concisely outlined all pertinent details about the study, including its aim and objectives.
- **Consent form:** Participants voluntarily participated in this study after being informed of its purpose. Written consent forms were used to obtain their formal consent.

- **Withdrawal form:** Before the data analysis began, participants were informed that they could withdraw from the study. They were given a withdrawal form attached to the information sheet to formalize their decision if they chose to withdraw.

3.5.3 Unequal Relationship

The student researcher had no unequal or power relationship with the participants.

3.5.4 Risk and Beneficence

It was explained to the participants that this research posed no physical, social, or psychological risk to them. Participants were informed that they would not receive any benefit from the researcher.

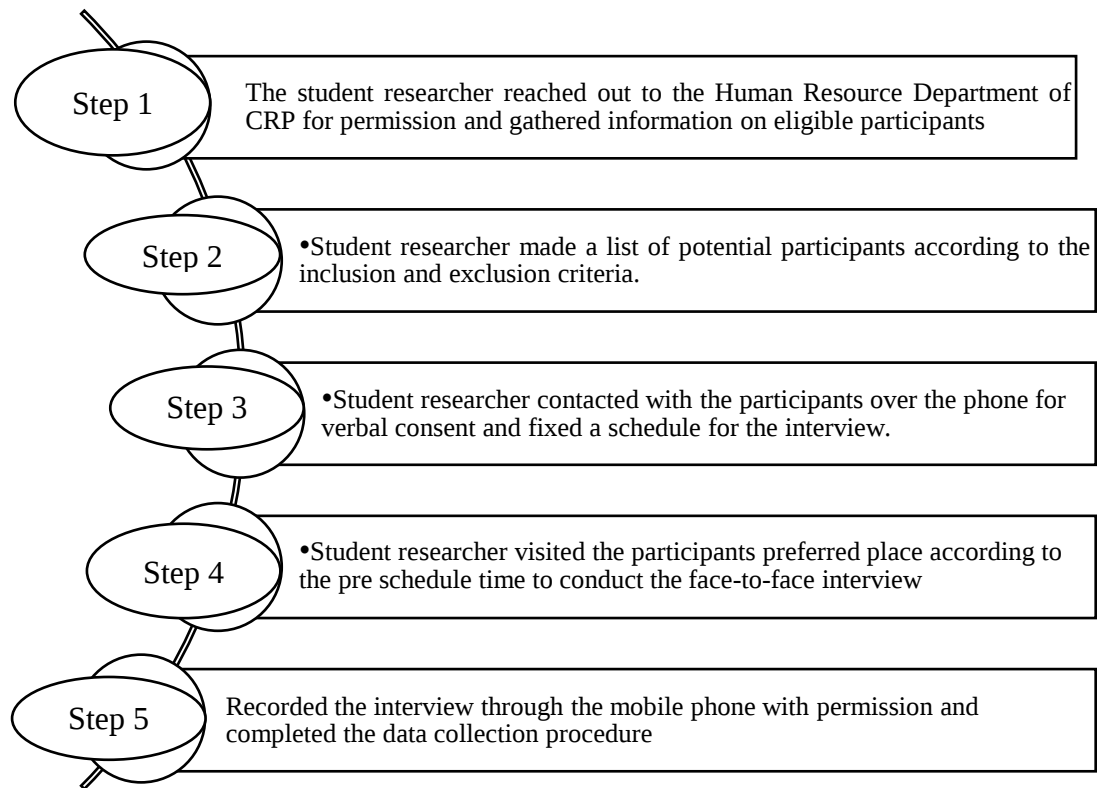
3.5.4 Confidentiality

The student researcher was highly concerned about the confidentiality of the participant's information. Their socio-demographic information, such as name and identity, was not disclosed except to the supervisor, as clearly stated in the information sheet. Participants were assured that their identities would remain private for all future purposes, including report writing, publication, conferences, and other written or verbal discussions.

3.6 Data Collection Process

3.6.1 Participant Recruitment Process

A total of ten participants took part in this study, all of whom were staff members at the Centre for the Rehabilitation of the Paralysed (CRP).

Figure 3.1*Overview of participant recruitment process***3.6.2 Data Collection Method**

The student researcher contacted the CRP authority to obtain permission to collect data from staff members with various physical disabilities who had experience transitioning from manual to power wheelchairs. The researcher obtained verbal consent from all the participants. Data were collected from all patients who met the inclusion and exclusion criteria. Data was collected using a face-to- face semi-structured interviews (Byrne, 2017). The student researcher performed in-depth, in-person, semi-structured interviews to gather data for the study. Building rapport, providing thorough answers, and observing behavioral indicators were all made possible by this method.

Open-ended questions facilitated in-depth conversations. The COREQ checklist directed data collection (Tong et al., 2007). To reduce distractions, interviews were

conducted in peaceful settings. The researcher-built rapport, outlined the study's goal, and emphasized the importance of the results before each session. The 45 to 60-minute interviews were recorded in flight mode using a mobile phone recorder.

3.6.3 Data Collection Instrument

The student researcher used a self-developed interview guide to collect participant data. The student researcher developed A semi-structured interview guide (See Appendix C) following Grounded Theory Interview Questions used in a study conducted in America (Veith et al., 2006). Because it encouraged a more in-depth response from research participants and helped to keep the interview and the subject focused, the student researcher developed an interview guide by reviewing literature related to this study, taking into account the research aim and objectives. The interview guide included questions about experiences of divorce/separation in the lives of individuals with SCI. The student researcher also developed a sociodemographic information sheet that is included in the semi-structured interview guide.

3.6.4 Field Test

The student researcher conducted a field test with 2 participants before starting data collection. A field test before the final data collection was crucial as it allowed the researcher to refine the data collection method and identify any challenges in questioning and develop strategies to build rapport with participants to elicit authentic responses (Malmqvist et al., 2019). The semi-structured questionnaire was used, and after the field test, one additional question were included. These questions explored financial responsibilities after marital dissolution and participants' reasons for avoiding social activities. The structure of the interview guide was slightly modified to better understand the participants' responses.

3.7 Data Management and Analysis

The primary definition of thematic analysis is an independent qualitative descriptive method, which is described as "a method for identifying, analyzing, and reporting patterns (themes) within data"(Braun & Clarke, 2006). It has also been presented as a qualitative descriptive approach that gives researchers the fundamental knowledge and abilities needed to carry out a wide range of additional qualitative analyses. In this regard, thematic analysis is an independent and trustworthy qualitative method that qualitative researchers use for data analysis (Vaismoradi et al., 2013). The student researcher selected thematic analysis based on Braun and Clarke's six steps of thematic analysis. The six steps are:

Step 1: Familiarizing with the data: Initially, the student researcher conducted interviews, translated Bangla textual data into English, and became familiar with the data. The renowned supervisor reviewed each translation and transcription. The student researcher read the entire document to understand the data's significance and patterns and highlight the key aspects (Braun & Clarke, 2006; Nowell et al., 2017).

Step 2: Generating initial codes: In this step, the student researcher highlighted key phrases from the data, created preliminary codes, and assigned names, which the supervisor verified after highlighting significant points (Braun & Clarke, 2006; Clarke & Braun, 2018).

Step 3: Searching for themes: After reading the translation and consulting with the supervisor, the student researcher recorded interview codes on separate pages, highlighting similar ones, and then arranged them on sticky notes and categorized them into potential themes to quickly identify related thoughts and identify possible themes (Braun & Clarke, 2006; Terry et al., 2017).

Step 4: Reviewing themes: After creating a preliminary thematic map, the student

researcher consulted with the supervisor. With the supervisor's assistance, seven themes with some sub-themes emerged from the study (Braun & Clarke, 2006; Nowell et al., 2017).

Step 5: Defining and naming themes: After refinement and amendment, the student researcher finalized the themes and sub-themes for the findings, providing precise names and definitions for reader comprehension. A renowned supervisor reviewed each theme and sub-theme (Braun & Clarke, 2006; Terry et al., 2017).

Step 6: Producing the Report: The student researcher wrote the findings chapter of the dissertation, organizing the themes using verbatim quotes from the participants (Braun & Clarke, 2006; Nowell et al., 2017).

3.8 Trustworthiness & Rigour

Trustworthiness was maintained by following methodological rigour and interpretive rigour (Fossey et al., 2002).

3.8.1 Methodological rigour

Congruence: To better understand the lived experiences, this study adopted a phenomenological qualitative approach (see Section 3.2: Study Design), enabling an in-depth exploration of individuals' experiences during the transition from manual to power wheelchairs (Fossey et al., 2002).

Responsiveness to Social Context: Semi-structured in-person interviews were held in a quiet, participant-favored location to encourage ease and candid communication (see section 3.3.1: Study Setting). This method assisted the researcher in comprehending the viewpoints of the participants concerning their social and environmental surroundings (Fossey et al., 2002).

Appropriateness and Adequacy: Convenient sampling was used to select participants who were easily accessible and willing to participate, ensuring that they met the inclusion requirements (Etikan, 2016; Hassani, 2017). Data was gathered via verbatim audio-

record transcriptions to preserve the responses' authenticity and depth (see sections 3.4.2 and 3.6.1: Sampling techniques and participant recruitment process).

