

# **Experience of Female Wheelchair Users' Personal Hygiene Management During Menstruation**



By

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

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**DEDICATION**

**To my beloved parents and teachers.**

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## LIST OF ABBREVIATIONS

<b>AOTA</b>	American Occupational Therapy Association
<b>ADLs</b>	Activities of Daily Living
<b>BHPI</b>	Bangladesh Health Professions Institute
<b>COREQ</b>	Consolidated Criteria for Reporting Qualitative Research
<b>CP</b>	Cerebral Palsy
<b>CRP</b>	Centre for the Rehabilitation of the Paralysed
<b>DMPA</b>	Depot Medroxyprogesterone Acetate
<b>GBS</b>	Guillain-Barré Syndrome
<b>HICs</b>	High-Income Countries
<b>ID</b>	Intellectual Disability
<b>IRB</b>	Institutional Review Board
<b>LMIC</b>	Low and Low Middle-Income countries
<b>MHM</b>	Menstrual Hygiene Management
<b>OCP</b>	Oral Contraceptive Pills
<b>OT</b>	Occupational Therapy
<b>OTPF-4</b>	Fourth edition of the Occupational Therapy Practice Framework
<b>PMS</b>	Premenstrual Syndrome
<b>PWDs</b>	Persons with Disabilities
<b>SCI</b>	Spinal Cord Injury
<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>WASH</b>	Water, Sanitation, and Hygiene
<b>WHO</b>	World Health Organisation
<b>WMA</b>	World Medical Association

## ABSTRACT

**Background:** Menstruation is a regular occurrence and natural part of life for all girls and women of reproductive age. During the menstrual cycle, females go through a variety of experiences and add new burdens to their lives. For women with disabilities, the menstruation cycle added additional burden. Moreover, when they used wheelchairs, it added more burden. Women who use wheelchairs describe a variety of experiences, needs, and levels of discrimination when they are menstruating, but little evidence exists.

**Aim:** The aim of this study was to explore the experiences of female wheelchair users' personal hygiene management during menstruation.

**Methods:** The phenomenological approach of qualitative research design was chosen to conduct this study. Ten females who have been using wheelchair for any disabilities or illness causing disability were included by purposive sampling. Data was collected by conducting face-to-face in-depth semi structured interview through a self-developed interview guide. Data was analysed by thematic analysis according Braun and Clark's six steps.

**Results:** The findings explored in-depth information regarding experiences of female with wheelchair users related to menstruation with twelve themes: i) Understanding of menstruation, ii) Physical disability double burdens the menstruation, iii) Pre and menstrual symptoms, iv) Period product, v) Personal hygiene routine, vi) Barriers, vii) Physical and psychological health impact, viii) Stigma, taboos, and religious restriction, ix) Food habit, x) Role of support system, xi) Coping strategies, xii) Recommendation.

**Conclusion:** In Bangladesh, women who use wheelchairs have described a wide range of menstrual-related issues. Managing menstruation hygiene issues is particularly difficult due to the additional disability discrimination and impairment experienced. Female wheelchair users face a variety of stigmas, taboos, and restrictions when they are menstruating. Research on these subjects is required in a variety of settings, and menstrual hygiene management therapies must be tailored to the particular disability and the requirements of carers.

**Key words:** Experience, Wheelchair users, Menstruation, Menstruation hygiene management, Personal hygiene management.

## CHAPTER I: INTRODUCTION

### 1.1 Background

World Health Organisation stated that, over 1.3 billion people in the world live with some form of disability (WHO, 2022). Around 24 million persons with disabilities (PWDs) live in Bangladesh, making up 15% of the country's total population where 50% are female (Thompson, 2020). According to the WHO (2010), 65 million individuals worldwide need wheelchair assistance. Menstruation is a regular occurrence and a natural part of life for about 1.8 billion girls and women of reproductive age (UNICEF, 2018). Over the years, many different societies have had taboos surrounding menstruation. Some societies believe menstruating women to be "unclean", and they keep them locked away (Bobel et al., 2020). In Bangladesh, a woman may be more embarrassed to have a menstruation "accident" than to have a urinary "accident" (Chowdhury et al., 2022). Many women with disability are able to ask a friend, partner, or attendant to empty a urinal bag, or help them onto the toilet, but find it extremely embarrassing to ask for help in changing a pad or tampon. Management of menstruation can be one of the more difficult self-care tasks for women with disability (Duckworth, 2015). The issue of menstruation, especially menarche, is a life-changing event for girls stepping into womanhood. Effective menstrual hygiene is vital to the health, well-being, dignity, empowerment, mobility and productivity of women and girls (Enoch et al., 2020). It is a crucial component of the fundamental services for reproductive health, sanitation, and hygiene to which every woman and girl is entitled (Karim, 2020).

Reproductive health and menstrual hygiene management become significant components of a female's life from adolescence till menopause (Power et al., 2020). Menstrual hygiene management (MHM) is a recognised public health, social and



educational issue. According to research, the realisation of human rights, such as the right to employment, health, and education, is constrained by the absence of provisions of menstrual hygiene management (MHM) (Wilbur, Kayastha, et al., 2021). Access to safe and dignified menstruation is fundamental for all menstruators. Yet millions of menstruators across the world are denied the right to manage their monthly menstrual cycle in a dignified, healthy way (Kaur & Byard, 2021).

Girls and women with disabilities and who are using wheelchair face even greater challenges in managing their menstruation hygienically and with dignity. They often experience double discrimination, due to both their gender and having a disability during maintaining the menstruation hygiene (UNICEF, 2019b). This can happen when there is a) inadequate physical Water, Sanitation, and Hygiene (WASH) infrastructure to support menstruation at home and in public spaces, b) a lack of affordable, comfortable, and appropriate menstrual products, c) a lack of accurate information on the menstrual cycle and how to manage it with dignity, and d) harmful social beliefs and taboos related to menstruation. Underlying these issues is menstrual stigma, which is rooted in power and gender inequalities, and means that menstruation is not often openly discussed. This discourages sharing accurate information on the menstrual cycle, and how to manage it hygienically and with dignity (Wilbur et al., 2019). It also leads people to be unsure how they can seek support at home, at school or through healthcare services. Stigma, misunderstandings and exclusion can lead to harmful practices (Nurkhairulnisa et al., 2018).

During student researcher's clinical placement at CRP in the previous year she saw that female with wheelchair users faced various type of physical and emotional problem at their menstruation period. They avoid therapy session the initial two days of menstruation period. Some of female become stressed and cannot concentrate during

therapy session. However, the lack of evidence made it difficult for the student researcher to plan a realistic therapeutic goal regarding this, especially considering Bangladesh context. Therefore, her exposure so clinical placement inspired her to continue this study where the aim of this study is to explore the experiences of female wheelchair users' personal hygiene management during menstruation period.

## **1.2 Justification of the Study**

According to my knowledge, this is the first study to explore in-depth knowledge regarding experiences of female wheelchair users' personal hygiene management during menstruation period in Bangladesh. This study reveals the female wheelchair users' general practice, personal hygiene management, premenstrual syndromes, seating position on wheelchair, cleanliness routine, dressing management techniques, physical health concerns, needs, preference, coping strategies, and challenges during menstruation. The study will help the relevant health professionals to determine the challenges in maintaining personal hygiene of female with wheelchair users during menstruation period. According to the fourth edition of the Occupational Therapy Practice Framework (OTPF-4), personal hygiene is an essential part of activities of daily living (ADLs) for every person, and occupational therapists also work in this area. But there is a lack of practice and research on this study topic. As personal hygiene management is a core occupational performance area for occupational therapists, this study is also beneficial for occupational therapy intervention (AOTA, 2020). Occupational therapist can make suitable techniques to managing menstruation hygienic, limitation and barrier free strategies for women with wheelchair users. The study will be beneficial for the female with wheelchair users to use obstacles free strategies to maintain their personal hygiene during menstruation period. The findings

will add insights for future literature about menstrual hygiene management for women with wheelchair users.

### **1.3 Operational Definition**

#### **1.3.1 Experience**

Something that someone has actually done or lived through (Rotha & Jornetb, 2014).

#### **1.3.2 Wheelchair User**

A person who is unable to walk through injury, illness, etc and relies on a wheelchair to move around (O'Reilly, 2023).

#### **1.3.3 Menstruation**

The periodic shedding of the lining of a woman's uterus is referred to as Menstruation, or a menstrual period (Idoko et al., 2022).

#### **1.3.4 Menstrual Hygiene Management**

Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear (UNICEF, 2019a).

#### **1.3.5 Personal Hygiene Management**

Maintaining cleanliness of one's body and clothing to preserve overall health and well-being (*Personal Hygiene*, 2019).

## **1.4 Study Question, Aim and Objectives**

### **1.4.1 Study Question**

How is the experience of female wheelchair users' personal hygiene management during menstruation?

### **1.4.2 Aim**

The aim of this study was to explore the experiences of female wheelchair users' personal hygiene management during menstruation.

### **1.4.3 Objectives**

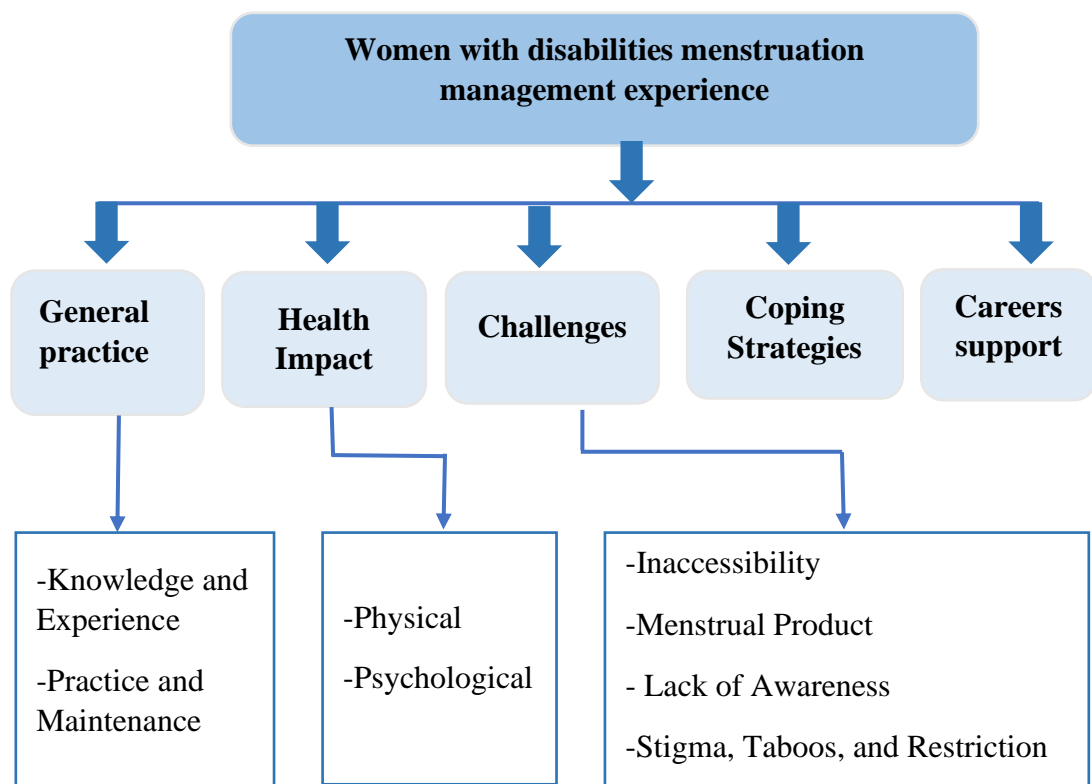
- To explore the Premenstrual syndrome (PMS) female wheelchair users' face during menstruation period.
- To identify their general practice for menstruation related personal hygiene management.
- To understand their cleanliness routine, dressing technique and related concerns considering the use of wheelchair.
- To investigate physical and psychological health concerns, needs and preference associated with personal hygiene during menstrual period.
- To explore the coping strategies related to menstrual period.
- To determine challenges in maintaining personal hygiene of female wheelchair users during menstruation period.

## CHAPTER II: LITERATURE REVIEW

This literature review chapter is an overview of articles that highlight the women with disabilities' menstruation management experience. This review chapter depicts the evidence of women with disabilities' general practice, challenges, coping strategies, career support, and physical and psychological health impact during menstruation. Key gap of the evidence is also stated at the end of this chapter. Google Scholar, PubMed, Embase, Scopus and Google have been searched for articles published in within the last 5-15 years. The search terms were reviewed very carefully considering the research question. Please see the figure 2.1 for overview of literature review findings.

**Figure 2.1**

*Overview of Literature Review Findings*



## **2.1 Women with Disabilities General Practice for Menstruation**

In this section of the literature review, general practice is discussed for women with disabilities during their periods, including knowledge, experience, practice, and maintenance.