Transparency: The methodical data collection and analysis documentation guaranteed a transparent and repeatable study procedure. To reduce prejudice, the researcher's interactions with participants were informed by ethical considerations and reflexivity (see sections 3.6 and 3.7: Data Collection Process and Data Management and Analysis).

3.8.2 Interpretive Rigour

Authenticity: During interviews, participants' answers were verbally verified to reflect their experiences accurately. Direct quotes were used to maintain the veracity of their stories (see Chapter IV: Result section).

Coherence: The data was transcribed in the participants' native tongue and then translated into English as part of a systematic thematic analysis process (Fossey et al., 2002). A supervisor reviewed each transcription to guarantee accuracy and consistency (see section 3.7: Data management and analysis).

Reciprocity: The interpretation of the data did not alter its original meaning; it stayed trustworthy to the participants' experiences. The analysis was carried out independently without participant input (see section 3.7: Data management and analysis).

Typicality: To improve transferability, the study thoroughly explained the research setting. The results provide important new information that can be applied to different rehabilitation situations (see sections 3.4.5 and 3.7: Participant Overview and Data Management and Analysis).

Permeability of the Researcher: Throughout the study, the researcher remained reflexive, admitting to her own prejudices and making sure that the interpretation of the results was based on the participants' experiences. The integrity of the study was maintained by closely adhering to ethical norms (see section 3.7: Data management and analysis)

CHAPTER IV: RESULTS

In this study, individuals with disabilities who had transitioned from manual to power wheelchairs shared their lived experiences related to mobility, participation, and daily life. A total of participants included individuals residing in the community as well as those receiving rehabilitation services. Data analysis resulted in the identification of six overarching themes: i) Reclaiming independence through mobility, ii) Transformation in mobility and occupational performance, iii) Physical comfort, health concerns, and body management, iv) Environmental and device-related barriers to participation, v) Psychosocial adjustment and occupational identity reconstruction, and vi) User-led recommendations for sustainable mobility.

Each theme consists of several subthemes that reflect participants' experiences and perceptions. An overview of the themes and corresponding subthemes is presented in Table 4.1, summarizing the key findings of the study.

Table 4.1

Overview of the result

Theme	Sub-Theme
Reclaiming Independence Through Mobility	Sense of autonomy and personal control
	Reduced reliance on caregivers
	Independent engagement in daily activities
Transformation in Functional Mobility and Occupational Performance	Time-saving and reduced physical fatigue
	Task-specific use of power versus manual wheelchair
	Enhanced access to work and community environments
Physical Comfort, Health Concerns, and Body Management	Reduction in upper-limb pain and physical strain
	Decreased physical exertion and exercise

Environmental and Device-Related Barriers to Participation	Perceived risk of weight gain and muscle weakness
	Need to balance mobility with physical health
	Limited accessibility in narrow and crowded spaces
	Inadequate indoor and bathroom accessibility
	Design, size, and safety limitations of the wheelchair
Reconstruction Occupational Identity and Psychosocial Adjustment	Weather, road condition, and infrastructure barriers
	Growth in self-confidence and self-efficacy
	Rediscovering meaningful family, work, and social roles
	Shift from dependency to active participation
User-Led Recommendations for Sustainable Mobility	Positive social response and acceptance
	Need for Individualized Wheelchair Design
	Balanced Use for Long-Term Health

4.1 Theme one: Reclaiming Independence Through Mobility

This theme captures how participants experienced the power wheelchair as a means of regaining independence that had been restricted following spinal cord injury. Transitioning from a manual to a power wheelchair allowed participants to move more freely, make independent decisions, and reduce reliance on caregivers. For many, this change represented not only improved physical mobility but also a restoration of personal control, dignity, and self-determination in daily life.

4.1.1 Sub-theme: Reduced Reliance on Caregivers

Participants frequently described how the power wheelchair decreased their need for assistance from family members or caregivers, particularly for outdoor mobility. Prior to using a power wheelchair, many participants relied on others for pushing, guidance, or supervision, which limited spontaneity and independence. One of the participants, Ishita

said,

“Before, someone had to push me whenever I went outside. Now I don’t need anyone with me.” After the transition, participants felt more capable of managing their mobility independently. Joshna Stated that,

“Before getting the power wheelchair, I could not go outside alone. Someone from my family always had to come with me and push my wheelchair. If they were busy, I had to stay at home. After I started using the power wheelchair, I don’t need anyone to help me move outside. I can go out whenever I want, and my family also feels relaxed because they don’t have to worry about me all the time.”

4.1.2 Sub-theme: Increased Autonomy and Personal Control

Beyond physical independence, participants emphasized a strong sense of autonomy gained through the use of a power wheelchair. The ability to decide when and where to go without waiting for assistance was described as empowering and emotionally meaningful. Participants associated this autonomy with improved confidence and self-esteem. Rina reported that,

“Earlier I had to wait for others to help me. Even if I wanted to go somewhere, I had to think whether someone was free or not. Now I can decide by myself. I can plan my day, go out when I want, and return on my own time. This makes me feel that I have control over my life again.” Another participant, Nirjhor said,

“It feels like I got my control back. I can plan my day the way I want.”

4.1.3 Sub-theme: Independent Engagement in Daily Activities

The regained independence translated into greater engagement in daily occupations such as shopping, commuting, social visits, and leisure activities. Participants described feeling more confident and motivated when they were able to perform these activities independently. Kabita said that,

“Now I can go to the market, meet friends, and attend work without depending on anyone. Doing my own activities by myself gives me confidence and makes me feel active again.”

4.2 Theme Two: Transformation in Mobility and Occupational Performance

This theme reflects how power wheelchair use transformed participants’ patterns of movement and improved their performance in work, household, and community-based occupations. Participants highlighted efficiency, reduced fatigue, and improved access to meaningful environments.

4.2.1 Sub-theme: Time-Saving and Reduced Physical Fatigue

Reduced physical fatigue was a key benefit of power wheelchair use. Participants reported having more energy available for work, family, and leisure activities. Midori reported that

“When I used the manual wheelchair, by the time I reached somewhere, I was already tired. Now I save both time and energy, and I can use that energy for other important activities.”

4.2.2 Sub-theme: Task-specific use of power versus manual wheelchair

Participants did not perceive the transition from manual to power wheelchair as a complete replacement of one device with another. Instead, they described a task-specific and context-dependent use of both wheelchairs, demonstrating active decision-making and problem-solving in managing their daily activities. The power wheelchair was primarily viewed as suitable for outdoor mobility, long-distance travel, and community participation, where reduced physical effort and increased speed were essential. In contrast, the manual wheelchair was often preferred for indoor use, short-distance movement, and activities requiring frequent transfers or maneuvering in confined spaces.

Participants explained that indoor environments such as homes, offices, and bathrooms often lacked adequate space for maneuvering a power wheelchair. As a result, the manual wheelchair was considered more practical for navigating narrow doorways, furniture arrangements, and tight corners. Additionally, some participants perceived the manual wheelchair as offering greater control during transfers and daily self-care tasks. Nishu reported That,

“I don’t think the power wheelchair can be used for everything. For long distance and outside movement, it is very helpful and saves my energy. But inside the house, especially in small spaces like the bedroom or bathroom, the manual wheelchair works better. I use the power wheelchair when I need to go far, and I use the manual wheelchair for daily activities and transfers. I choose according to the task and the place”.

4.2.3 Sub-theme: Enhanced access to work and community environments

Several participants emphasized that prior to using a power wheelchair, reaching work or community spaces required excessive physical effort, assistance from others, or complete avoidance of certain locations. The power wheelchair reduced these barriers by allowing longer-distance travel with minimal physical strain, making regular participation more feasible and less exhausting. Rina reported that,

“Before getting the power wheelchair, going to my office was very difficult. Sometimes I could not go at all because the distance was too much for me. After using the power wheelchair, I can go to my office regularly, move around the area, and come back without feeling completely tired. I can also go to the market and meet people in the community. Earlier, these places felt unreachable, but now they feel possible.”

Participants also highlighted that increased access to community environments supported social interaction, independence, and a renewed sense of social inclusion. Being able to move freely within community spaces allowed participants to participate more actively in social life rather than remaining confined to their homes. This shift contributed to improved confidence and a stronger occupational identity as workers, community members, and active individuals.

4.3 Theme Three: Physical Comfort, Health Concerns, and Body Management

This theme captures participants' complex bodily experiences following the transition from manual to power wheelchairs. While the power wheelchair significantly improved physical comfort by reducing pain and strain, participants simultaneously expressed concern about reduced physical activity and its potential long-term consequences. Participants' narratives reflected an ongoing process of body management, where comfort, efficiency, and health were continuously weighed against one another.