### **2.1.1 Knowledge and Experience**

Women with disabilities' knowledge and experience with menstruation differ depending on their disability (Pokhrel et al., 2020; Power et al., 2020). Pokhrel et al. (2020) conducted a study in Kathmandu, Nepal. The aim of the study was to assess the knowledge and practice regarding menstrual health of women with disability. In this study descriptive, cross-sectional approach was adopted to collect data from 151 participations. The participants age ranged between 15-34 years. The result identified that most of participants (80.13%) knew that 26-30 days were the normal menstrual cycle duration. 76.82% of participants learned about menstrual hygiene from parents and 10.61% participants learned from friends and others sources of information such as teachers and course book. 96.69% of participants stayed at home during menstruation. Some of the participants reported that they understood that their menstruation occurred after seeing blood on the bed sheets or cloths and after premenstrual and menstrual symptoms. However, there was also a mixed method study focused on the menstrual experiences and need of young adolescent women with cerebral palsy (CP). The study conducted at Sirajgonj district in Bangladesh among 45 participants including 12 female adolescents with CP and 33 caregivers. The female adolescents with CP aged range between 10-18 years. They reported wide range of need and experiences. Menstruation was discursively positioned alongside greater vulnerability to sexual abuse as a sign of female growth, accompanied by an expectation of independence, necessary for admittance into socially valued adult roles. Although unmanageable pain

and distress were noted, young adolescent women with CP were supposed to “quietly accept the tangible components of menstruation.” Most of the participant can manage their menstruation alone after learning about the menstruation management from others (Power et al., 2020).

### **2.1.2 Practice and Maintenance**

In this section, the principal findings about practice and maintenance with menstruation for women with disabilities are discussed, including choice, preference and uses of the menstrual product and personal hygiene management (Chowdhury et al., 2022; Pokhrel et al., 2020; Wilbur et al., 2019). The study mentioned the above details that find out about 83% of participants used sanitary pads during their menstruation, 69.54% of participants changed pads twice a day. The maximum number of participants (91.39%) disposed of sanitary pads in a dustbin, 5.30% disposed them in a separate place, and (5.30%) buried them in mud. Only 31% of participants bath daily during menstruation. Majority of the participants (61.59%) carelessly washed their genitalia and 88.08% cleaned with soap and water. During menstruation most of the respondent (90.06%) had taken rest (Pokhrel et al., 2020). A mixed method study was conducted with the aim of WASH and Menstrual Hygiene Management (MHM) experiences of females with disability living in Dhaka slums of Bangladesh. The study was conducted with 15 females with disability and 15 females without disability. The study was located at Korail and Koalyanpur slum area in Dhaka district (Chowdhury et al., 2022). This study also discovered that female with disabilities’ house has a tiny corner for the private shower, wash, and change of menstrual clothes that was locally separated by a curtain inside the house. Most of the women use menstrual cloth and they change this cloth twice a day (Chowdhury et al., 2022). A systematic review was conducted in 2019 to assess the menstrual hygiene requirements of persons with disabilities, the barriers they

face, and the available interventions to help them manage their menstruation hygienically and with dignity. A systematic review included articles from 22 countries. There were seven articles from low- and low middle-income countries (LMIC) region and 15 were from the high-income countries (HIC) region. This study identified there was lack of options of menstrual products for women with physical disabilities. As a result they felt discomfort and difficulty positioning the menstrual product. (Wilbur et al., 2019).

## **2.2 Health Impact during Menstruation**

This section of the literature review covers information on the health impact of menstruation in two major areas for women with disabilities. The areas of health impact for women with disabilities are shown as follows:

### **2.2.1 Impact on Physical Health**

Women experienced pre and menstrual symptoms like menstrual cramp, headache, swelling, skin irritation, breast tenderness, weight gain, increase hyper-activity, and self-injury (Jaffery et al., 2013; Pokhrel et al., 2020; Wilbur, Kayastha, et al., 2021; Yolanda A. Kirkham et al., 2013). In Nepal, a qualitative study was conducted by Wilbur and Kayastha (2021), to explore the barriers to menstrual hygiene management faced by adolescents and young people with a disability, and their careers in the Kavrepalanchok district at Nepal. In this study, 20 females with different types of disability aged between 15-24 years The study identified that the women with disability faces menstrual cramp. Some participants experienced more intense pain during their menstrual cycle (Wilbur, Kayastha, et al., 2021). A systematic review reported frequency and severity of menstrual pain is comparing with female with and without disability. Where identified, women with disabilities experience more severe pain than women without disabilities (Wilbur et al., 2019). Jaffery et al. (2013) conducted



research to evaluate the different management options for adolescents with learning and physical disabilities during menstruation period. The study stated that the onset of menarche in adolescents with disabilities can cause significant disruption to their lives. Distressing symptoms such as dysmenorrhea, menorrhagia, increased seizures, cyclical behaviour disturbances and an inability to cope with emotional surges of sex hormones are frequently reported. Besides 44.80% of participants in Nepal faced dysmenorrhea, abnormal blood flow (22.40%), and premenstrual symptoms (32.8%) (Pokhrel et al., 2020). A retrospective cohort study was conducted with the aim to demonstrate changes in methods of menstrual suppression in adolescents with developmental disabilities in a recent 5-year cohort compared with an historical cohort at the Hospital for Sick Children in Toronto, Canada an academic, tertiary referral centred from January 2006 to October 2011. The number of participants was 300, and their age range between 7.3 to 18.5 years. The study finds that participants used menstrual suppression to stop menstruation such as depot medroxyprogesterone (DMPA), and oral contraceptive pills (OCP). Weight gain, skin irritation, headache, dizziness, nausea, acne, abdominal bloating, breast swelling and tenderness, reduced libido, and alopecia were the most common physical health impacts of using menstrual suppression (Yolanda A. Kirkham et al., 2013).

### **2.2.2 Psychological Health Impact**

Women with disabilities has some psychological health problem such as; mood swing, fatigue, irritability, discomfort, anxiety, anger, social withdrawal, decreased concentration, increase hyper-activity, self-injury (Chowdhury et al., 2022; Enoch et al., 2020; Power et al., 2020; Wilbur et al., 2019). A qualitative study was conducted in Kumasi Metropolis of Ghana explored menstruation hygiene management challenges and coping strategies for adolescents with disabilities. In the study, 18

female adolescents with disability were included. The participants aged between 12-19 years. In the study, they found out anxiety and emotional stress during menstruation. Girls with physical impairment reported to feel discomfort for long hour of being seated in wheelchair (Enoch et al., 2020). Another study mentioned the above details and found that nine papers (41%) covered premenstrual symptoms, including mood swings, irritability, anger, social withdrawal, and hyperactivity (Wilbur et al., 2019). Most (53.3%) of females with disability reported exaggeration with mood swings while menstruation is ongoing and with 40% feeling abdominal pain. They also reported painful menstruation, gastrointestinal problems, and cramps are sometimes the source of stress/depression (Chowdhury et al., 2022).

### **2.3 Challenges of Women with Disabilities during Menstruation**

Women with disabilities faced various challenges like inaccessibility and inaccessible WASH facilities, inadequate menstrual product, poverty, lack of menstrual hygiene information and support, stigma, taboos, and menstrual restriction. All of this literature described similar challenges and identified some barriers to MHM experienced by women with disabilities that differ according to the impairment.

#### **2.3.1 Inaccessibility**

One common challenge that the women who used wheelchair faced inaccessibility of the washrooms. Girls with mobility issues must leave their wheelchair outside the bathroom to use the facilities. Sometimes the bathrooms were filthy, which made the issue worse. During menstruation, getting out of the wheelchair and sitting on the floor to take a bath could be challenging. Difficulty in fixing pads properly in the right place and detecting menstrual blood when their menstrual period begins was also the biggest challenge for visually impaired adolescents (Enoch et al., 2020). A person who have

impaired sensation in perineal area may not know when menstruation started and also faced trouble to fix pad in right place (Duckworth, 2015).

A mixed method study was conducted in Nepal which explored the menstrual health experiences of menstruators with and without disabilities. They stated that menstrual restrictions affected everyone, but for menstruators with disabilities particularly those who needed caregiver support collecting water and managing menstrual debris was more difficult. Despite reporting reduced interference from menstruation with involvement, these characteristics had a detrimental influence on menstruators with disabilities' comfort, safety, and hygiene (Wilbur, Morrison, et al., 2021). Other findings reported that inaccessible WASH facilities affected women with mobility impairments most severely. They were unable to comfortably change, wash, or dry their menstrual products, or wash their bodies in private, from a location that was easily accessible or safe (Wilbur, Kayastha, et al., 2021).

### **2.3.2 Menstrual Product**

The systematic review found that women with physical impairment faced challenges because of a lack of options for menstrual products. They could not buy menstrual products due to their high cost (Wilbur et al., 2019). In another study, mothers stated that it was crucial to take care of their adolescent's menstrual requirements, but this responsibility was discursively positioned as "painful," "irritating," and "shameful," in part because there were no accessible, reasonably priced menstruation products available (Power et al., 2020). Financial constraint is one of the essential issues behind their poor hygiene. Due to financial issue some women used menstrual cloth and could not buy menstrual product for maintain a good personal hygiene (Chowdhury et al., 2022).

### **2.3.3 Lack of Awareness**

Lack of menstruation hygiene information, training and support also were reported as challenges for managing menstruation. Older women in the household, such as mothers, grandmothers, and sisters, did not share information about menstruation before menarche. They used to educate them once that time had come. Menstrual products were recommended for use as blood absorbents, but instructions were not provided on how frequently to change them or how to discard them in a hygienic and environmentally responsible manner (Wilbur, Morrison, et al., 2021). Only 3.31 percent of participants in a cross-sectional study had attended health education classes or received menstrual hygiene training (Pokhrel et al., 2020). People with intellectual impairments had difficulty accessing MHM information and their careers despaired when they showed their menstrual blood to others, which could result in abuse. No support mechanisms existed for caregivers for MHM, who were overwhelmed and isolated. Menstrual discomfort was a major challenge but managed with home remedies, or not at all (Wilbur, Kayastha, et al., 2021).

### **2.3.4 Stigma, Taboos, and Restriction**

Menstrual care was seen as a very private matter, and very few caregivers and women spoke with others—including medical professionals—about it. Menstrual restrictions were common and expected, and the majority of participants had to adhere to them out of fear of being cursed. As disability is often viewed as a curse, this demonstrates the layers of discrimination faced (Wilbur, Kayastha, et al., 2021). Study finds that, participant faced menstrual restriction which is indicated that menstrual people must sleep separately, could not enter in the kitchen and touch food because it is believed that menstrual blood is dirty and contaminating (Enoch et al., 2020). Other difficulties mentioned by caregivers were resistance to using a menstrual product, a disregard for

social and cultural standards, including improper handling of monthly blood and product, talking to others about their periods, and replacing the used menstrual product in front of others (Wilbur, Morrison, et al., 2021). Food restrictions are also imposed on the girls. During menstruation, certain foods like sugar, toffee, and oranges should be avoided (Enoch et al., 2020). A systematic review included an Indian study that stated mothers restricted their daughters' physical activity while they were having their periods to prevent them from wearing blood-stained clothing outside (Wilbur et al., 2019).

## **2.4 Coping Strategies**

Adolescent females have created their own coping mechanisms to deal with the particular difficulties they confront during menstruation in order to do so with the least amount of discomfort. Almost everyone who reported experiencing discomfort did so by taking medicines. The two most often used painkillers are Paracetamol and Efpac. The minority who refuses to use painkillers weep and suffer in pain. Getting enough rest or sleep is another tactic for reducing discomfort. Although they did not find this method to be completely dependable, the majority of visually impaired adolescents appeared to keep track of their menstrual cycle calendar in order to be prepared (Enoch et al., 2020). Another study participants used therapeutic option for ease the menstrual problem like; combined oral contraceptive pill, combined transdermal patch, Progestogen only pill, Depot medroxyprogesterone acetate, Nexplanon, Gonadotrophin-releasing hormone analogues, Levonorgestrel intrauterine system, Endometrial ablation and Hysterectomy (Jaffery et al., 2013). Coping strategy used by caregivers in Taiwan was to sew the pad into the underwear or to buy their daughters adult-sized diapers (Wilbur et al., 2019). Another study find that to cope up with problem, 44.80% women took rest, 17.60% used hot water bag, 22.40% ate food,

15.20% women took medicine and 3.31% of women had taken health education class and training related to menstrual hygiene among the participants in the study (Pokhrel et al., 2020).

## **2.5 Carer Support**

Women with disabilities require minimal to extensive caregiver support, like family members or friends, to manage their periods (Pokhrel et al., 2020; Power et al., 2020; Wilbur, Kayastha, et al., 2021; Wilbur et al., 2019). Women with disabilities who were unable to manage menstruation on their own required support from caregivers. Mothers and sisters were the ones that helped the women with disabilities for managing their menstruation (Wilbur, Morrison, et al., 2021).

## **2.6 Key Gaps of the Evidence**

- There are nine of studies regarding women with disabilities menstruation hygiene management, barriers, and coping strategies during menstruation in other countries. Nevertheless, specifically female with wheelchair users' experiences not enough explored globally.
- Most of the literature focused on female with intellectual impairment.
- Little evidence was found about menstruation hygiene management for female with disabilities in Bangladesh. Besides, there was a lack of evidence on assistive devices in previous literature.
- To my knowledge there was no in-depth evidence about the experience of female wheelchair users' personal hygiene management during menstruation in Bangladesh and globally.

Therefore, this study explored the experiences of female wheelchair users' personal hygiene management during menstruation.

## CHAPTER III: METHODS

### 3.1 Study Design

#### 3.1.1 Method

In this study, student researcher followed qualitative research method, as the qualitative study explores, understand and describe the world from the subject's perspective (Creswell & Poth, 2018). Qualitative research aims to address issues with the development and comprehension of the meaning and experience dimension of the human lives and social world (Fossey et al., 2002). Instead of focusing on the natural world, qualitative research focuses on the social world (Liamputtong, 2017). In this study, the student researcher set out to investigate human lived experiences, which is at the centre of the qualitative approach. Therefore, qualitative research was best fit for this study.

#### 3.1.2 Approach

The phenomenological study design of qualitative research was chosen for this study. Phenomenology is a methodological approach with a strong and dynamic philosophical and epistemological base that seek to comprehend, characterise, and interpret human behaviour and the significance that different people place on their experiences (Liamputtong, 2017). The complexity of learning, behaviour, and communication can be better understood. Additionally, it enables us to understand the significance of each person's perspective, knowledge, and lived experiences (Neubauer et al., 2019). This study explored the female wheelchair users own understanding, their lived experiences, meaning of their life situation, personal hygiene management during their menstruation. For in-depth insights, this strategy is used.

## **3.2 Study Setting and Period**

### **3.2.1 Study Setting**

The data were collected at a mutually convenient place decided by both student researcher and the participants. Four data were collected from participants work place in different organisation of Dhaka district. Two data were collected from participant home. Student researcher conducted the remaining four participant interviews from the local area around CRP considering a quiet place. From this one participant's data were collected from CRP's ward as she used wheelchair for seven years and she was re-admitted at the CRP during the data collection period for further treatment. All interview conducted by student researcher in a quiet and participant's comfort place.

### **3.2.2 Study Period**

The period of the study was from April 2022 to February 2023 and data collection period was between 1 November, 2022 to 30 November, 2022.

## **3.3 Study Participants**

### **3.3.1 Study Population**

The study population was ten women who were using wheelchairs for any disability or illness causing disability.

### **3.3.2 Sampling Techniques**

The student researcher had selected purposive sampling procedure to collect the data. It is a type of non-probability sampling also known as judgemental, subjective, or selective sampling. Purposive sampling helps the student investigator in locating the chosen sample, which mostly satisfies the requirements of the study and is relevant to the study's goal (Crossman, 2020). It entails choosing participants or data on the basis that they have certain characteristics or experience (Braun & Clarke, 2013). As this



study followed some inclusion and exclusion criteria, purposive sampling was a good fit for this study (Creswell & Poth, 2018). Inclusion and exclusion criteria are given below.

### **3.3.3 Inclusion Criteria**

- Women who are using wheelchair for any disability or illness causing disability.
- Age above 12 years.
- Women with wheelchair users who have experienced menstrual cycle.

Age range was selected according to UNICEF (2018) guideline. It said majority of girls start their period between the age of 10-14 years. So normally above 12 years old girls can experience menstrual cycle.

### **3.3.4 Exclusion Criteria**

- Women with wheelchair users who have experienced menopause.

### **3.3.5 Participant Overview**

Ten participants responded to this study who were using wheelchair for any injury or illness causing disability. From ten participant, there were six women with Spinal Cord Injury (SCI), and other four were different types of illness following Polio, Myopathy, Guillain-Barre syndrome (GBS) and Transverse Myelitis. All participants experienced menstruation. To maintain confidentiality participants name were coded with a pseudonym. An overview of the identified participant is given in Table 3.1.

**Table 3.1***Participants Overview*

<b>Pseudo Name</b>	<b>Age (years)</b>	<b>Type of Disability and Condition</b>	<b>Occupation</b>	<b>Year or month of experiencing menstruation after injury or illness</b>	<b>Area of residence</b>
Mila	30y	Physical (Polio)	Videographer	18 years	Urban
Arshi	44y	Physical (SCI)	Director	30 years	Urban
Saarah	22y	Physical (SCI)	Homemaker	10 years	Rural
Kaniz	25y	Physical (Myopathy)	Receptionist(Front Desk)	13 years	Rural
Faiza	30y	Physical (GBS)	Receptionist(Front Desk)	18 years	Rural
Urmi	22y	Physical (SCI)	Student	7 years	Rural
Rifa	21y	Physical (SCI)	Student	4 years	Rural
Faraah	45y	Physical (SCI)	Homemaker	8 years	Rural
Rubina	32y	Physical (SCI)	Freelancer	3 years	Rural
Jessia	12y	Physical (Transverse Myelitis)	Student	3 months	Rural

**3.4 Ethical Consideration**

As a statement of ethical principles for medical research, the World Medical Association (WMA) created the Declaration of Helsinki (*World Medical Association Declaration of Helsinki, 2022*).

**3.4.1 Ethical approval from IRB**

The ethical clearance for the study has been sought from the Institutional Review Board (IRB) of BHPI by explaining the study purpose, through the Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI). IRB clearance

number CRP/BHPI/IRB/19/22/633 (See appendix A). Before gathering participants information from their work place, permission was sought from participant's respective place of employment .

### **3.4.2 Informed Consent**

- **Information sheet:**

Every participant received an information sheet from the student researcher that covered all the details about the study and made it obvious to them what its purpose and goals were (see appendix B).

- **Consent form:**

After given explanation of the purpose of the study, participant chose to voluntarily participate in the study. The consent was taken by a written consent form (see appendix B).

- **Withdrawal form:**

Participants have the right and can voluntarily withdraw to participate in the study before starting the data analysis. For this withdrawal form has been attached with information sheet and informed the participant about this (see appendix B).

### **3.4.3 Unequal Relationship**

The student researcher did not have any unequal relationship with the participants.

### **3.4.4 Risk and Beneficence**

There was no risk and benefit involved in this study.

### **3.4.5 Power Relationship**

The student researcher did not have any power relationships with any participants.

### **3.4.6 Confidentiality**

The participant's information was kept private. Their name and identity were not disclosed to anyone except for the supervisor and it was stated on the information sheet.

Additionally, the student researcher obtained the volunteers' signatures on a transcription contract form asking them not to disclose the information (See Appendix C for details). The participants were informed that their identity remain confidential for any upcoming uses, including report writing, publication, conferences, or any other written materials and vocal discussion.

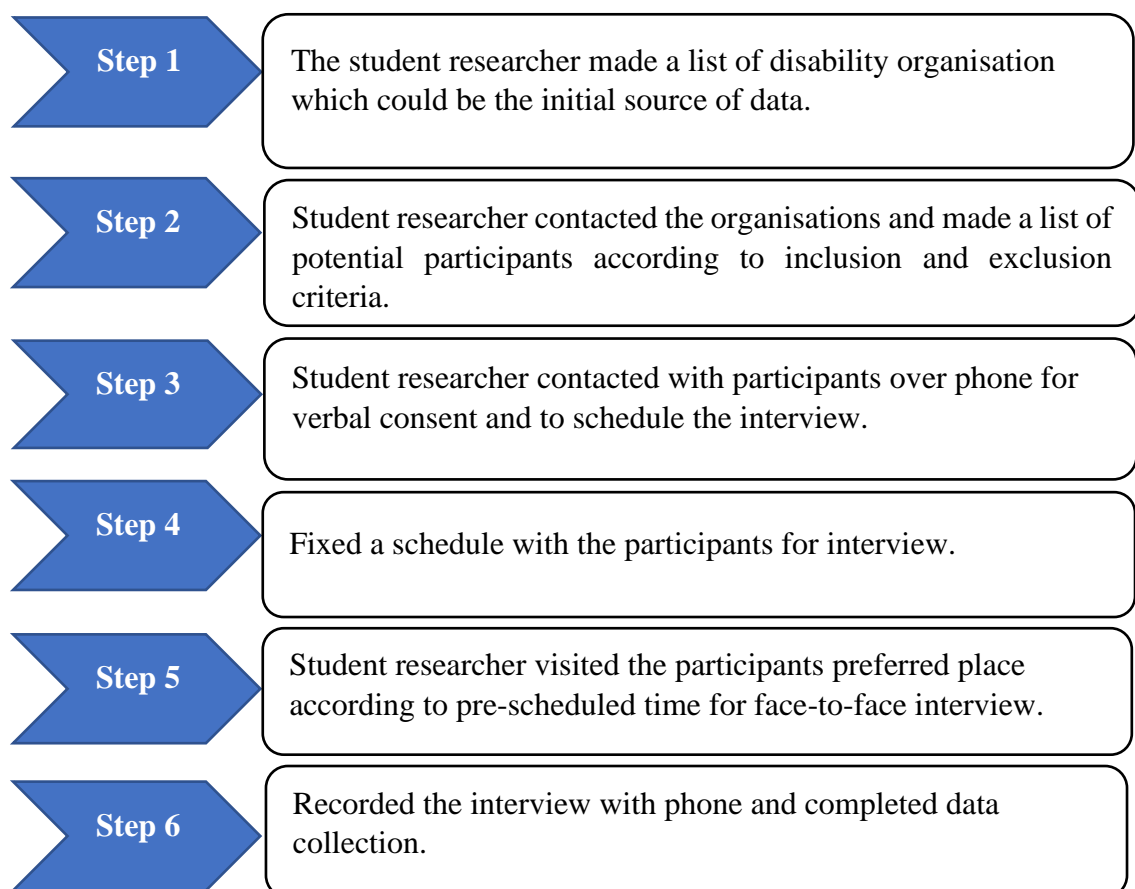
### 3.5 Data Collection process

#### 3.5.1 Participant Recruitment Process

Ten females with wheelchair users were recruited with different background. Participant recruitment diagram is given in Figure 3.1.

**Figure 3.1**

*Overview of Participant Recruitment Process*



The student researcher talked with a female peer counsellor for potential participant who worked in counselling unit at CRP and according to her help student researcher collected a list of participants from social welfare department of CRP. Student researcher also selected some disability service centre within and nearby Dhaka district and listed the name and location of the organisation as well as find out the name and contact number of the potential participants from different sources. Student researcher made the list of potential participants according to inclusion and exclusion criteria (see section 3.3.3 and 3.3.4 for details) and sociodemographic question (see appendix D). Then student researcher contacted with them over phone and explained clearly the details about the study (see appendix B). After explaining, student researcher selected participants for the interview according to participants' consent (see appendix B). After mutually convenient made an interview scheduled and selected a place according to participant preference and collected data in the pre-scheduled time.

### **3.5.2 Data Collection Method**

To conduct this study student researcher collected the data through face-to-face in-depth semi-structured interview. Through face-to-face interview the student researcher could ensure that the targeted participant was respondent, could develop rapport with the participant for taking in-depth information and could capture additional emotional and behavioural clues during answering the question. From in-depth semi structured interview, the student researcher could prepare question with some broad open-ended question will be included for the intention of eliciting in depth information, while at the same time enabling participants to elaborate on their responses (Liamputtong, 2017). Data collection method was followed by consolidated criteria for reporting qualitative research (COREQ) checklist (Tong et al., 2007). Data were collected by mobile phone

recorder which was kept flight mode so that recording could not be interrupted by any calls or messages. The interviews were lasted for 20-60 minutes.

### **3.5.3 Data Collection Instrument**

A self-developed interview guide was used by the student researcher to collect data from the participant. A semi structured interview guide was developed by student researcher (See appendix D). Because it encouraged a more in-depth response from research participants and help to keep the interview and the subject focused. The student researcher developed an interview guide by reviewing literature related to this study and according to research aim and objectives (Akter, 2021; Chowdhury et al., 2022; Enoch et al., 2020; Wilbur, Kayastha, et al., 2021). In the interview guide, questions were included about the female wheelchair users' general practice, personal hygiene management, premenstrual syndromes, seating position on wheelchair, cleanliness routine, dressing management techniques, physical health concerns, needs, preference, coping strategies, and challenges during menstruation. The student researcher also developed a sociodemographic information sheet which also included in the semi structured interview guide.

### **3.5.4 Field Test**

Field test was conducted with one participant. After field test two questions were included in the interview guide for better understanding of participant experiences. The two question is about participants food habit and recommendation during menstruation (See appendix D).