4.3.1 Sub-theme: Reduction in Upper-Limb Pain and Physical Strain

Participants consistently described relief from upper-limb pain, particularly in the wrists, shoulders, and hands, which had developed due to prolonged manual wheelchair propulsion. The physical demands of repetitive pushing were described as exhausting and painful, often limiting daily mobility. Transitioning to a power wheelchair reduced these repetitive movements, allowing participants to conserve energy and experience greater physical comfort throughout the day. Ishita reported that,

“When I was using the manual wheelchair, my wrists and shoulders were always painful. After some time, I could not push properly anymore. Now with the power wheelchair, that pain has reduced a lot. My body feels more relaxed, and I don’t feel the same pressure on my hands and shoulders.” For many participants, this reduction

in pain was described as essential for sustaining daily activities and preventing further physical deterioration.

4.3.2 Sub-theme: Decreased Physical Exertion and Exercise

Despite improved comfort, participants were acutely aware that power wheelchair use reduced the level of physical exertion involved in daily movement. While this reduction was initially welcomed, it also raised concerns about becoming physically inactive. Participants reflected on the contrast between the effort required in manual wheelchair use and the ease of powered mobility. Midori reported that,

“Now I don’t need to push myself physically. It is comfortable, and I don’t get tired like before. But at the same time, my body movement has reduced a lot. I feel that I am sitting most of the time, and that worries me.” This awareness often leads participants to reconsider how much they relied on powered mobility in their everyday routines.

4.3.3 Sub-theme: Perceived Risk of Weight Gain and Muscle Weakness

Participants frequently linked reduced physical activity with fears of weight gain and muscle weakness. Many viewed these risks as long-term health threats that could further limit independence and functional ability. Participants expressed concern that prolonged sitting and reduced exertion could negatively affect their physical condition over time. Akash reported that,

“Earlier, when I used the manual wheelchair, my body used to get exercise naturally. Now I sit most of the time on the power wheelchair. I feel that if this continues, my muscles will become weak and my weight may increase in the future.” These concerns highlight participants’ awareness of secondary health complications associated with reduced physical activity.

4.3.4 Sub-theme: Need to Balance Mobility with Physical Health

In response to these concerns, participants emphasized the importance of balancing comfort and convenience with physical health maintenance. Many adopted a combined approach, using power wheelchairs for long-distance and outdoor mobility while continuing to use manual wheelchairs for short-distance movement or exercise. This strategy was described as intentional and health-driven. Kobita reported that,

“Using only the power wheelchair is not good for health. I use the manual wheelchair also so that my body stays active. Power wheelchair is helpful for distance, but manual wheelchair helps me keep my strength.” Overall, participants described body management as an ongoing process that required conscious decision-making. Rather than viewing the power wheelchair as a complete solution, they actively adjusted their mobility strategies to protect long-term physical health while maintaining independence and comfort.

4.4 Theme Four: Environmental and Device-Related Barriers to Participation

Although the power wheelchair enhanced personal mobility and independence, participants consistently reported that environmental and device-related barriers continued to restrict full participation in daily life. These barriers were largely external and beyond the users’ control, highlighting a mismatch between individual capacity and environmental readiness. Participants emphasized that without accessible environments and appropriate device design, the benefits of powered mobility remained limited and situational.

4.4.1 Sub-theme: Limited Accessibility in Narrow and Crowded Spaces

Participants frequently described difficulties navigating narrow roads, crowded marketplaces, and congested public areas. The physical dimensions of the power wheelchair, combined with limited turning space and unpredictable pedestrian

movement, made these environments particularly challenging. Participants reported anxiety, slowed movement, and in some cases complete avoidance of such areas. Monir reported that,

“In narrow roads and crowded markets, it becomes very difficult to move with the power wheelchair. People don’t always notice the wheelchair, and there is very little space to turn or stop safely. Sometimes I feel scared to go there because one small mistake can cause an accident.” These challenges significantly reduced participants’ confidence in using the power wheelchair in busy community settings.

4.4.2 Sub-theme: Inadequate Indoor and Bathroom Accessibility

Despite improvements in outdoor mobility, participants reported persistent barriers within indoor environments, particularly in homes and bathrooms. Limited space, narrow doorways, and fixed furniture arrangements restricted wheelchair movement and increased dependence during self-care activities. Bathrooms were described as especially problematic due to insufficient turning space and lack of accessible fixtures. Joshna reported that,

“Inside the house, especially in the bathroom, there is not enough space for the power wheelchair. I cannot move freely, and sometimes I need help just to enter or position the chair properly.” Such limitations reduced participants’ sense of independence and privacy during daily self-care routines.

4.4.3 Sub-theme: Design, Size, and Safety Limitations

Participants highlighted concerns related to wheelchair design, including poor fit, balance issues, and safety during transfers. Some participants felt that the wheelchair did not adequately match their body dimensions or functional needs, leading to discomfort and fear of falling. Safety concerns were particularly prominent during transfers, uneven surfaces, and sudden stops. Sumon reported that,

“Sometimes the wheelchair does not fit my body properly. During transfer, I feel unsafe because locking the chair is not always easy, and I am afraid of losing balance.” These design-related challenges reduced participants’ confidence in using the wheelchair independently in certain situations.

4.4.4 Sub-theme: Weather, Road Condition, and Infrastructure Barrier

Environmental factors such as rain, waterlogging, uneven roads, and poor infrastructure were major barriers to safe wheelchair use. Participants expressed fear of damage to the battery and motor, as well as concern for their own safety during adverse weather conditions. As a result, many avoided outdoor movement during rain or in poorly maintained areas. Ishita reported that,

“During rain or waterlogging, I avoid going out because it is unsafe and can damage the wheelchair. The roads are uneven, and I worry about slipping or damaging the battery.”

4.5 Theme Five: Reconstruction of Occupational Identity and Psychosocial Adjustment

This theme reflects the profound psychosocial changes experienced by participants following improved mobility through the use of a power wheelchair. Beyond physical movement, participants described changes in how they perceived themselves, how they engaged in meaningful roles, and how they were viewed by others. Improved mobility supported a process of occupational identity reconstruction, characterized by increased confidence, renewed participation, and a shift from passive dependency to active engagement in life.

4.5.1 Sub-theme: Growth in Self-Confidence and Self-Efficacy

Participants consistently reported increased self-confidence and belief in their own abilities after gaining independent mobility. The ability to move without assistance

strengthened their sense of competence and control, leading to greater self-efficacy. This confidence extended beyond mobility to influence emotional well-being and decision-making in daily life. Rina reported that,

“Now I feel confident because I can manage my movement independently. Earlier, I was always afraid of going outside alone, but now I trust myself more. I feel that I can handle my daily life better than before.” For many participants, confidence grew gradually as they became familiar with the power wheelchair and experienced success in independent movement.

4.5.2 Sub-Theme: Rediscovering Meaningful Family, Work, and Social Roles

Improved mobility enabled participants to re-engage in roles that had been disrupted following injury, including family responsibilities, employment, and social participation. Participants described how resuming these roles restored a sense of purpose, responsibility, and usefulness, which are central to occupational identity. Nishu reported that,

“I can take care of my family again. I can go out, work, and support them. This makes me feel responsible and useful, like I am contributing again.”

4.5.3 Sub-Theme: Shift from Dependency to Active Participation

Participants described a clear transition from being dependent on others to becoming active participants in their own lives. Independent mobility reduced the need for constant assistance, allowing participants to take initiative and make decisions regarding their daily activities. Midori reported that,

“Earlier I depended on others for everything, even for small things. Now I actively participate in my life. I plan my activities and go where I need to go by myself.”

4.5.4 Sub-theme: Positive Social Response and Acceptance

Participants perceived noticeable changes in how they were treated by family members, peers, and the wider community. Independent mobility altered societal perceptions, leading

to increased respect, acceptance, and inclusion. Rina reported that,

“People now see me as capable, not helpless. Their attitude towards me has changed, and they treat me with more respect.”

Positive social responses reinforced participants’ confidence and sense of belonging.

4.6 Theme Six: User-Led Recommendations for Sustainable Mobility

This theme captures participants’ recommendations for improving power wheelchair use and ensuring sustainable mobility. Drawing on lived experience, participants identified practical needs related to wheelchair design, training, and health maintenance. These recommendations reflect participants’ desire for long-term independence, safety, and well-being.

4.6.1 Sub-theme: Need for Individualized Wheelchair Design

Participants emphasized that wheelchair design should be individualized based on body size, functional ability, and environmental context. Standardized designs were perceived as insufficient and sometimes unsafe. Participants highlighted the importance of proper fitting, seating comfort, and adjustability. Nirjhor reported that,

“One standard wheelchair cannot suit everyone. Every person’s body and condition are different. The design should match the user, otherwise it becomes uncomfortable and even unsafe.” Individualized design was viewed as essential for maximizing independence and safety.

4.6.2 Sub-theme: Balanced Use for Long-Term Health

Participants strongly recommended a balanced approach to wheelchair use, combining power and manual wheelchairs to maintain physical health. While power wheelchairs were valued for long-distance mobility and energy conservation, manual wheelchairs were seen as important for maintaining physical activity and preventing deconditioning. Monir reported that,

“Power wheelchair is very good for distance and outdoor movement, but manual wheelchair is important for exercise. Using both helps to keep the body healthy and active in the long run.”