## **3.6 Data Management and Analysis**

Student researcher selected thematic analysis for analysing the data. Because it offers fundamental abilities that are necessary for carrying out many different kinds of

analysis (Braun & Clarke, 2013). Six steps were followed according to Braun & Clarke which are described below.

### **Step 1: Making yourself familiar with the data**

At the first step student researcher got familiarised with the data by taking interview, transcribed data verbatim in Bangla and translated them in English. One transcription was translated by a volunteer. The student researcher rechecked and retranslated the translation. The respected supervisor rechecked all the transcription and translation. Then the student researcher thoroughly read first to last to understand the meaning and pattern of data and marking the important point.

### **Step 2: Generating the initial codes**

In this step the student researcher identified some important point from the data and highlighting those sentences. Then the student researcher generated some initial code from the marking of important point and named them. The initial codes were checked by the supervisor.

### **Step 3: Searching for tentative themes**

The student researcher wrote down the code from every interview in individual paper by serially and highlighted the similar codes through reading the translation and speaking with the supervisor. Following that student researcher organized the codes into potential theme and wrote them on different sticky notes. Sticky notes hanged on wall so that related concepts could be conveniently grouped together to identify potential theme.

### **Step 4: Reviewing themes**

The student researcher created an initial thematic map and discussed with supervisor. With supervisor help twelve themes with some sub-themes were emerged from the study.

### **Step 5: Defining and naming themes**

The student researcher refined and revised the theme and sub theme and finalized those themes and sub-themes for results. Then generated clear name and definition for the theme and sub-themes so that reader can clearly understand. The respected supervisor checked all the theme and sub-theme.

### **Step 6: Producing the report**

According to theme the student researcher produced the report in the dissertation by writing the results chapter with verbatim quotes from participants.

Thematic analysis seeks to ascertain participants' perspectives, opinions, knowledge, and experiences regarding a subject (Braun & Clarke, 2013). As student researcher explored the experience of menstrual hygiene management for women with disability, thematic analysis was the proper way of analysing the data.

## **3.7 Trustworthiness**

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

### **3.7.1 Methodological rigour**

**Congruence:** Phenomenological approach of qualitative design was selected for the research which was accurately fit to the aim and objectives (see section 3.1: Study Design).

**Responsiveness to social context:** Face-to-face interview was conducted in a suitable place by manually convenient. By verbal communication with the participant, student researcher become familiar with the context (see section 3.2.1: Study setting)

**Appropriateness and adequacy:** Purposive sampling are followed to find out the participants for the study. ten participants were selected in this study based on some



inclusion and exclusion criteria. Data were collected by face-to-face interview (see section 3.3.2 and 3.5.1: Sampling techniques and participant recruitment process).

**Transparency:** The student researcher collected and analysed data. There was no risk of bias because the supervisor was actively involved in every step of data analysis process, giving the data variety of viewpoints (see section 3.5 and 3.6: Data collection process and data management and analysis).

### **3.7.2 Interpretive rigour**

**Authenticity:** Presentation of finding and interpretation was maintained by providing verbatim quotation of participant. Following the participants' statements, the student researcher verbally checked the participants' understanding of the explanation. (See chapter IV: Result section).

**Coherence:** Data was fitted to the aim and objectives. The student researcher transcribed data verbatim listening to the audio in Bengali as first language and translated them in English. The respected supervisor rechecked every transcription after listening to the audio recording, then student researcher started to analyse data (see section 3.6: Data management and analysis).

**Reciprocity:** Student researcher translated the data in verbatim by keeping the original data unchanged. Data analysis was not discussed with any participants. (See section 3.6: Data management and analysis).

**Typicality:** The term “typicality” describes how well the results can be applied to different contexts (Fossey et al., 2002). For readers clear understanding student researcher described the context of the study in depth (see section 3.3.5 and 3.6: Participant overview and Data management and analysis).

**Permeability of the researcher's:** By strictly adhering to the rules of ethics, the student researcher's intentions, preconceptions, values, or preferred theories were

maintained. The student researcher completed all the strategy of the research after checked and discussed with the supervisor which beneficial for keeping the study unbiased (see section 3.6: Data management and analysis).

## **CHAPTER IV: RESULT**

This chapter discusses the experience of female wheelchair users' personal hygiene management during menstruation. Ten females with disabilities from different areas shared their menstruation experience after their disability or illness. Twelve themes that emerged from the data analysis included: i) Understanding of menstruation, ii) Physical disability double burden of menstruation, iii) Pre and menstrual symptoms, iv) Period product, v) Personal hygiene routine, vi) Barriers, vii) Physical and psychological health impact, viii) Stigma taboos and religious restriction, ix) Food habit, x) Role of support system, xi) Coping strategies, and xii) Recommendation. There are multiple sub-themes found for each theme. In this chapter they are listed below in table 4.1; overview of results.

**Table 4.1***Overview of Results*

<b>Themes</b>	<b>Sub-themes</b>
Understanding of menstruation	Menstruation cycle and period
	Flow of bleeding
	Detecting bleeding
Physical disability double burdens the menstruation	Assistive device
	Accessibility
Pre and menstrual symptoms	
Period product	Choice of period product
	Availability
	Period poverty
Personal hygiene routine	Common practice
	Cleanliness routine
	Bathing and dressing management
	Physical health concern
Barriers	Water, Sanitation and Hygiene (WASH)
	Catheter
	Lack of period education, training, and support
Physical and psychological health impact	Reaction to first time menstruation
	Psychological impact
	Physical impact
Stigma, taboos, and religious restriction	Self-stigma
	Social stigma
	Social and religious restriction
Food habit	
Role of support system	Family members
	Friends or colleagues
Coping strategies	
Recommendation	Raising awareness
	For female wheelchair users
	For health professionals

**4.1 Theme one: Understanding of Menstruation**

Menstruation is a regular process. All the participant had experienced menstruation cycle after their injury or illness. All of them have an exact time for menstruation period. Everyone was able to detect blood by their own way. Accordingly, related sub-themes are described as follows:

#### **4.1.1 Sub-theme one: Menstruation Cycle and Period**

All the participant stated 20-30 days as a normal menstrual cycle duration. Their menstruation period lasts from 3-7 days. For example, Jessia, 12 years old with transverse myelitis, who has experienced three menstrual cycles, stated that “My menstruation starts 27-28 days later... My menstruation lasts for 3-4 days.”

#### **4.1.2 Sub-theme two: Flow of Bleeding**

Most of the participants reported that their blood flow was normal. Bleeding was heavy for the first 3-4 days and bleeding decreased after 5 days. Kaniz with Myopathy, described that “At the first 4 days bleeding is a little high and then gradually decreased.” Some of participants stated that their blood flow decreased with age. Arshi, 45 years old with SCI reported that “The amount of bleeding has also decreased a little than before.”

#### **4.1.3 Sub-theme three: Detecting Blood**

After injury or illness all the participant used wheelchair and they have impaired sensation in lower limb. Most of the participants detected their menstrual blood after seeing the stain cloths, cushion, or bed sheet. Faraah with SCI, said that “I check my bed, see the blood then I realise that I had my menstruation.” Three participants stated that they detected the menstrual blood during catheterisation. Rifa with SCI said that “When I use catheter, if see blood then I understand that the menstruation has taken place,”

### **4.2 Theme two: Physical Disability Double Burdens the Menstruation**

The participants in the study explained their experiences of before and after injury or illness. They have faced various types of obstacles during moving or transferring from one place to another. They adapted day by day and learnt to manage their menstruation with disability or illness.

#### **4.2.1 Sub-theme one: Assistive Device**

All the participant uses wheelchair after their injury or illness. Some of them told that they can use wheelchair well. Some participant reported that they faced difficulty during moving wheelchair. They felt pain while propelling wheelchair. Most of them unable to change and wear pad and need more time during sitting in wheelchair. Mila with Polio, stated that:

“The problem is that when I am removing or wearing the pad nicely, my wheelchair has rod on both side and I have to tilt one side and lift my waist which required more time and need to give more pressure... And if I am propelling my wheelchair during period, I feel pain.”

#### **4.2.2 Sub-theme two: Accessibility**

Some of participants transferred to live an accessible place after their disability or illness some of them made their environment suitable for their wheelchair. Two participants stated that, in their home environment there was not enough space for wheelchair and most of the time they were laying on the bed and their toilet distance was far and inaccessible with wheelchair so that they needed family members' help to reach bathroom and could not enter into the bathroom with wheelchair. Most of the participant reported that their blood flow dependent on their moving. Urmi with SCI said that, “Bleeding is less if I do not move a lot.”

#### **4.3 Theme three: Pre and Menstrual Symptoms**

Most of the participants in the study reported pre and menstrual symptoms including menstrual cramps, mood swing, tiredness, weakness, irritability, anger, decreased concentration, increased hyperactivity. Some of women with SCI could not understand properly their menstrual cramps because of their impaired sensation in lower limb.

Many participants said that menstrual cramps were one of the biggest challenges they faced when menstruating. Mila described that:

“I can understand a little about two weeks earlier as my body feels somewhat strange, then I feel extreme pain in my abdomen. When I have period, I feel extreme pain in my waist to leg and abdomen two to three hours prior to that day [Participant said it with sorrow shrinking her eyebrows] ... when I was at home I cried loudly for pain and everyone knows that I am in menstruating period.”

Some participant understand that their menstruation is about to begin by seeing their premenstrual symptoms. Rubina with SCI described that “Before it [menstruation] happened, I feel like stomach-ache slightly and had pain in the side of my waist.”

#### **4.4 Theme four: Period Product**

All participants of the study discussed about their period product. They have different type of explanation regarding period product.

##### **4.4.1 Sub-theme one: Choice of Period Product**

All participants had access to menstrual materials, including sanitary pad, menstrual cloth or tailor-made pad and diapers. Some participants use panties with sanitary napkin. One of them stated that she feels comfortable to use menstrual cloth instead of using pad. Kaniz stated that “It can be seen that the pad is not comfortable for me and I feel a little uneasy. And wearing menstrual cloth instead of pad makes me feel comfortable that is why I wear it.”

##### **4.4.2 Sub-theme two: Availability of Period Product**

Eight participants had access to adequate amounts of menstrual materials. Their family members help to buy menstrual products. Some of participants purchased the period

products themselves. Rubina reported that “I buy the pad myself and I also ask my brother to buy a pad for me.”

#### **4.4.3 Sub-theme three: Period Poverty**

Two participants reported buying period materials was a challenge as they were expensive. For these issue two participants could not use sanitary pad. One of the participants used tissue with the pad and used pad for a long period of time. One participant needs to manage money for parched pad. Faraah reported that: “I use pieces of cloth. Moreover, I do not use anything else. I do not use the pad. It takes money to buy those. We cannot eat properly, cannot educate my children for lack of money, how will I buy pads? [she looked sad]”

#### **4.5 Theme five: Personal Hygiene Routine**

Personal hygiene management is an important component during menstruation. All of the participants reported that they try to maintain personal hygiene during menstruation.

##### **4.5.1 Sub-theme one: Common Practice of Using Period Products**

Most of the participants reported that they wore and changed the pad laying on the bed. In this study two participants reported that they can wear and change the pad in anywhere such as in toilet or room or bed. Almost every participant had same techniques for wearing pad in bed. Saarah with SCI reported that “I use rubber belt pad. First, I bring the rubber belt from the head side to the waist. Then I tie the pad and attached with the belt. Then I tilt side to side and wear the pad.” Most of the participant used the pad for four - six hours. Some of them used pad for a long period of time for their personal issues. Some of them changed the pad frequently due to profuse bleeding and to avoid physical complication. Faiza with GBS reported that “I need to change the napkin a bit more because I get disturbed when it becomes wet.” Regarding disposal of pad, eight participants reported same that they wrapped the used pad with paper or



polythene and disposed in dustbin. Urmi reported that she disposed the pad in toilet. And Faraah stated that “I put the used menstrual cloth in a bag. Then it is not seen from outside that what it actually is. My husband throws it away too far [said in a low voice].”

#### **4.5.2 Sub-theme two: Cleanliness Routine**

Participants use soap, savlon, shampoo, hexisol, hand wash, detergents, pure water for their cleanliness. Most of the participants were very much concerned about their cleanliness. They washed the vaginal area and wiped with tissue before using pad. They washed the hand after changing the pad and . Arshi stated that:

“Cleanliness is something that we have to be always careful about this. I am very careful about my cleanliness. For example: taking a regular shower, using soap, using shampoo, then using the catheter, maintaining the catheter, and washing hand properly after change the pad and .”

#### **4.5.3 Sub theme three: Bathing and Dressing Management**

Eight participants reported that they bath daily during menstruation period. Two participants cannot bath daily during menstruation. Arshi stated that “when I am out of the house like, I am on an office tour, at that time I did not shower if I am having period because there was no chair for my shower.” Six participants wanted to change dressing pattern during menstruation. Some of them want to wear loose fitting dress and avoid light colour dress. Faiza and Rifa reported same that they want to wear tight pant during menstruation to prevent the pad from moving.

#### **4.5.4 Sub theme four: Physical Health Concern**

Almost all participants were aware of the infection. They were very concerned and tried to keep clean and maintain personal hygiene to avoid infection. Only Jessie reported that “Mother did not talk about infection so I do not know about it. I just know to stay clean. But I do not know what happens if it is not clean.”

## **4.6 Theme six: Barriers**

Women with disabilities often experience double discrimination, due to both their gender and having a disability during maintaining the menstruation hygiene.

### **4.6.1 Sub-theme one: Water, Sanitation and Hygiene (WASH)**

Inaccessible WASH facilities affected the participants most severely. They were unable to easily reach the place they keep their menstrual product, unable to comfortably change and wash their menstrual product. Most of the participant need help to do these. Mila and Kaniz reported same that they cannot change the pad and have to stay on wet pad during office hour. Mila stated that:

“It is a painful saying. Since I work, I cannot go home often. So, the pad I wear at 8am in the morning, have to stay with that wet pad until 2pm in the afternoon. Even if it wet too much, I have to stay on it.”

### **4.6.2 Sub theme two: Catheterisation**

All of the SCI participant reported that they felt uneasy and uncomfortable during catheterisation. They cannot insert catheter and need to try repeatedly to insert catheter because of menstrual blood. They feel bad when blood stained on hand. They drink water less because of fear of urine leaks out and catheterisation. Saarah stated that “I do not want to drink the water during menstruation. For fear of having to catheterise again and again.”

### **4.6.3 Sub-theme three: Lack of Period Education, Training and Support**

The participants stated that they had not receive proper training on menstruation management at hospital after their disability or illness. Some of them have self-management learnt over time. Most of the participant needed carer to help them for managing menstruation. For that they faced various type of problem during managing menstruation. Rifa described that:

“We had a basketball camp, where I had to stay at a residential facility. When I went up to the high commode there, I slipped up on the flood. My bathroom door was locked. I could not even get up. I could not even call anyone. No one will listen. I have tried a lot by myself. Getting up and down in a wheelchair has become very difficult. It has been a bit of a habit since then. And learning by myself. But God forbid, I would have been in danger.”

#### **4.7 Theme seven: Physical and Psychological Health Impact**

Participants experienced some problem related to physical and psychological health during menstruation.

##### **4.7.1 Sub-theme one: Reaction to First time Menstruation**

All participants described that they felt very bad during their first experience of menstruation. They could not understand how to manage menstruation with their disability or illness. All the participant need help from someone to manage menstruation. Rubina stated that “I felt very bad. I never let anyone do my own thing. But then I compelled to take help from others. Then I thought why it happened! It would have been better if I had died.”

##### **4.7.2 Sub-theme two: Psychological Impact**

Eight participants reported that they face emotional stress. Most of them feel bad, irritable mood, mood swing, get upset, hot temper, get angry, stressed, frustrated, anxiety and depression. They get anxious and worried when blood stained anywhere. They felt bad and shamed when someone help to manage their menstruation period. Rifa stated that “I just have bad mood and I cry because of bad mood. Then only tears came without any reasons. Mood swings also happen. Excessive anger. Then I do not want to talk to anyone.” Mila reported that “During period there is a lot of mood swing and it seems that you come to me and talk to nicely but I wonder why she come.”

### **4.7.3 Sub-theme three: Physical Impact**

All the participants in the study passed with various type of physical difficulties during menstruation. They faced problem during doing their daily living activity. Some of them reported that they cannot do anything and most of the time take rest. All participant reported that their pad needs to fix repeatedly during moving. The long hours of sitting add to the discomfort and decreased bleeding. Feel itchiness and pain. Some participant informed skin issue and infection during menstruation. Arshi reported that:

“When I go out, I have to use diaper. If it is used continuously for five to six days, then it can be seen that a little red rash comes out on both sides of the groin. And since panties are used during menstruation, a little red rash also comes out during this time.”

And Saarah reported that “Earlier the problem was that if I used my pad, my legs squeezed for the pad. Red rashes on both sides. So, two times it can be seen that it is completely sore.”

## **4.8 Theme eight: Stigma, Taboos and Religious restriction**

The participant experienced Stigma, taboos, and religious restriction. Which are influenced by culture, traditions and myths surrounding the menstruation and faced by all women and girls.

### **4.8.1 Sub-Theme one: Self Stigma**

Almost all participants voided to pronounce menstruation, bleeding, vaginal area, and menstrual product name like: Pad or Panties. They referred the products as ‘it.’ They blushed with shame when this name was pronounced by the student researcher. Kaniz said that:

“For the first time my sister showed me that this is how to hold ‘it,’ this is how to take ‘it,’ this is how to do ‘it’. Then I did ‘it’ myself.

Student researcher -What do you mean by 'it'?

Kaniz - The pad [smiled shyly].”

Some participants did not want to share about menstruation related topics with their family members and friend. Faiza said that “I do not like to share these things [menstruation] with anyone... I keep my privacy as much as I can.”

#### **4.8.2 Sub-theme two: Social Stigma**

Four participants reported that they had experienced social stigma during menstruation. Mila stated that “When I have period pain many people said that, do not go outside at this time. Maybe you have got some bad air.”

#### **4.8.3 Sub-theme three: Social and Religious Restriction**

It was evident from the study that two participants face challenges that related to restrictions to the community when they are menstruating. Urmi explained that “During menstruation my neighbours says that do not touch anything and forbid to communicate with them. If I touch or communicate with them, they may have problem. So, I do not go out during menstruation.”

#### **4.9 Theme nine: Food Habit**

Some participant reported that during menstruation they did not have the appetite to eat anything and no taste in food. The rest of the participant can eat well as normal day. Mila reported that “I do not get hungry. Specially, in the morning I do not want to eat even a little bit.”

#### **4.10 Theme ten: Role of Support System**

Support is the most significant aspect stated by the participants for the women with disabilities during their menstruation management. While talking about support system,

all the participant mentioned about their family members, friends, and colleagues about their behaviour.

#### **4.10.1 Sub-theme one: Family-members**

All the participant mentioned that they got enough family support in every stage during menstruation management. Needless to say, mother was always with them as their helping hand after their injury or illness. Faiza mentioned that “My elder sister and mother used to take care of me all the time since childhood... Everyone in my family was aware and always gave me the priority.” Two participants reported that they had experienced negligence and avoidance behaviour from their husband and family members. Faraah explained that:

“My husband said that I am lying at home for so long, I cannot do any work. He thinks of me as a “trouble.” If I tell him about my medicine, he does not bring... If I order the children to do something, then they said that, cannot you do it yourself? [Said in low voice]”

#### **4.10.2 Sub-theme two: Friends or Colleagues**

Some of participant have helpful friends and colleagues. Participants reported that they can shared anything related to period with their friends and colleagues and they gave good advices. Mila mentioned that “I have extreme pain during period, they (colleagues) understand and share about their menstruation experienced. They give me good suggestion. Some of them tell to use hot pack.”

#### **4.11 Theme eleven: Coping Strategies**

Despite so many barriers and problems, they have developed their own coping strategies to deal with the situation as much as possible. Most of the participant stated that they take painkillers, hot pack, antiseptic and ointment to reduce pain and skin issues. Lifting during long time seated in wheelchair. Saarah told that “First infection

was not that serious so it got better after applying ointment and after taking bed rest.”

Faiza told that:

“When I feel irritating due to setting for long period of time wearing the napkin at home, I lie in bed and try to ventilated the area [vaginal area] and at office I go to the washroom a little later and try to keep open the area [vaginal area] for ventilated. I felt better after doing this.”

#### **4.12 Theme twelve: Recommendation**

Most of the participants mentioned some recommendation according to their experiences.

##### **4.12.1 Sub theme one: Raising Awareness**

Some of participants stated same that need to increased awareness about menstruation all of the humans. Need support by government, NGOs, and policy maker for women with disabilities for their economic issues and menstrual product cost. Jessia stated that:

“It would be nice to have a pad that would not move and the blood would not stick to the cloth. Or there would be a pad that only the blood would fall into it. Then there would be no worry of getting blood on the cloths.”

##### **4.12.2 Sub theme two: For Female Wheelchair users**

For female wheelchair users some of participant recommended that they need to be clean always and need to concerns about personal hygiene during menstruation. Rubina stated that:

“Because we are leading our life with a problem first. It is always necessary to be careful so that no other kind of problem occurs. And period is very sensitive for a girl. That is why we always have to be clean, careful, and aware [laughs].”

#### **4.12.3 Sub theme three: For Health Professionals**

Three participants mentioned that it would be better if the health professional were friendly with the patient and taught menstruation management techniques in details. Rifa stated that “No health professionals say or teaches about period or its maintenance properly [said emphatically].” Rubina reported the same as Rifa.



## CHAPTER V: DISCUSSION

This study presented the experiences of female wheelchair users' personal hygiene management during menstruation. Ten women who have used wheelchair for any physical disabilities or illness causing disability were participated in the study. Participant were from both urban and rural area. The study identified twelve theme which emerged from the transcript of the participant.

The study was able to explore in great detail the menstrual experiences that women had after their disability or illness. In previous no in depth explanation findings about this.

This study found that female with wheelchair users has regular menstruation cycle with normal blood flow. In Kathmandu a study found that, about 80% of participants reported 26-30 days as normal menstruation cycle and 67.55% have normal flow of bleeding (Pokhrel et al., 2020). One interesting finding of the current study was identified that the flow of menstrual blood gradually decreased with age. No previous finding was identified about this topic.

In this study, women with disabilities faced problems using wheelchairs during menstruation. They explained that they face difficulty moving wheelchairs and managing menstruation with wheelchairs. In previous only one literature that reported some relevant findings. The study found that girls with mobility issues faced difficulty accessing the washroom with a wheelchair. They have to leave their wheelchair outside the washroom to use washroom facilities. It was challenging to take a bath as well when menstruating (Enoch et al., 2020). However, there were no specific findings from the earlier study that focused on assistive devices.

Prior studies explained about participants pre and menstrual symptoms related issues (Chowdhury et al., 2022; Enoch et al., 2020; Jaffery et al., 2013; Pokhrel et al., 2020; Wilbur, Kayastha, et al., 2021) which were consistent with this study. This study found

using sanitary pad and menstrual cloth as the most used method which were reported by several other studies. In Kathmandu 86.44% women with disability used sanitary pad and 16.56% used cloths (Pokhrel et al., 2020). This study identified in detail of their experiences with menstrual hygiene management for women with wheelchair users. In previous only a cross sectional study reported that only 31% of participants took a daily bath while they were menstruating. Most participants (61.59%) washed their genitalia carelessly, and 88.08% cleaned with soap and water. But no previous study has provided detailed information regarding this topic, but the current study explained in depth the information provided by participants about this. Most of the literature focused on the barriers and challenges of menstruation hygiene management women with disabilities (Chowdhury et al., 2022; Enoch et al., 2020; Jaffery et al., 2013; Power et al., 2020; Wilbur, Kayastha, et al., 2021; Wilbur, Morrison, et al., 2021; Wilbur et al., 2019).

The study reported lots of barriers including WASH, catheterisation and lack of education, training, and support. Previous literature also found out women with mobility issues suffered the most from inaccessible WASH facilities. They were unable to wash or dry their period supplies or their bodies in a private setting from a location that was convenient or secure (Chowdhury et al., 2022; Wilbur, Kayastha, et al., 2021; Wilbur, Morrison, et al., 2021). The study found that the women who worked in a job sector they could not change pad during job hour for that they felt discomfort and faced skin issues. No study focused on women with disabilities who worked in a job sector in previous. This present study also found that women who used catheters felt discomfort and unease during catheterisation when they were menstruating. They drank less water during this time. In the past, no study has discussed this topic. It also highlighted the economic issues related to period products for some women. Women

with disabilities could not buy menstrual products because of their financial problems and some of them used the pads for a long time to avoid using more pads. In a Bangladesh study, it was also reported that due to financial problems, women with disabilities could not buy menstrual products to maintain proper personal hygiene (Chowdhury et al., 2022).

Stigma, social restrictions, and superstitions is the major aspect in this study. Most of the participant have self-stigma for menstruation. they felt shy and avoid to spelled menstrual blood, pad and shy to share about this with their family members or partners, friends, and colleagues. There are many types of social taboos and superstitions in rural areas. In Nepal, a study reported that very few caregivers and women talked to others about menstrual care because it was viewed as a very private matter. The majority of participants were required to follow menstrual restrictions out of fear of being cursed. Menstrual restrictions were common and expected in there for women with disability (Wilbur, Kayastha, et al., 2021). In Kumasi literature found that social restriction and superstitions was a significant aspect for women with disabilities. Menstruating women were required to sleep separately, are prohibited from entering the kitchen, and were not allowed to touch food due to the belief that menstrual blood is filthy and contaminating (Enoch et al., 2020).