CHAPTER V: DISCUSSION

This qualitative study explored the lived experiences of persons with disabilities during their transition from manual to power wheelchairs in a low-resource context. The findings demonstrate that this transition is not merely a change in mobility device but a complex occupational, physical, and psychosocial process shaped by environmental, cultural, and personal factors. Consistent with previous research, the transition to power wheelchair use enhanced mobility, independence, participation, and psychosocial well-being; however, the findings also revealed important contextual and gender-specific differences that extend existing literature.

Participants described the transition to a power wheelchair as a major turning point that increased independence and reduced reliance on caregivers. This aligns with the findings of Mortenson et al. (2015) and Abou and Rice (2024), who reported that power wheelchair users experience greater autonomy, participation, and enfranchisement. Similarly, Domingues et al. (2019) found that powered mobility improves competence, adaptability, and self-esteem. However, unlike Western studies where power wheelchairs often replace manual mobility (e.g., Sonenblum et al., 2008; Cooper et al., 2002), participants in this study used both devices strategically. Manual wheelchairs remained essential for indoor mobility, transfers, and physical activity, while power wheelchairs were preferred for outdoor and community participation. This dual use reflects environmental constraints, housing conditions, and limited accessibility in Bangladesh.

Participants reported improved access to work, markets, education, and social life through powered mobility, consistent with Giesbrecht et al. (2009) and Rice et al. (2015). Power wheelchairs enabled faster, smoother, and less physically demanding travel, allowing sustained engagement in productive and social roles.

However, environmental barriers such as narrow roads, poor surfaces, and inaccessible buildings continued to restrict full participation, reinforcing that powered mobility alone cannot ensure occupational engagement without environmental support, as also emphasized by Hardy (2004) and Mortenson et al. (2015).

The reduction in upper-limb pain and fatigue reported by participants aligns with biomechanical evidence showing that powered mobility reduces joint loading and propulsion strain (Corfman et al., 2003; Mercer et al., 2006). At the same time, concerns about weight gain and reduced physical activity mirror findings from Levy et al. (2010) and Giacobbi et al. (2010), suggesting that while power wheelchairs reduce physical strain, they may also contribute to deconditioning if not balanced with activity. Participants' adaptive use of both wheelchairs reflects an effort to maintain physical health while benefiting from powered mobility.

Participants also described increased confidence, social acceptance, and engagement in meaningful roles after transitioning to power wheelchairs, which is consistent with Domingues et al. (2019) and Rice et al. (2015). Improved mobility allowed participants to redefine themselves as capable, productive, and socially involved, supporting the relationship between participation and occupational identity described by Hardy (2004).

A particularly important and culturally grounded finding of this study was the gendered pattern of wheelchair use. Female participants preferred power wheelchairs for outdoor mobility because they continued to perform extensive household duties after returning from work or education. These domestic responsibilities required prolonged use of manual wheelchairs indoors, leading to fatigue and upper-limb strain. As a result, women used power wheelchairs to conserve energy and maintain their ability to participate in both domestic and professional roles.

In contrast, male participants generally had fewer household responsibilities beyond self-care. Consequently, greater reliance on power wheelchairs led to reduced physical activity and more rapid weight gain, prompting the need for additional exercise to maintain physical health. This gendered pattern is rarely addressed in existing powered mobility literature, which tends to focus on functional and psychosocial outcomes rather than cultural and occupational role differences.

These findings have important implications for occupational therapy practice. They highlight the need for context-sensitive and gender-responsive assistive technology provision that considers domestic workload, environmental conditions, and long-term health. Occupational therapists should support hybrid mobility strategies, training in safe use, and physical activity planning to ensure sustainable participation, consistent with the client-centered and occupation-focused approaches recommended by Worobey et al. (2012), Kloosterman (2016), and Rushton et al. (2017). Overall, the transition from manual to power wheelchairs should be understood as an ongoing occupational adaptation process that requires holistic, person-centered rehabilitation to support meaningful and healthy participation.

Overall, this study demonstrates that the transition from manual to power wheelchairs is a complex and multifaceted process. While power wheelchairs enhance mobility, independence, and participation, their impact is shaped by physical health considerations, environmental accessibility, device design, and psychosocial factors. The findings underscore the importance of holistic, person-centered rehabilitation approaches that address not only mobility needs but also long-term health, environmental barriers, and occupational identity.

CHAPTER VI: CONCLUSION

6.1 *Strength and Limitation*

6.1.1 Strengths of the Study

- This study provides an in-depth understanding of the lived experiences of persons with disabilities during the transition from manual to power wheelchairs. By focusing on participants' personal narratives, the study captures nuanced insights into physical, emotional, social, and occupational changes that are often overlooked in quantitative research.
- The use of a qualitative research design allowed participants to express their experiences in their own words, enabling a deeper exploration of meanings, perceptions, and subjective realities. This approach was particularly suitable for understanding complex phenomena such as independence, identity reconstruction, and psychosocial adjustment.
- Including both inpatient and community-dwelling participants strengthened the study by capturing experiences across different stages of rehabilitation. This provided a broader perspective on how the transition to power wheelchairs is experienced during institutional rehabilitation as well as in real-life community contexts.
- The study did not limit its focus to functional mobility outcomes but also explored psychosocial well-being, participation, and occupational identity. This comprehensive approach aligns well with occupational therapy frameworks and provides a more complete understanding of the impact of power wheelchair use.

The findings are directly applicable to occupational therapy and rehabilitation practice.

Insights related to task-specific wheelchair use, health maintenance, environmental

barriers, and identity reconstruction can inform clinical decision-making, client education, and service planning.

6.1.2 Limitation of the Study

- The relatively small number of participants may limit the generalizability of the findings. While qualitative research does not aim for statistical generalization, a larger sample could have captured a wider range of experiences and perspectives.
- Participants were recruited from a single rehabilitation center and its surrounding community. As a result, the findings may reflect contextual characteristics of that setting and may not fully represent experiences in other rehabilitation facilities or regions.
- The study relied on participants' self-reported experiences, which may be subject to recall bias or social desirability bias. Participants' reflections may also have been influenced by their current physical or emotional state at the time of the interview. The study captured participants' experiences at a single point in time. Longitudinal data could provide a deeper understanding of how experiences, health concerns, and occupational identity evolve over time following the transition to power wheelchair use. Environmental, cultural, and infrastructural factors unique to the study setting may limit the transferability of findings to other contexts. Differences in accessibility, rehabilitation services, and societal attitudes toward disability may influence experiences in other regions.

6.2 Practice Implication

6.2.1 Recommendations for Future Practice

- Occupational therapists should assess not only physical abilities but also psychosocial needs, occupational roles, lifestyle, and environmental contexts when prescribing power wheelchairs.

- Wheelchair design, seating, control systems, and dimensions should be tailored to the user's body structure, functional ability, and daily activity demands to ensure comfort and safety.
- Rehabilitation programs should train users in selecting and using manual or power wheelchairs based on task requirements, environmental conditions, and safety considerations.
- Clients should receive guidance on balancing power and manual wheelchair use to prevent physical deconditioning, weight gain, and musculoskeletal complications. Regular follow-up sessions should be integrated into rehabilitation services to monitor wheelchair use, address emerging challenges, and adjust equipment as needed. Occupational therapists should assess home, workplace, and community environments and advocate for accessible infrastructure, including ramps, road safety, and indoor space modifications.
- Rehabilitation interventions should explicitly address confidence building, role resumption, and occupational identity reconstruction following the transition to power wheelchair use.

6.2.2 *Recommendations for Future Research*

- **Larger and more diverse sample studies:** Future research should involve participants from multiple rehabilitation centers and varied geographic regions to improve transferability of findings.
- **Longitudinal research designs:** Long-term studies are needed to examine changes in health, participation, and occupational identity over time following the transition to power wheelchairs.

- **Mixed-methods approaches:** Combining qualitative and quantitative methods may provide a more comprehensive understanding of functional outcomes, health indicators, and participation levels.
- **Environmental accessibility research:** Further studies should explore how environmental and infrastructural factors influence power wheelchair use, particularly in low-resource and rural settings.
- **User-centered wheelchair design research:** Research focusing on culturally and contextually appropriate wheelchair design may improve usability and safety.
- **Health outcome studies:** Future research should examine the long-term physical health effects of power wheelchair use, including muscle strength, cardiovascular health, and secondary complications.
- **Comparative studies:** Studies comparing outcomes between exclusive power wheelchair users and those using both manual and power wheelchairs may provide valuable clinical insights.

6.3 Conclusion

This qualitative study explored the lived experiences of persons with disabilities during the transition from manual to power wheelchairs. The findings demonstrate that this transition is not merely a change in mobility device, but a complex process that influences independence, occupational performance, physical health, psychosocial well-being, and occupational identity.

The study revealed that power wheelchairs significantly enhanced participants' independence, autonomy, and access to work and community environments. Reduced physical strain and improved mobility enabled participants to engage more actively in daily activities and meaningful roles.

However, these benefits were accompanied by important challenges, including reduced physical activity, concerns about long-term health, environmental inaccessibility, and device-related limitations. Participants' experiences highlighted the need for ongoing body management and balanced use of manual and power wheelchairs to maintain physical health.