Support system played an important role for every woman with disabilities during managing their menstruation. Most of them had positive and supportive family member, friends, and colleagues but negative experience like; family members avoidance, negligence and unliked behaviour were also included in the study. Previous study findings also identified positive support. In the study of Bangladesh found the experience of mother support for women with cerebral palsy during menstruating (Power et al., 2020). In the study some women with disabilities reported skin issues and

pressure sore type of complication during menstruation. But no previous study has portrayed about menstruation related infection. These findings may help the rehabilitation professionals to set realistic goals.

Participants in this study reported that despite encountering numerous challenges and issues, they had developed their own coping strategies to deal with the situation as effectively as possible. To lessen pain and skin problems, they use ointments, heat packs, antiseptics, and medicines and lifting while seated for long time in a wheelchair. According to earlier research, 44.80% of women used rest to deal with typical problems, 17.60% used hot water bags, 22.40% ate food, 15.20% took medication, and 3.31% of women attended health education classes and received instruction in menstrual hygiene (Pokhrel et al., 2020). But none of the participants of this study reported attending health education classes.

In this study female participants stated some crucial recommendations for government and non-governmental organisation policies, as well as for health professionals and female wheelchair users based on their personal experiences. In previous, there were no literature where participants recommendation was included clearly. It is important because they had experienced and managed their menstruation themselves for that they had better understand about what was needed for their better management.

Three pieces of literature reported that women with disabilities had taken treatment for menstrual suppression (Jeffery et al., 2013; Wilbur et al., 2019; Yolanda A. Kirkham et al., 2013). But no information from this study was detected regarding menstrual suppression.

The overall findings of the study help us to understand the experience of female wheelchair users' general practice, personal hygiene management, premenstrual syndromes, seating position on wheelchair, cleanliness routine, dressing management

techniques, physical health concerns, needs, preference, coping strategies, and challenges during menstruation.

This finding has significant implications for designing an accessible environment and ensuring that female wheelchair users have equal opportunities to use obstacles free strategies to maintain their personal hygiene during menstruation. The study will be beneficial for health professionals such as; gynaecologist, rehab doctors, nurses, social workers, and occupational therapists to determine the challenges and requirements for maintaining personal hygiene for female wheelchair users during their menstruation period. From this finding occupational therapist can make suitable techniques to managing menstruation hygienic, limitation and barrier free strategies for women with wheelchair users. The findings added insights for future literature about menstrual hygiene management for women with wheelchair users.

## CHAPTER VI: CONCLUSION

### 6.1 Strength and Limitation

#### 6.1.1 Strength

Strengths of the study was:

- The data were collected from participants with various types of backgrounds such as; age, types of disability or illness causing disability, area of residence, occupation, and duration of menstruation experience, which added variation in experiences and provided rich, in-depth data from this study.
- The qualitative approaches used in this study were the best fit for achieving the goal and objective.
- Although there has been little research on menstruation in Bangladesh for women with disabilities, this is the first study to explore in-depth about menstruation on physical disability and assistive devices.
- The student researcher followed the COREQ checklist in this study.
- Future studies on this phenomenon will benefit from the findings of this study.

#### 6.1.2 Limitation

There are some limitations of the study. These are:

- This study followed a qualitative methodology for which a small number of participants and potential bias from participants while responding to the interview questions restricted the generalisability of the study.
- As the topic was sensitive, participants tended to feel embarrassed and shy, which could affect the quality of the data.

- It took time to build rapport with the participants before starting the interview as menstruation is considered a taboo topic for so many people in Bangladesh. So, it took a long time to get each and every participant's data.
- The student researcher collected data from Dhaka district which was not enough to generalise the study findings.
- As this is the first-time experience to conduct a study for student researcher so there would be any mistake which can be impacted on rich data quality.

## **6.2 Practice Implication**

The results will help health practitioners in identifying the difficulties faced in maintaining personal hygiene when they are menstruating. According to the fourth edition of the Occupational Therapy Practice Framework (OTPF-4), occupational therapy practitioners can create appropriate menstrual management procedures for women who use wheelchairs that are hygienic, unrestrictive, and barrier-free in their ADLs based on this study results. This study will be a baseline document for occupational therapists and other health professionals to design training and guidelines regarding menstruation management for females with wheelchair users. The results will help women who use wheelchairs to maintain their personal hygiene during their periods without encountering any hurdles. The research can provide new information for literature regarding wheelchair-users women's menstrual hygiene management.

### **6.2.1 Recommendation**

- **Recommendation for Professionals**  
Health Professionals such as; gynaecologist, rehab doctors, nurses, and occupational therapy practitioners may provide specialised teaching and training guidelines and open discussion for menstrual hygiene.

- **Recommendation for Researcher and Policy Makers**

Menstrual hygiene products should be affordable. The policy makers and researchers should create and make available a guidebook for education and training on proper menstrual care, hygiene maintenance, causes of relevant risks (infections, abusive incidences), and prevention strategies (proper hygiene, self-protection). This is because menstrual care is linked to improved health and wellbeing of girls with and without disabilities.

The policy maker could some awareness programs regarding this topic.

- **Recommendation for Further Research**

This is an undergraduate study and time was very limited. So, it was hard for the student researcher to include large sample. So further research study is recommended with large sample. Additionally, more studies on individual conditions or illness will strengthen unique evidence.

### **6.3 Conclusion**

Female with wheelchair users in Bangladesh reported wide range of experiences regarding their menstruation. Because of the added disability discrimination and impairment encountered, issues relating to menstruation hygiene management are more complicated for female wheelchair users than for other members of the population. It is necessary to undertake research on these topics in various contexts and to design menstruation hygiene management therapies that are specific to the type of disability and the needs of the caregivers. To guarantee that "no one is left behind," disability inclusive menstruation hygiene management must receive priority attention and funding.



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## APPENDICES

### Appendix A: Ethical Approval Form and Permission Letter

#### Ethical Approval Letter from IRB



Ref:

Date:

CRP/BHPI/IRB/09/22/633

28<sup>th</sup> September, 2022

Nusrat Jahan Rinku  
 4<sup>th</sup> Year B.Sc. in Occupational Therapy  
 Session: 2017-18 Student ID: 122170294  
 BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal "Experience of Female Wheelchair Users' Personal Hygiene Management during Menstruation" by ethics committee.

Dear Nusrat Jahan Rinku,  
 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/author and Arifa Jahan Ema as thesis supervisor. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Thesis Proposal
2	Questionnaire
3	Information sheet & consent form.

The purpose of the study is to explore the experience of female wheelchair users' personal hygiene management during menstruation. The study involves use of a Self-developed Interview Guide to explore the experience of female wheelchair users' personal hygiene management during menstruation that may take approximately 20 to 30 minutes to answer the Interview Guide and there is no likelihood of any harm to the participants in the study. 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 27<sup>th</sup> August, 2022. at BHPI (32<sup>nd</sup> 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, Dept. of Rehabilitation Science  
 Member Secretary, Institutional Review Board (IRB)  
 BHPI, CRP, Savar, Dhaka-1343, Bangladesh

## Permission Letter for Data Collection

Date: 22/10/2022  
 Head of the Department  
 Department of Occupational Therapy  
 Bangladesh Health Professions Institute (BHPI)  
 CRP-Savar, Dhaka-1343, Bangladesh

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

Sir,

With due respect I would like to draw your kind attention that I am a 4<sup>th</sup> year student of B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI). I have to submit a research paper to the University of Dhaka in partial fulfillment of the degree of Bachelor Science in Occupational Therapy. The settings of the research are **Centre for the Rehabilitation of the Paralyzed (CRP), Women with Disabilities Developmental Foundation, Centre for Disability in Development, Jatiyo Protibondhi Unnayan Foundation**. The research titled, "Experience of female wheelchair users personal hygiene management during menstruation". As it is phenomenological qualitative research, I would like to take interview of women with disabilities who are using wheelchairs and experiencing menstruation from the above settings. That's why I need permission to start my research project. I assure that anything of my project will not harmful for the participants and any data collected will be kept confidential.

So, I look forward to having your permission to start data collection to conduct a successful study as a part of my course.

Sincerely yours,

*Nusrat Jahan Rinku*

Nusrat Jahan Rinku  
 4<sup>th</sup> Year B.Sc. in Occupational Therapy  
 Session: 2017-2018 Student ID: 122170294  
 Bangladesh Health Professions Institute  
 CRP, Savar, Dhaka-1343, Bangladesh

**Signature and comments of the head of the department**

*Sk. Moniruzzaman*  
 22/10/2022

Sk. Moniruzzaman  
 Head of the department  
 Department of Occupational Therapy  
 Bangladesh Health Professions Institute

Date: 09/11/2022  
 Manager  
 Rehabilitation wing  
 CRP-Savar, Dhaka-1343, Bangladesh

**Subject: Application for permission to collect information for the research project.**

Sir,

With due respect I would like to draw your kind attention that I am a 4<sup>th</sup> year student of B.Sc. in Occupational Therapy at Bangladesh Health Professions Institute (BHPI). I have to submit a research paper to the University of Dhaka in partial fulfillment of the degree of Bachelor Science in Occupational Therapy. The settings of the research are **Centre for the Rehabilitation of the Paralyzed (CRP), Women with Disabilities Developmental Foundation, Centre for Disability in Development, Jatiyo Protibondhi Unnayan Foundation**. The research titled, "Experience of female wheelchair users personal hygiene management during menstruation". As it is phenomenological qualitative research, I would like to take interview of women with disabilities who are using wheelchairs and experiencing menstruation from the above settings. That's why I need permission to collect information for my research project.

I assure that anything of my project will not harmful for the participants and any data collected will be kept confidential.

So, I look forward to having your permission to collect information for data collection to conduct a successful study as a part of my course.

Sincerely yours,

*Nusrat Jahan Rinku*  
 Nusrat Jahan Rinku  
 4<sup>th</sup> Year B.Sc. in Occupational Therapy  
 Session: 2017-2018 Student ID: 122170294  
 Bangladesh Health Professions Institute  
 CRP, Savar, Dhaka-1343, Bangladesh

**Signature and comments of the head of the department**

*On behalf of RM*

*Rahman*  
 RDO, 2502

Salim Rahman  
 Manager  
 Rehabilitation wing  
 CRP, Savar, Dhaka-1343, Bangladesh



## **Appendix B: Information Sheet and Consent Form (English and Bangla Version)**

### **Information Sheet (English Version)**

#### **Title of the study: Experience of Female Wheelchair Users' Personal Hygiene Management During Menstruation.**

I would like to invite you to participate in a research study. You must comprehend the purpose of the research and what it would entail for you before making a choice. Please take your time and thoroughly read the following information. If something you read is unclear or you would like additional information, ask questions. Take time for deciding whether or not to participate.

#### **Who I am and what this study is about:**

I am Nusrat Jahan Rinku, 4<sup>th</sup> year student, B. Sc in Occupational Therapy Department of Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP). As a part of my academic course curriculum, I have to conduct a dissertation in this academic year. The titled of my study is “Experience of female wheelchair users' personal hygiene management during menstruation.” The aim of this study is to explore the experiences of female wheelchair users’ personal hygiene management during menstruation. Explore the female wheelchair users’ general practice, personal hygiene management, premenstrual syndromes, seating position on wheelchair, cleanliness routine, dressing management techniques, physical health concerns, needs, preference, coping strategies, and challenges during menstruation. The study is supervised by Arifa Jahan Ema, lecturer of Occupational Therapy Department, Bangladesh Health Professions Institute (BHPI).

**What will taking part involve?**

A semi-structured interview guide and a sociodemographic information question will be developed by student researcher that will be used for interview for the research. The expected time of the interview is 50-60 minutes and it will take place at a pre-schedule time. Student researcher will ask the question according to interview guide and they need to answer them. A mobile recorder will be used to record the interview.

**Why you have been invited to take part?**

You have been invited to take part because you have met up all the inclusion criteria according to the research study.

**Do you have to take part?**

Your participation in the study is entirely voluntary and you have the right to withdraw your consent and discontinue participation at any time until data will be analyzed without any repercussions.

**What are the possible risks and benefits of taking part?**

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

**Will taking part be confidential?**

All information collected during this study will be kept confidential and will not be shared with anyone outside the study unless required by law. Only the student researcher and supervisor are allowed to access in the data here. The participants will

not be named in any reports, publications, or presentations that may come from this study.

**How will information you provide be recorded, stored and protected?**

Data will be recorded by mobile recorder. Collected data will be kept on a password-protected computer and lock cloud system.