Environmental and infrastructural barriers, such as narrow roads, inaccessible buildings, poor road conditions, and weather-related challenges, continued to restrict full participation despite improved personal mobility. These findings emphasize that assistive technology alone is insufficient to ensure participation without supportive environments. Additionally, issues related to wheelchair design, fit, and safety underscored the importance of individualized and context-sensitive wheelchair prescription.

Psychosocial changes emerged as a central aspect of the transition process. Participants described increased confidence, renewed participation in family, work, and social roles, and a shift from dependency to active engagement.

Improved mobility contributed to the reconstruction of occupational identity, allowing participants to redefine themselves as capable and socially valued individuals.

Overall, this study highlights that the transition from manual to power wheelchairs is a multifaceted experience shaped by personal, environmental, and social factors. The findings underscore the importance of holistic, person-centered rehabilitation approaches that integrate mobility provision with health maintenance, environmental accessibility, and support for meaningful occupational participation. By giving voice to the lived experiences of power wheelchair users, this study contributes valuable insights to occupational therapy practice and future research, emphasizing the need for sustainable mobility solutions that support long-term well-being and inclusion.

CHAPTER VII: LIST OF REFERENCE

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APPENDICES

Appendix A: Approval / Permission Letter

Ethical Approval Letter from IRB



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

Ref: CRP-BHPI/IRB/07/2025/1115 Date: 21.07.2025

To
 Moumita Sarker
 4th Year, B.Sc. in Occupational Therapy
 Session: 2020-21, Student ID: 122200451
 BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal Lived Experience of Persons with Disabilities During the Transition from Manual to Power Wheelchair: A Qualitative Study by ethics committee.

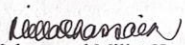
Dear Moumita Sarker,
 Congratulations.
 The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above mentioned dissertation, with yourself, as the principal investigator and Khadija Akter Lily, Lecturer, Department of Occupational Therapy, Bangladesh Health 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	Semi-structure Interview Guide (English & Bangla)
3	Information sheet & consent form

The purpose of the study is to explore these lived experiences, capturing the voices of individuals navigating the shift from manual to powered mobility, and identifying the factors that facilitate or hinder their functional and emotional adaptation. The study involves use of a semi-structure interview guide to explore these lived experiences, capturing the voices of individuals navigating the shift from manual to powered mobility, and identifying the factors that facilitate or hinder their functional and emotional adaptation 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 in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,


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

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ। ফোন: +৮৮ ০২ ২২৪৪৪৫৪৬৪-৫, +৮৮ ০২ ২২৪৪৪১৪০৪, মোবাইল: +৮৮ ০১৭৩০ ০৫৯৬৪৭
 CRP-Chapain, Savar, Dhaka-1343, Bangladesh. Tel: +88 02 224445464-5, +88 02 224441404, Mobile: +88 01730059647
 E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd

Permission letter for Data Collection


বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)
 CRP, Chapain, Savar, Dhaka-1343 Tel: 02-7745464-5, 7741404, Fax: 02-7745069

Date: 02/08/2025

To
 The Executive Director
 Centre for the Rehabilitation of the Paralysed (CRP)
 Savar, Dhaka-1343.

Subject: Regarding permission for data collection for undergraduate research.

Sir,

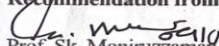
With due respect I would like to draw your kind attention that I am a student of 4th Year B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI) which is an academic institute of Centre for the Rehabilitation of the Paralysed (CRP), affiliated to Faculty of Medicine, University of Dhaka. According to my course curriculum, I have to conduct research, and my research title is **"Lived Experience of Persons with Disabilities During the Transition from Manual to Power Wheelchairs: A Qualitative Study"** with myself & Khadija Akter Lily as my thesis supervisor. The purpose of the study is to explore these lived experiences, capturing the voices of individuals navigating the shift from manual to powered mobility, and identifying the factors that facilitate or hinder their functional and emotional adaptation. In order to fulfill the objectives of this study, I intend to collect data from selected staff members of CRP who have transitioned from using manual wheelchairs to power wheelchairs and the data collection period is from 02/08/2025 to 15/09/2025. I assure you that collected information that will be used solely for academic purpose and confidentiality will be maintain in accordance with ethical guideline. Your permission and support would be invaluable in facilitating the successful completion of my research.

So, I therefore, pray and hope that you would be kind enough to grant me permission to collect data for my study and oblige thereby.

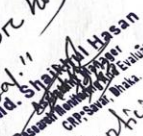
Sincerely yours,


 Moumita Sarker
 4th Year, B.Sc. in Occupational Therapy
 Session: 2020-21; Student ID: 122200451
 BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Recommendation from the Head of the Department:


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

Attachments: Copy of IRB Approval Letter and list of participant's name

"Forwarded to ED Sir for his approval"

 Md. Shaukatul Hasan
 Assistant Director (Research & Evaluation)
 CRP-Savar, Dhaka.
At Convenience of participants data may be collected.

 Dr. Moniruzzaman
 Executive Director CRP

Appendix B: Information sheet and consent form [English Version]

**Bangladesh Health Professions Institute
Savar-1343**

Participants' Information and Consent Sheet

**Research Title: Lived Experience of Persons with disabilities During the Transition
from Manual to Power Wheelchairs: A Qualitative Study**

Student Investigator:

Moumita Sarker

4th Year, B.Sc. in Occupational Therapy Department,

Bangladesh Health Professions Institute (BHPI) CRP, Savar, Dhaka

Centre for the Rehabilitation of the Paralysed (CRP),

Cell: 01641766981

Email: mousarker37@gmail.com

Principal Investigator:

Khadija Akter Lily

Lecturer

Department of Occupational Therapy

BHPI, CRP, Savar, Dhaka: 1343

What is the purpose of this research?

We are undertaking a research project that aims to explore the lived experience of persons with disabilities in Bangladesh during the transition from manual to power wheelchairs. To achieve the overall aim, the researcher will explore the personal experiences of the participants, the use of the power wheelchair and their level of satisfaction, as well as the environmental and social barriers they may encounter.

This project involves the student researchers from Bangladesh Health Professions Institute (BHPI), CRP. The is supervised by Khadija Akter Lily, Lecturer, Department of

Occupational Therapy, Bangladesh Health Professions Institute (BHPI). The study is being undertaken at Centre for the Rehabilitation of the Paralysed (CRP).

What does the research involve?

Please read this explanatory statement in full before deciding whether you are interested in participating in this research. If you would like further information regarding any aspect of the project, you are encouraged to contact the researchers via the phone number or email addresses listed above.

- You are invited to take part in a semi-structured face-to-face interview with the student investigator at CRP. The expected time of the interview is 30-45 minutes and it will take place at a pre-scheduled time.
- You will be asked to share your experience of moving from a manual wheelchair to a power wheelchair. We expect you to share details about how you use your wheelchair in daily life, how this transition has affected your independence and participation, what barriers and facilitators you face in your home, community, road and transport, and your overall satisfaction with the power wheelchair. You will also be invited to talk about your feelings, challenges, and motivations during this transition.
- You will be asked some short questions about your age, gender, type of injury, date of injury, living situation, occupational history and others.

Why were you chosen for this research?

You have been invited to participate because you have experience of using both manual and power wheelchairs, which is important to understand the transition process of persons with disabilities.

Source of funding

It is a self - funded research.

Consenting to participate in the project and withdrawing from the research

If you agree to participate in this research, you will need to sign the accompanying consent form and provide it to the researcher at the time of the interview. Participating in this research is voluntary and you are under no obligation to consent to participate. However, if you do consent to participate, you may withdraw from further participation at any stage up until the data are analysed. There will be no negative consequences if you choose to withdraw. You are also able to refuse to answer any questions with no negative consequences.

Possible benefits and risks to participants

You are unlikely to gain any direct benefits from participating in this research. However, the information gained from this study will contribute to the ongoing development and improvement of wheelchair services and rehabilitation support. This may help to improve the quality of life for persons with disabilities in Bangladesh who are transitioning from manual to power wheelchairs.

The research has been designed to have low risk. The potential risks to you includes psychological discomfort only because of sharing your experience. If it arises during the interview, the student researcher will minimise it in following way:

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

Confidentiality

All information provided by you will be kept confidential and only accessible to the researchers conducting the study. At no time will your name be used in any published

documentation. Once the interviews have been completed your name will be deidentified using a code, all data analysis will then occur using that code. No one other than the researchers will have access to the original interview transcripts with your name on it.

Storage of data

Collected data will be stored on a password-protected computer and locked cloud system, accessible only to the researchers conducting this study. Hard paper copies of data will be stored in locked filing cabinets at Centre for the Rehabilitation of the Paralysed (CRP).

Results

Results from the interviews and other data collected as part of this research will be aggregated, analysed and written in a descriptive report. You may request a summary of the project results by emailing any of the project investigators using the above contact details.

Complaints

Should you have any concerns or complaints about the conduct of project, you are welcome to contact Bangladesh Health Professions Institute (BHPI), Occupational Therapy Department.

Cell: 02-224445464-5, fax:0-224445069

Thank You,

Moumita sarker

4th Year, Department of Occupational Therapy,

Bangladesh Health Professions Institute (BHPI), CRP, Savar.