**What will happen to the result of the study?**

The findings will help the health professionals to determine the challenges in maintaining personal hygiene of female with wheelchair users during menstruation period. From the findings Occupational therapist can develop suitable techniques to managing menstruation hygienic, limitation and barrier free strategies for women with wheelchair users. The findings will also be beneficial for the female with wheelchair users to use obstacles free strategies to maintain their personal hygiene during menstruation period. The results will additionally add insights for future literature about menstrual hygiene management for women with wheelchair users.

The final result of the study may be published in a scientific journal.

Who should you contact for further information?

If you have any query regarding the study now or in future, please feel free to ask and you are always welcome to contact to following person:

**The student researcher name: Nusrat Jahan Rinku**

B. Sc in Occupational Therapy

4<sup>th</sup> year, Session: 2017-18

Department of Occupational Therapy

Contact Number: 01683781528

Email: [nusratjahanrinku@gmail.com](mailto:nusratjahanrinku@gmail.com)

**The supervisor's name: Arifa Jahan Ema**

Lecturer and Course Coordinator of M.Sc. in Occupational Therapy Department

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

CRP, Savar, Dhaka

Contact Number: 01753979041

Email: [arifajemaotbhpi@gmail.com](mailto:arifajemaotbhpi@gmail.com)

**Thank you**

**Consent Form (English Version)****Title of the study: Experience of Female Wheelchair Users' Personal Hygiene Management During Menstruation.**

I am \_\_\_\_\_, I have read the above statement, understand the nature of my participation in the research, and I freely agree to participate. I recognize my right to withdraw my consent and discontinue participation in the study at any time until data will be analysed without fear of any prejudice, and recognize that my activities and data generated by my participation will remain strictly confidential.

I am \_\_\_\_\_ Inform that, the all information from the participation will be kept private and secure. Only the researcher and supervisor are allowed to access in the data here.

I \_\_\_\_\_ have been informed about all mentioned and I voluntarily consent to taking part in the study.

Name of the participant \_\_\_\_\_

Signature of participant/thumb print \_\_\_\_\_

Date \_\_\_\_\_

Student researcher's signature \_\_\_\_\_

Date \_\_\_\_\_

**Withdrawal form (English Version)**

**Title of the study: Experience of female wheelchair users' personal hygiene management during menstruation.**

I \_\_\_\_\_ confirm that, I wish to withdraw all of my data from the study before data analysis has been completed and that none of my data will be included in the study.

Name of the participant \_\_\_\_\_

Signature of participant/thumb print \_\_\_\_\_

Date \_\_\_\_\_

## Information sheet (Bangla Version)

### তথ্য পত্র

আমি আপনাকে একটি গবেষণায় অংশগ্রহণের জন্য আমন্ত্রণ জানাতে চাই। আপনি সম্মতি দেওয়ার পূর্বে গবেষণা সম্পর্কিত বিস্তারিত তথ্য আপনার জানা প্রয়োজন। অনুগ্রহ করে আপনি সময় নিন এবং পুঙ্খানুপুঙ্খভাবে নিম্নলিখিত তথ্য পড়ুন। পড়ার সময় আপনার কিছু অস্পষ্ট মনে হলে বা অতিরিক্ত তথ্য জানতে চাইলে দয়া করে প্রশ্ন করুন। তথ্য পত্রটি ভালোভাবে পড়ার পরে গবেষণায় অংশগ্রহণ করবেন কিনা সে বিষয়ে সিদ্ধান্ত নিন।

### আমি কে এবং এই গবেষণাটি কী সম্পর্কে করা হবে:

আমি নুসরাত জাহান রিংকু, বাংলাদেশ হেলথ প্রফেশনাল ইনস্টিটিউট (বিএইচপিআই), সিআরপি শিক্ষা প্রতিষ্ঠান, অকুপেশনাল থেরাপি বিভাগে অধ্যয়নরত ৪র্থ বর্ষের একজন ছাত্রী। আমার একাডেমিক কোর্স এর পাঠ্যক্রমের একটি অংশ হিসাবে, আমাকে এই শিক্ষাবর্ষে একটি গবেষণামূলক কাজ করতে হবে। আমার গবেষণার শিরোনাম হল "মহিলা হুইলচেয়ার ব্যবহারকারীদের মাসিকের সময় ব্যক্তিগত স্বাস্থ্যবিধি ব্যবস্থাপনার অভিজ্ঞতা"। এই গবেষণার লক্ষ্য হল মাসিকের সময় মহিলা হুইলচেয়ার ব্যবহারকারীদের ব্যক্তিগত স্বাস্থ্যবিধি ব্যবস্থাপনার অভিজ্ঞতাগুলি সম্পর্কে বিষদভাবে জানা। আমি বিশেষভাবে মহিলা হুইলচেয়ার ব্যবহারকারীদের সাধারণ অনুশীলন, ব্যক্তিগত স্বাস্থ্যবিধি ব্যবস্থাপনা, মাসিকের আগে উপসর্গগুলো, হুইলচেয়ারে বসার অবস্থান, পরিচ্ছন্নতা রুটিন, ড্রেসিং পরিচালনার কৌশল, অন্যান্য শারীরিক সমস্যা, চাহিদা, পছন্দ-অপছন্দ, মাসিকের সময় মোকাবেলা করার কৌশল এবং বাধাগুলি খুঁজে বের করতে চাই। গবেষণাটি তত্ত্বাবধানে আছেন অকুপেশনাল থেরাপি বিভাগের প্রভাষক আরিফা জাহান ইমা, বাংলাদেশ হেলথ প্রফেশনাল ইনস্টিটিউট (বিএইচপিআই), সিআরপি, সাভার, ঢাকা: ১৩৪৩।

### এতে অংশ নেওয়ার জন্য কী কী করতে হবে?

গবেষণাটি পরিচালনা করার জন্য আমি কিছু প্রশ্নপত্র তৈরি করেছি যা মূলত আপনার মাসিকের অভিজ্ঞতা কেন্দ্রিক। তাছাড়াও আমি আপনার সম্পর্কে কিছু সাধারণ তথ্য জানতে চাই। যার

জন্য সরাসরি সাক্ষাতকার প্রয়োজন। সাক্ষাতকারের সময় ৫০-৬০ মিনিট হতে পারে এবং এটি একটি প্রাক-নির্ধারিত সময়ে অনুষ্ঠিত হবে। শিক্ষার্থী গবেষক সাক্ষাতকার নির্দেশিকা অনুযায়ী প্রশ্ন জিজ্ঞাসা করবেন এবং আপনাকে সেগুলোর উত্তর দিতে হবে। সাক্ষাতকার রেকর্ড করতে একটি মোবাইল রেকর্ডার ব্যবহার করা হবে।

### **কেন আপনাকে অংশ নিতে আমন্ত্রণ জানানো হয়েছে:**

আপনাকে অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে কারণ আপনি নীচে উল্লিখিত গবেষণা অধ্যয়ন অনুসারে সমস্ত অন্তর্ভুক্তির মানদণ্ড পূরণ করেছেন:

### **অন্তর্ভুক্তির মানদণ্ড:**

যে মহিলারা কোনো অক্ষমতা বা অসুস্থতার জন্য হুইলচেয়ার ব্যবহার করছেন।

বয়স ১২ বছরের উপরে

হুইলচেয়ার ব্যবহারকারী মহিলারা যাদের মাসিক চক্রের অভিজ্ঞতা রয়েছে।

### **বর্জনের মানদণ্ড:**

হুইলচেয়ার ব্যবহারকারী মহিলারা যাদের খাতুজরা অভিজ্ঞতা রয়েছে।

### **আপনাকে কি অংশ নিতে হবে?**

গবেষণায় আপনার অংশগ্রহণ সম্পূর্ণরূপে নিজের ইচ্ছায় এবং আপনার সম্মতি প্রত্যাহার করার ও কোনো প্রতিক্রিয়া ছাড়াই তথ্য বিশ্লেষণ না হওয়া পর্যন্ত যেকোনো সময় আপনার অংশগ্রহণ প্রত্যাহার করার অধিকার রয়েছে।

### **অংশগ্রহণের সম্ভাব্য ঝুঁকি এবং সুবিধাগুলি কি কি?**

অংশগ্রহণকারী এই গবেষণায় অংশগ্রহণের জন্য সরাসরি কোন সুবিধা পাবেন না, তবে এই গবেষণা থেকে প্রাপ্ত তথ্য ভবিষ্যতের উন্নয়ন এবং পুনর্বাসন পরিষেবার উন্নতির জন্য অবদান রাখা হবে। অংশগ্রহণকারীরা গবেষণায় অংশগ্রহণ করার জন্য কোনো ধরনের সমস্যা বা ক্ষতির সম্মুখীন হবে না, তবে তাদের কঠিন অভিজ্ঞতা শেয়ার করার সময় তারা মানসিক অস্বস্তি অনুভব করতে পারে। সাক্ষাতকারের সময় যদি এটি দেখা দেয় তবে শিক্ষার্থী গবেষক একটি



বিরতি নেবে বা সাক্ষাত্কারের জন্য পুনরায় সময়সূচীর জন্য আলোচনা করবে। এটি অংশগ্রহণকারীদের উপর খুব কঠিন হয়ে গেলে, তারা তাদের সম্মতি প্রত্যাহার করতে পারবে।

### **অংশগ্রহণের গোপনীয়তা কিভাবে নিশ্চিত করা হবে?**

এই গবেষণার সময় সংগৃহীত সমস্ত তথ্য গোপন রাখা হবে। শুধুমাত্র শিক্ষার্থী গবেষক এবং সুপারভাইজার তথ্য সম্পর্কিত বিস্তারিত জানতে পারবেন। এই গবেষণা থেকে আসা কোনো প্রতিবেদন, প্রকাশনা বা উপস্থাপনায় অংশগ্রহণকারীদের নাম দেওয়া হবে না।

### **আপনার দেওয়া তথ্য কীভাবে রেকর্ড, সংরক্ষণ এবং সুরক্ষিত করা হবে?**

তথ্য মোবাইল রেকর্ডার দ্বারা রেকর্ড করা হবে। সংগৃহীত তথ্য পাসওয়ার্ড-সুরক্ষিত কম্পিউটার এবং লক ক্লাউড সিস্টেমে রাখা হবে।

### **গবেষণার ফলাফলের কী হবে?**

এই ফলাফলগুলি স্বাস্থ্য পেশাদারদের মাসিকের সময় মহিলা হুইলচেয়ার ব্যবহারকারীদের ব্যক্তিগত স্বাস্থ্যবিধি বজায় রাখার ক্ষেত্রে অভিজ্ঞতা বের করে আনতে সহায়তা করবে। ফলাফল থেকে অকুপেশনাল থেরাপিস্ট হুইলচেয়ার ব্যবহারকারী মহিলাদের জন্য মাসিক স্বাস্থ্যকর, সীমাবদ্ধতা এবং বাধা মুক্ত কৌশলগুলি পরিচালনা করার জন্য উপযুক্ত কৌশল শিক্ষা দিতে পারবে। ফলস্বরূপ হুইলচেয়ার ব্যবহারকারী মহিলাদের জন্যও উপকারী হবে তারা ঋতুস্রাবের সময় তাদের ব্যক্তিগত স্বাস্থ্যবিধি বজায় রাখার জন্য বাধা মুক্ত কৌশল ব্যবহার করতে পারে। এছাড়াও হুইলচেয়ার ব্যবহারকারী মহিলাদের জন্য মাসিক স্বাস্থ্যবিধি ব্যবস্থাপনা সম্পর্কে ভবিষ্যতের গবেষণার জন্য বিশেষভাবে অন্তর্দৃষ্টি যোগ করবে। গবেষণার চূড়ান্ত ফলাফল একটি বৈজ্ঞানিক জার্নাল, সংবাদপত্র, ব্লগ বা অন্যান্য প্রাসঙ্গিক উত্সগুলিতে প্রকাশিত হতে পারে।

### **আরও তথ্যের জন্য আপনার কার সাথে যোগাযোগ করা উচিত?**

এখন বা ভবিষ্যতে গবেষণার কোনো বিষয়ে আপনার কোন প্রশ্ন থাকলে বা জানার কিছু থাকলে, অনুগ্রহ করে নির্দিধায় জিজ্ঞাসা করতে এবং নিম্নলিখিত ব্যক্তির সাথে যোগাযোগ করতে আপনাকে সর্বদা স্বাগত জানাইঃ

**শিক্ষার্থী গবেষকের নাম:নুসরাত জাহান রিংকু**

বি. এসসি ইন অকুপেশনাল থেরাপি

৪র্থ বর্ষ, সেশনঃ২০১৭-২০১৮

অকুপেশনাল থেরাপি বিভাগ

যোগাযোগ নম্বরঃ০১৬৮৩৭৮১৫২৮

ইমেইল: [nusratjahanrinku@gmail.com](mailto:nusratjahanrinku@gmail.com)