CONSENT FORM

Title: Lived Experience of Persons with disabilities During the Transition from Manual to Power Wheelchairs: A Qualitative Study

Student investigator: Moumita Sarker

I have been asked to take part in the research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

I consent to the following:	Yes	No
Participating in one semi-structured interview lasting approximately one at a location to be determined.	☐	☐
Audio recording of interview.	☐	☐
Being available to participate in further research relating to this project	☐	☐

Name of participant: _____

Signature of participant/ thumb print: _____

Date: _____

WITHDRAWAL OF CONSENT FORM

Title: Lived Experience of Persons with disabilities During the Transition from Manual to Power Wheelchairs: A Qualitative Study

Student investigator: Moumita Sarker

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: _____

Appendix D: Interview Guide [English Version]

Semi-structure interview guide will be used in this study. Participants will be provided with a self-administered questionnaire, which can be completed on paper.

Research Topic: Lived Experience of Persons with disabilities During the Transition from Manual to Power Wheelchairs: A Qualitative Study

Student Investigator: Moumita Sarker

Semi-Structured Interview Questionnaire

Section A: Demographic Information

1. Name (optional):
2. Age:
3. Gender:
4. Diagnosis / Condition:
5. Duration of disability:
6. Time since transition to power wheelchair:
7. Type of power wheelchair used:

Section B: Transition and Functional Changes

1. Can you describe your daily routine before and after transitioning to a power wheelchair? Prompt: Changes in mobility, self-care, household tasks, etc.
2. What specific activities became easier or more difficult after starting to use a power wheelchair?
3. How has your ability to move around inside and outside your home changed?
4. How do you manage transferring in and out of the wheelchair or operating it in different environments?

Section C: Difficulties & Barriers in the Transition

5. What were the biggest challenges you faced during the transition from manual to power wheelchair? (Prompt: Physical, emotional, technical, or financial barriers.)
6. Did you receive any training or support during this transition? If yes, how helpful was it?
7. Were there any emotional or psychological difficulties (such as anxiety, fear, or frustration) during the transition?

Section D: Occupational Identity & Meaningful Roles

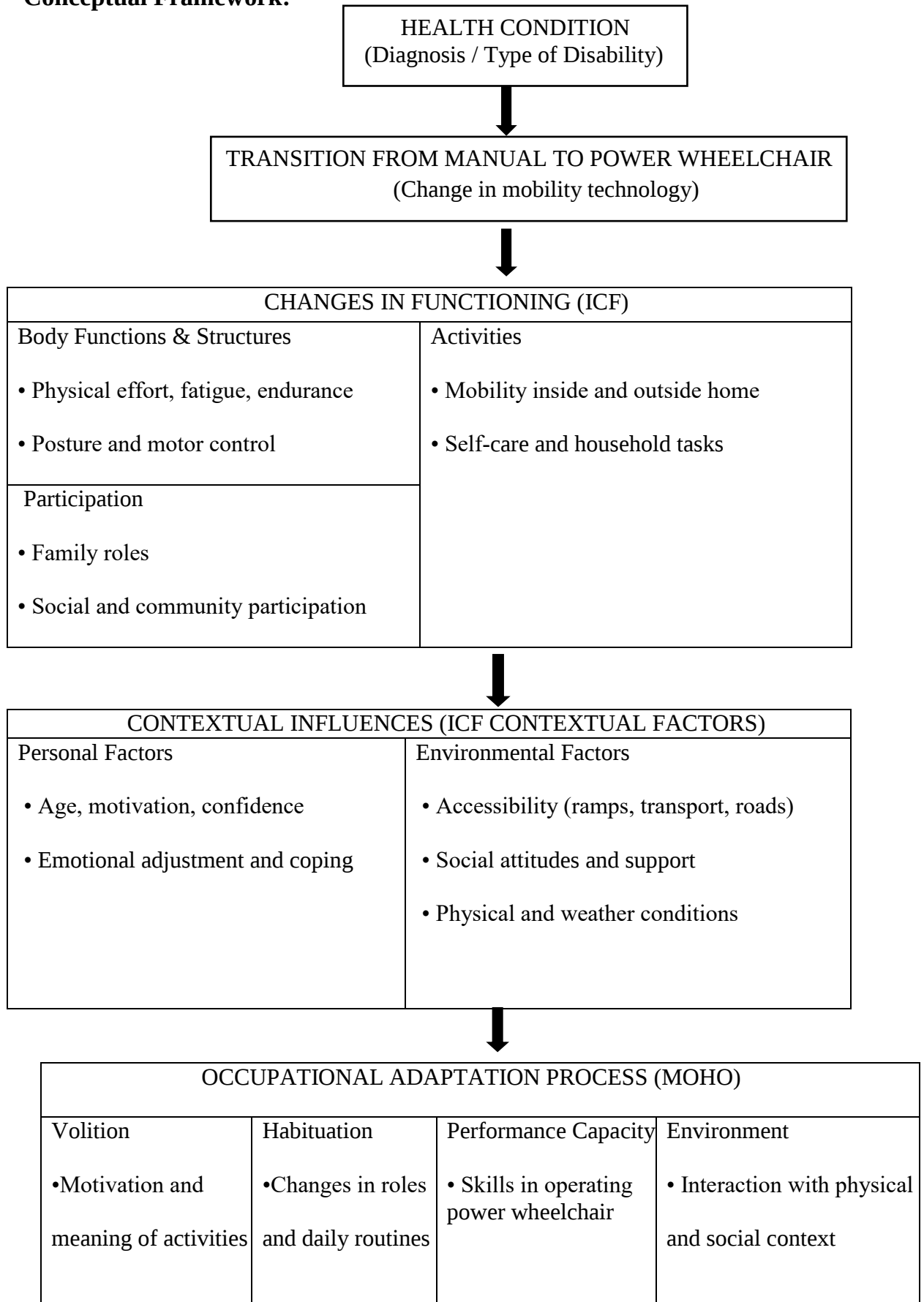
8. How has using a power wheelchair affected the way you see yourself in your family or community roles?
9. Are there activities or occupations that you re-engaged in (or had to stop) because of the power wheelchair?
10. How has your motivation or confidence in doing meaningful activities changed?

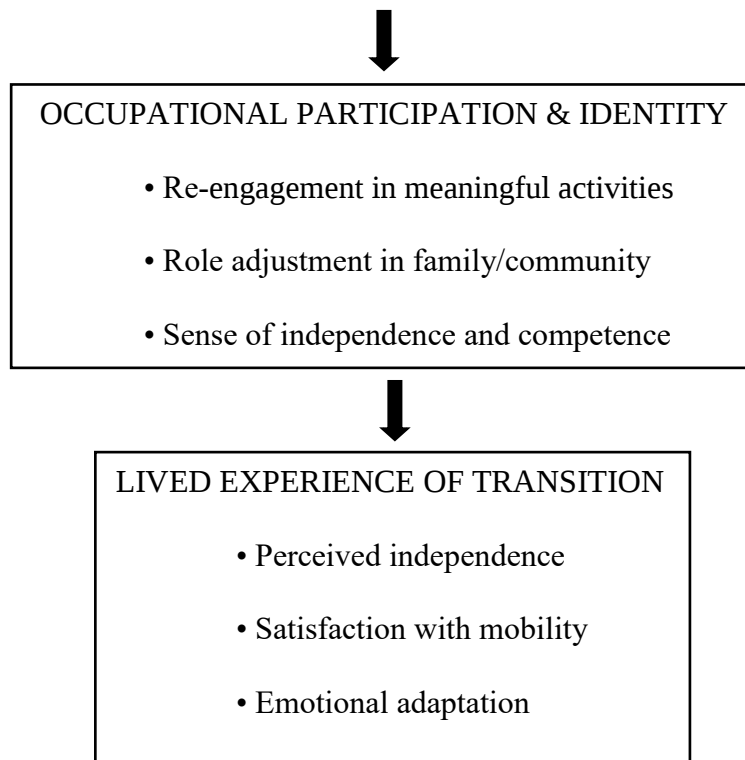
Section E: Environmental Influence

11. What kind of environmental features (such as ramps, roads, transport, weather) have helped or hindered your use of a power wheelchair?
12. How accessible are public spaces like parks, hospitals, markets, or transport systems for you now?
13. How do people (family, friends, society) respond to you using a power wheelchair? Has it changed your social participation?

Section F: Final Reflections

14. If you could change or improve anything in your transition experience, what would it be?
15. What advice would you give to someone who is about to move from a manual to a power wheelchair?

Conceptual Framework:



Appendix D: Information Sheet and Consent Form (রোগী তথ্যপত্র বাংলা)

শিরোনাম: ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে রূপান্তরের সময় প্রতিবন্ধী ব্যক্তিদের জীবনের

বাস্তব অভিজ্ঞতা: একটি গুণগত গবেষণা

ছাত্রী গবেষক: মৌমিতা সরকার

৪র্থ বর্ষ, বিএসসি ইন অকুপেশনাল থেরাপি বিভাগ, পক্ষাঘাতগ্রস্থদের পুনর্বাসন কেন্দ্র (সিআরপি)

মোবাইল: ০১৬৪১৭৬৬৯৮১

ই-মেইল: mousarker37@gmail.com

প্রধান গবেষক:

সহ-গবেষক:

এই গবেষণার উদ্দেশ্য কী?

আমরা একটি গবেষণা পরিচালনা করছি যার উদ্দেশ্য হলো বাংলাদেশে প্রতিবন্ধী ব্যক্তিদের জীবিত অভিজ্ঞতা অনুসন্ধান করা, যখন তারা ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে রূপান্তর করেন। এই সামগ্রিক উদ্দেশ্য অর্জনের জন্য, গবেষক অংশগ্রহণকারীদের ব্যক্তিগত অভিজ্ঞতা, পাওয়ার হুইলচেয়ারের ব্যবহার এবং তাদের সম্ভবতার মাত্রা, পাশাপাশি তারা যেসব পরিবেশগত ও সামাজিক প্রতিবন্ধকতার সম্মুখীন হন তা অনুসন্ধান করবেন।

এই প্রকল্পে বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (BHPI), সিআরপি-এর ছাত্রী গবেষক অংশগ্রহণ করছেন। গবেষণাটি তত্ত্বাবধান করছেন খাদিজা আক্তার লিলি, প্রভাষক, অকুপেশনাল থেরাপি বিভাগ, বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (BHPI)। গবেষণাটি পক্ষাঘাতগ্রস্থদের পুনর্বাসন কেন্দ্র (সিআরপি)-তে পরিচালিত হচ্ছে।

এই গবেষণায় কী ধরনের কার্যক্রম থাকবে?

এই ব্যাখ্যামূলক বিবৃতিটি সম্পূর্ণভাবে পড়ে দেখুন, তারপর সিদ্ধান্ত নিন আপনি এই গবেষণায় অংশগ্রহণে আগ্রহী কি না। যদি এই প্রকল্পের কোনো দিক সম্পর্কে আরও তথ্য জানতে চান, তাহলে উপরে দেওয়া মোবাইল নম্বর বা ইমেইল ঠিকানায় গবেষকদের সাথে যোগাযোগ করতে পারেন।

- আপনাকে সিআরপি-তে শিক্ষার্থী গবেষকের সাথে একটি আধা-সংগঠিত সরাসরি সাক্ষাৎকারে অংশ নেওয়ার জন্য আমন্ত্রণ জানানো হচ্ছে। সাক্ষাৎকারের সম্ভাব্য সময়কাল হবে ৩০-৪৫ মিনিট এবং এটি পূর্বনির্ধারিত সময়ে অনুষ্ঠিত হবে।
- আপনাকে অনুরোধ করা হবে আপনার অভিজ্ঞতা শেয়ার করতে, যখন আপনি ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে গিয়েছেন। আমরা আশা করি আপনি বিস্তারিত বলবেন কীভাবে দৈনন্দিন জীবনে হুইলচেয়ার ব্যবহার করেন, এই রূপান্তর কীভাবে আপনার স্বাধীনতা ও অংশগ্রহণে প্রভাব ফেলেছে, ঘরে, সমাজে, রাস্তায় ও পরিবহনে আপনি কী ধরনের প্রতিবন্ধকতা ও সহায়তার সম্মুখীন হন, এবং পাওয়ার হুইলচেয়ারের প্রতি আপনার সামগ্রিক সন্তুষ্টি কেমন। এছাড়াও আপনাকে আমন্ত্রণ জানানো হবে এই রূপান্তরের সময়কার আপনার অনুভূতি, চ্যালেঞ্জ ও প্রেরণা সম্পর্কে বলার জন্য।
- আপনাকে কিছু সংক্ষিপ্ত প্রশ্ন করা হবে যেমন: আপনার বয়স, লিঙ্গ, আঘাতের ধরন, আঘাতের তারিখ, পেশাগত ইতিহাস এবং অন্যান্য প্রাসঙ্গিক তথ্য।

আপনাকে এই গবেষণায় কেন অন্তর্ভুক্ত করা হয়েছে?

আপনাকে অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে কারণ আপনার হাতে ম্যানুয়াল হুইলচেয়ার এবং পাওয়ার হুইলচেয়ার উভয় হুইলচেয়ার ব্যবহার করার অভিজ্ঞতা রয়েছে, যা প্রতিবন্ধী ব্যক্তিদের হুইলচেয়ার পরিবর্তনের প্রক্রিয়া বোঝার জন্য গুরুত্বপূর্ণ।

তহবিলের উৎস:

এই গবেষণাটি স্ব-অর্থায়নে পরিচালিত হচ্ছে।

গবেষণায় অংশগ্রহণে সম্মতি এবং প্রত্যাহার

আপনি যদি এই গবেষণায় অংশগ্রহণে সম্মত হন, তাহলে আপনাকে একটি সম্মতি ফর্মে স্বাক্ষর করতে হবে এবং সাক্ষাৎকারের সময় তা গবেষকের কাছে জমা দিতে হবে। এই গবেষণায় অংশগ্রহণ সম্পূর্ণ স্বৈচ্ছামূলক এবং আপনি এতে অংশ নিতে বাধ্য নন। তবে আপনি যদি অংশগ্রহণে সম্মত হন, তাহলেও তথ্য বিশ্লেষণের আগ পর্যন্ত যে কোনো সময় আপনি অংশগ্রহণ থেকে সরে দাঁড়াতে পারবেন। এতে আপনার কোনো ক্ষতি বা নেতিবাচক প্রভাব পড়বে না। আপনি চাইলে কোনো প্রশ্নের উত্তর না দেওয়ার অধিকারও রাখেন এবং তাতেও কোনো নেতিবাচক প্রভাব পড়বে না।

অংশগ্রহণকারীদের সম্ভাব্য উপকারিতা ও ঝুঁকি

এই গবেষণায় অংশগ্রহণের মাধ্যমে আপনি সরাসরি কোনো ব্যক্তিগত সুবিধা পাবেন না। তবে, এই গবেষণার মাধ্যমে প্রাপ্ত তথ্য হুইলচেয়ার সেবা ও পুনর্বাসন সহায়তার উন্নয়ন এবং সম্প্রসারণে অবদান রাখবে। এটি বাংলাদেশের সেই প্রতিবন্ধী ব্যক্তিদের জীবনমান উন্নত করতে সাহায্য করতে পারে যারা ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে পরিবর্তন করছে।

এই গবেষণাটি খুবই কম ঝুঁকি সম্পন্নভাবে পরিকল্পিত হয়েছে। তবে, আপনার অভিজ্ঞতা শেয়ার করার সময় সামান্য মানসিক অস্বস্তি হতে পারে। যদি সাক্ষাৎকারের সময় এমন অস্বস্তিকর অনুভূতি তৈরি হয়, তাহলে ছাত্রী গবেষক নিচের পদ্ধতিতে তা কমিয়ে আনার চেষ্টা করবেন:

- আপনাকে মনে করিয়ে দেওয়া হবে যে, এই গবেষণায় অংশগ্রহণ সম্পূর্ণ স্বেচ্ছামূলক এবং আপনি যেকোনো সময় ইচ্ছামতো এটি থেকে সরে দাঁড়াতে পারেন।
- যদি সাক্ষাৎকার চলাকালীন আপনার অস্বস্তি দেখা দেয় এবং তা সাক্ষাৎকারে প্রভাব ফেলে, তাহলে ছাত্রী গবেষক সাক্ষাৎকারে বিরতি দেওয়ার প্রস্তাব দেবেন। এছাড়াও, আপনি যদি পরবর্তী সময়ে সাক্ষাৎকার চালিয়ে যেতে চান, তবে গবেষক সাক্ষাৎকার পুনঃনির্ধারণ সম্পর্কে আলোচনা করবেন।

গোপনীয়তা

আপনি যে সমস্ত তথ্য প্রদান করবেন, তা গোপন রাখা হবে এবং কেবলমাত্র গবেষণাটি পরিচালনাকারী গবেষকরা তা ব্যবহার করতে পারবেন। কখনোই আপনার নাম প্রকাশিত কোনো ডকুমেন্টে ব্যবহার করা হবে না। সাক্ষাৎকারগুলি শেষ হওয়ার পর, আপনার নাম একটি কোড ব্যবহার করে অজ্ঞাত করা হবে এবং সমস্ত ডেটা বিশ্লেষণ সেই কোডের মাধ্যমে করা হবে। গবেষকদের বাইরে কেউও আপনার নাম উল্লেখ করা সাক্ষাৎকারের মূল তথ্যপত্রগুলি ব্যবহার করতে পারবেন না।

ডেটা সংরক্ষণ

সংগ্রহিত ডেটা একটি পাসওয়ার্ড সুরক্ষিত কম্পিউটারে এবং একটি লকড ক্লাউড সিস্টেমে সংরক্ষিত থাকবে, যা শুধুমাত্র এই গবেষণা পরিচালনাকারী গবেষকরা ব্যবহার করতে পারবেন। ডেটার কাগজে প্রিন্ট করা হার্ড কপি সিআরপিআর (Centre for the Rehabilitation of the Paralysed) লকড ফাইলিং ক্যাবিনেটে সংরক্ষিত থাকবে।

ফলাফল

সাক্ষাৎকার এবং এই গবেষণার অংশ হিসেবে সংগৃহীত অন্যান্য ডেটা একত্রিত, বিশ্লেষণ ও একটি বর্ণনামূলক প্রতিবেদনে লেখা হবে। আপনি প্রকল্পের ফলাফল সম্পর্কে একটি সারাংশ চাইলে, উপরের যোগাযোগের বিস্তারিত ব্যবহার করে যেকোনো প্রকল্পের গবেষকের কাছে ইমেইল করতে পারেন।

অভিযোগ

যদি আপনি প্রকল্পের পরিচালনা সম্পর্কে কোনো উদ্বেগ বা অভিযোগ অনুভব করেন, তবে আপনি বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (BHPI), অকুপেশনাল থেরাপি বিভাগের সঙ্গে যোগাযোগ করতে পারেন।

মোবাইল: ০২-২২৪৪৪৫৪৬৪-৫, ফ্যাক্স: ০-২২৪৪৪৫০৬৯

ধন্যবাদ,

মৌমিতা সরকার

৪র্থ বর্ষ, অকুপেশনাল থেরাপি বিভাগ,

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (BHPI), সিআরপি, সাতার

সম্মতি ফর্ম

শিরোনাম: ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে রূপান্তরের সময় প্রতিবন্ধী ব্যক্তিদের জীবনের

বাস্তব অভিজ্ঞতা: একটি গুণগত গবেষণা

ছাত্রী গবেষক: মৌমিতা সরকার

আমাকে উপরোক্ত গবেষণা প্রকল্পে অংশগ্রহণের জন্য অনুরোধ করা হয়েছে। আমি ব্যাখ্যামূলক বিবৃতি (Explanatory Statement) পড়েছি এবং বুঝেছি এবং আমি এই গবেষণা প্রকল্পে অংশগ্রহণে সম্মতি দিচ্ছি।

আমি নিম্নলিখিত বিষয়ে সম্মতি দিচ্ছি:	হ্যাঁ	না	
আনুমানিক এক ঘণ্টাব্যাপী একটি আধা-সংগঠিত	☐	☐	
সাক্ষাৎকারে অংশগ্রহণ, স্থান পরে নির্ধারিত হবে	☐	☐	
সাক্ষাৎকারের অডিও রেকর্ডিং	☐	☐	
এই প্রকল্প সম্পর্কিত ভবিষ্যতের গবেষণায় অংশগ্রহণের জন্য উপলব্ধ থাকা			

অংশগ্রহণকারীর নাম:

অংশগ্রহণকারীর স্বাক্ষর/আঙুলির ছাপ:

তারিখ:

সম্মতি প্রত্যাহারের ফর্ম

শিরোনাম: ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে রূপান্তরের সময় প্রতিবন্ধী ব্যক্তিদের জীবনের

বাস্তব অভিজ্ঞতা: একটি গুণগত গবেষণা

ছাত্রী গবেষক: মৌমিতা সরকার

আমি,

(অংশগ্রহণকারী), এই গবেষণা প্রকল্পে অংশগ্রহণের ফলে সৃষ্ট তথ্য ব্যবহারের জন্য আমার সম্মতি প্রত্যাহার করতে ইচ্ছুক। অংশগ্রহণের ফলে প্রাপ্ত তথ্য এই গবেষণা প্রকল্পে ব্যবহৃত হবে না, যেমনটি তথ্য ও সম্মতি ফর্মে বর্ণিত হয়েছে। আমি বুঝতে পারি যে, এই অনুরোধটি আমার অংশগ্রহণের সমাপ্তির চার সপ্তাহের মধ্যে গ্রহীত হলে, অংশগ্রহণের ফলে প্রাপ্ত তথ্য ধ্বংস করে ফেলা হবে। আমি আরও বুঝতে পারি যে, এই বিজ্ঞপ্তিটি আমার সম্মতি ফর্মের সাথে সংরক্ষিত থাকবে, যা এই গবেষণা প্রকল্পের জন্য আমার প্রদত্ত তথ্য ব্যবহারের সম্মতি প্রত্যাহারের প্রমাণ হিসেবে থাকবে।

অংশগ্রহণকারীর নাম :

অংশগ্রহণকারীর স্বাক্ষর/আঙুলের ছাপ :

তারিখ:

Appendix E: Interview Guide (প্রশ্নাবলীঃ বাংলা)

শিরোনামঃ ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে রূপান্তরের সময় প্রতিবন্ধী ব্যক্তিদের

জীবনের বাস্তব অভিজ্ঞতা: একটি গুণগত গবেষণা

সেমি-স্ট্রাকচার্ড সাক্ষাৎকার প্রশ্নমালা

অনুচ্ছেদ ১: ব্যক্তিগত তথ্য

১. নাম (ঐচ্ছিক):

২. বয়স :

৩. লিঙ্গ:

৪. রোগ নির্ণয় / অবস্থা:

৫. প্রতিবন্ধকতার সময়কাল:

৬. পাওয়ার হুইলচেয়ারে রূপান্তরের সময়কাল :

৭. ব্যবহৃত পাওয়ার হুইলচেয়ারের ধরণ:

অনুচ্ছেদ ২: কার্যকরী পরিবর্তন

১. আপনি পাওয়ার হুইলচেয়ারে রূপান্তরের আগে ও পরে আপনার দৈনন্দিন রুটিনটি বর্ণনা করতে পারেন কি? প্রম্পট:

চলাফেরা, আত্ম-যত্ন, গৃহস্থালি কাজ ইত্যাদিতে পরিবর্তন।

২. কোন কোন কাজ পাওয়ার হুইলচেয়ার ব্যবহারের পর সহজ বা কঠিন হয়েছে?

৩. আপনার ঘরের ভিতরে ও বাইরে চলাচলের সক্ষমতা কীভাবে পরিবর্তিত হয়েছে?

৪. আপনি কীভাবে হুইলচেয়ার থেকে উঠা-নামা বা বিভিন্ন পরিবেশে চালনা পরিচালনা করেন?

অনুচ্ছেদ ৩: সমস্যাাবলী ও প্রতিবন্ধকতা

৫. ম্যানুয়াল থেকে পাওয়ার হুইলচেয়ারে রূপান্তরের সময় সবচেয়ে বড় চ্যালেঞ্জগুলো কী ছিল? প্রম্পট: শারীরিক,

মানসিক, প্রযুক্তিগত বা আর্থিক প্রতিবন্ধকতা।

৬. এই রূপান্তরের সময় আপনি কি কোনো প্রশিক্ষণ বা সহায়তা পেয়েছেন? এটি কতটা সহায়ক ছিল?

৭. রূপান্তরের সময় আপনার কি কোনো মানসিক বা আবেগজনিত সমস্যা (যেমন উদ্বেগ, ভয়, হতাশা) হয়েছে।

অনুচ্ছেদ ৪: পেশাগত পরিচিতি ও ভূমিকা

৮. পাওয়ার হুইলচেয়ার ব্যবহার করার ফলে পারিবারিক বা সামাজিক ভূমিকায় আপনি নিজেকে কীভাবে দেখেন তা

কীভাবে পরিবর্তিত হয়েছে।

৯. এমন কী কী কাজ বা কর্মকাণ্ড আছে যা আপনি আবার শুরু করেছেন বা বাদ দিয়েছেন পাওয়ার হুইলচেয়ার

ব্যবহারের কারণে?

১০. অর্থবহ কর্মকাণ্ডে অংশগ্রহণের ইচ্ছা বা আত্মবিশ্বাসে কোনো পরিবর্তন হয়েছে কি?

অনুচ্ছেদ ৫: পরিবেশগত প্রভাব

১১. কোন ধরনের পরিবেশগত উপাদান (যেমন রাস্তা, রাস্তা, পরিবহন, আবহাওয়া) আপনার হুইলচেয়ার ব্যবহারে

সহায়ক বা প্রতিবন্ধক ছিল?

১২. বর্তমানে আপনার জন্য পার্ক, হাসপাতাল, বাজার বা পরিবহনের মতো জনসাধারণের স্থানগুলো কতটা

সহজপ্রবেশযোগ্য?

১৩. আপনার হুইলচেয়ার ব্যবহারের প্রতি পরিবারের সদস্য, বন্ধু বা সমাজের দৃষ্টিভঙ্গি কীভাবে পরিবর্তিত হয়েছে।

অনুচ্ছেদ ৬: অংশগ্রহণকারীদের অভিজ্ঞতাভিত্তিক পরামর্শ

১৪. আপনি যদি এই অভিজ্ঞতার কোনো কিছু পরিবর্তন বা উন্নয়ন করতে পারতেন, তবে সেটা কী হতো?

১৫. কেউ যদি ম্যানুয়াল হুইলচেয়ার থেকে পাওয়ার হুইলচেয়ারে রূপান্তর করতে চায়, তাহলে আপনি তাকে কী পরামর্শ

দিতেন?