**সুপারভাইজারের নাম: আরিফা জাহান ইমা**

প্রভাষক,কোর্স কোআরডিনেটর-এমএসসি ইন অকুপেশনাল থেরাপি

অকুপেশনাল থেরাপি বিভাগ,

বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউট,সিআরপিআই,সাভার,ঢাকা

যোগাযোগ নম্বরঃ০১৭৫৩৯৭৯০৪১

ইমেইল: [arifajemaotbhpi@gmail.com](mailto:arifajemaotbhpi@gmail.com)

**ধন্যবাদ**

**Consent Form (Bangla Version)****সম্মতি পত্র**

আমি \_\_\_\_\_ (অংশগ্রহণকারীর নাম), আমি উপরের বিবৃতিটি পড়েছি, গবেষণায় আমার অংশগ্রহণের প্রকৃতি বুঝতে পেরেছি এবং আমি স্বাধীনভাবে অংশগ্রহণ করতে সম্মত। আমি অবগত যে, গবেষণার তথ্য বিশ্লেষণ না করা পর্যন্ত কোনধরনের ভয় ছাড়া আমি আমার সম্মতি প্রত্যাহার করা এবং গবেষণায় অংশগ্রহণ প্রত্যাহার করার অধিকার আছে, এবং আমার অংশগ্রহণের তথ্য কঠোরভাবে গোপনীয় থাকবে।

আমি \_\_\_\_\_ (ছাত্র গবেষকের নাম) জানাচ্ছি যে, অংশগ্রহণের সমস্ত তথ্য গোপন ও সুরক্ষিত রাখা হবে। শুধুমাত্র গবেষক এবং সুপারভাইজারকে তথ্য অ্যাক্সেস করার অনুমতি দেওয়া হবে।

আমাকে \_\_\_\_\_ (অংশগ্রহণকারীর নাম) উল্লিখিত সমস্ত বিষয়ে অবহিত করা হয়েছে এবং আমি স্বেচ্ছায় গবেষণায় অংশ নিতে সম্মতি দিচ্ছি।

**অংশগ্রহণকারীর নাম** \_\_\_\_\_

অংশগ্রহণকারীর স্বাক্ষর/অঙ্গুলি প্রিন্ট \_\_\_\_\_

তারিখ \_\_\_\_\_

**শিক্ষার্থী গবেষকের স্বাক্ষর** \_\_\_\_\_

তারিখ \_\_\_\_\_

**Withdrawal Form (Bangla Version)****প্রত্যাহার পত্র**

আমি \_\_\_\_\_ (অংশগ্রহণকারীর নাম) নিশ্চিত করছি যে, তথ্য বিশ্লেষণ সম্পন্ন হওয়ার আগে আমি আমার সমস্ত তথ্য এই গবেষণা থেকে প্রত্যাহার করতে চাই এবং আমার কোনও তথ্যই গবেষণায় অন্তর্ভুক্ত করা হবে না।

**অংশগ্রহণকারীর নাম** \_\_\_\_\_

**অংশগ্রহণকারীর স্বাক্ষর/আঙুলের ছাপ** \_\_\_\_\_

**তারিখ** \_\_\_\_\_

## **Appendix C: Translator consent form**

### **Translator consent form (English Version)**

I am Nusrat Jahan Rinku, 4<sup>th</sup> year student, B. Sc in Occupational Therapy Department of Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP). As a part of my academic course curriculum, I am going to conduct a dissertation in this academic year. The titled of my study is “Experience of female wheelchair users' personal hygiene management during menstruation”. The aim of this study is to explore the experiences of female wheelchair users’ personal hygiene management during menstruation.

According to the research conduct rules, the student researcher and supervisor of the study will only access the data and apart from personal information, interview information cannot be mentioned elsewhere.

In working as a translator in this study I am clearly aware of the aims, objectives and confidentiality of data collection. I will translate this research data into English with utmost confidentiality. I will not discuss any information related to this matter with anyone.

**Translator’s name**\_\_\_\_\_

Translator’s Signature\_\_\_\_\_

Date\_\_\_\_\_

**Student researcher’s signature**\_\_\_\_\_

Date\_\_\_\_\_

## Translator consent form (Bangla Version)

### অনুবাদক চুক্তিপত্র

অকুপেশনাল থেরাপি কোর্সের পাঠ্যক্রমের একটি অংশ হিসেবে, আমি নুসরাত জাহান রিংকু, বাংলাদেশ হেলথ প্রফেশনাল ইনস্টিটিউটের (বিএইচপিআই) এর বি.এসসি. ইন অকুপেশনাল থেরাপি বিভাগের ৪র্থ বর্ষের একজন ছাত্রী একটি গবেষণা কার্যক্রম পরিচালনা করতে যাচ্ছি। গবেষণাটি হল "মহিলা হুইলচেয়ার ব্যবহারকারীদের মাসিকের সময় ব্যক্তিগত স্বাস্থ্যবিধি ব্যবস্থাপনার অভিজ্ঞতা"। এই গবেষণার লক্ষ্য হল মাসিকের সময় মহিলা হুইলচেয়ার ব্যবহারকারীদের ব্যক্তিগত স্বাস্থ্যবিধি ব্যবস্থাপনার অভিজ্ঞতাগুলি সম্পর্কে বিষদভাবে জানা।

গবেষণা পরিচালনার নিয়মানুসারে, গবেষণার গবেষক এবং তত্ত্বাবধায়ক শুধুমাত্র তথ্য অ্যাক্সেস করবেন এবং ব্যক্তিগত তথ্য ছাড়াও সাক্ষাৎকারের তথ্য অন্যকোথাও উল্লেখ করা যাবে না।

এই গবেষণায় আমি একজন অনুবাদক হিসেবে কাজ করার ক্ষেত্রে গবেষণার লক্ষ্য, উদ্দেশ্য এবং তথ্য সংগ্রহের গোপনীয়তা সম্পর্কে স্পষ্টভাবে অবগত। আমি সর্বোচ্চ গোপনীয়তা রক্ষা করে এই গবেষণার তথ্য ইংরেজি অনুবাদ করবো। এই বিষয় সংশ্লিষ্ট কোন তথ্য কারো সাথে আলোচনা করবো না।

অনুবাদকের নাম \_\_\_\_\_

অনুবাদকের স্বাক্ষর \_\_\_\_\_

তারিখ \_\_\_\_\_

শিক্ষার্থী গবেষকের স্বাক্ষর \_\_\_\_\_

তারিখ \_\_\_\_\_

## Appendix D: Interview Guide (English and Bangla Version)

### Interview guide (English Version)

#### Sociodemographic information:

Participant No:

Age:

Types of disability:

Reason of condition:

Mobility aid/Assistive device:

Occupation:

Workplace:

Marital status:

Number of family member:

Living address:

#### Semi structured interview guide:

**The aim of this study is to explore the experiences of female wheelchair users' personal hygiene management during menstruation.**

Objective	Interview question
Opening question	1. Do you get your period every month after illness? -If yes then how often do you get your period? - Can you understand if you are menstruating? -How long does your menstruation continue? 2. Explain your first menstruation experience and feelings after your injury or illness.

<p>To explore the premenstrual syndrome (PMS) female wheelchair users face during menstruation period.</p>	<p>3. Do you have any idea about PMS?          -If yes then do you face any changes or pre and menstrual symptoms before or after the menstrual phase?          -If you face, what are the changes or difficulties?          -How long do these problems last after menstruation?          -Did you visit the doctor when it occurred?</p>
<p>To identify the general practice for menstruation related personal hygiene management.</p>	<p>4. What do you use in the menstrual phase? Clothes or sanitary pad?          -How often do you change your napkin?          - Do you always get enough of what you need to manage your period?          5. Do you know about personal hygiene during the menstrual phase? How do you maintain?          -Which products do you need to manage your hygiene?          -If you do not know, then why didn't you know?</p>
<p>To understand their cleanliness routine, dressing techniques and related concern considering the use of wheelchair.</p>	<p>6. What's the routine of your cleanliness during your menstrual phase?          -Do you have enough things for cleanliness? Such as - soap, tissue paper, napkins?          7. Do you bathe every day during your menstruation?          8. What kind of clothiers do you wear during the period?          9. If you do not maintain cleanliness and personal hygiene during your menstrual phase, you may be infected. Do you know about this?          -How you be conscious of this?          -Did you suffer any infected disease before?          -If yes, what did you do then?</p>
<p>To investigate physical and psychological health concerns, needs and preference associated with personal hygiene during menstrual period.</p>	<p>10. What's the distance from your bedroom to the toilet?          -Does your toilet have enough space to change your napkin and to maintain cleanliness?          -If not, where, and how do you manage?          -Where do you change your pad? How do you change?</p>



	<p>- Where and how to dispose of used sanitary napkins?</p> <p>11. Do you need anyone's help during this time? -If yes, how did he/she help you?</p>
<p>To explore the coping strategies associated with physical complications related to menstrual period.</p>	<p>12. If you maintain your hygiene by yourself during your menstruation period, -how do you do it yourself? -From whom have you learned?</p> <p>13. Do you continue your job in this time? -How do you manage your job? -How does your colleague behave with you? -Do you need their help? -What is the routine during this time to maintain your job-related work?</p> <p>14. Do you follow any routine for eating?</p>
<p>To determine challenges in maintaining personal hygiene of female wheelchair users during menstruation period.</p>	<p>15. How do you seat for a long time in a wheelchair during your period days? -Do you change face any problems seating for a long time in a wheelchair? -If yes, what kind of problem do you face?</p> <p>16. Do you face any problems during the period? -What kind of problem do you face?</p> <p>17. How do your family members behave during your period? -Do you face any embarrassing situations? -If it is, how is the situation?</p> <p>18. How do the surrounding people behave toward you? -Have you face any social problems?</p> <p>19. Do you face any mental disorders at this time? Adidas anxieties, depression, or boringness?</p> <p>20. Is there any impact on your daily activities for the menstrual phase? -If yes then, what is the impact? -How do you manage it?</p>
<p>Additional</p>	<p>21. Do you have any recommendations related to menstruation?</p>

## Interview guide (Bangla Version)

### প্রশ্নপত্র

#### প্রাথমিক প্রশ্ন:

অংশগ্রহনকারীর নাম:

বয়স:

প্রতিবন্ধকতার ধরন:

প্রতিবন্ধকতার কারণ:

চলাচলের সহায়ক উপকরণ:

পেশা:

কর্মক্ষেত্রের স্থান:

বৈবাহিক অবস্থা:

পরিবারের সদস্য সংখ্যা:

ঠিকানা:

#### মূল প্রশ্ন:

১) অসুস্থতার পরে আপনার মাসিক কি প্রতিমাসে হয়?

- হ্যাঁ হলে, কতদিন পরে পরে হয়?
- মাসিক হলে বুঝতে পারেন?
- মাসিক হওয়ার কতদিন পরে শেষ হয়?

২) অসুস্থতার পরে প্রথম যখন আপনার মাসিক হলো তখন মাসিকের ব্যবস্থাপনা সম্পর্কে কে আপনাকে জানিয়েছে?

- অসুস্থতার পরে, প্রথম মাসিক হওয়ার পরে মাসিকের ব্যবস্থাপনা কে করেছে?
- আপনি নিজে নিজে করলে, কিভাবে করেছেন?
- আপনাকে কেউ সাহায্য করলে, কে সাহায্য করেছে? এবং কিভাবে সাহায্য করেছে?

৩) অসুস্থতার পরে প্রথম মাসিক হওয়ার পর আপনার অভিজ্ঞতা কেমন ছিল?

- অসুস্থতার পরে প্রথম মাসিক হওয়ার পর আপনার অনুভূতি ও প্রতিক্রিয়া কি ছিল?

৪) মাসিক হওয়ার আগে বা পরে বিভিন্ন ধরনের শারীরিক উপসর্গ দেখা যায়, আপনি কি এ সম্পর্কে কিছু জানেন?

- যদি জানেন, আপনি কি মাসিক হওয়ার আগে বা পরে শরীরে কোন ধরনের পরিবর্তন বা সমস্যা লক্ষ্য করেন?

- হলে কী ধরনের সমস্যা হয়?

- মাসিক হওয়ার কতদিন আগে থেকে এ ধরনের সমস্যা লক্ষ্য করেন?

- মাসিক হওয়ার কতদিন পর পর্যন্ত এ সমস্যা থাকে?

- এজন্য কী ডাক্তারের সরনাপন্ন হয়েছেন?

৫) মাসিকের সময় ব্যবস্থাপনার জন্য আপনি কি কি ব্যবহার করেন?

- কতক্ষণ পর পর স্যানিটারি ন্যাপকিন পরিবর্তন করেন?

- মাসিকের ব্যবস্থাপনার জন্য যা যা লাগে, সেগুলো কি আপনি যথেষ্ট পরিমাণে সবসময় পেয়ে থাকেন?

৬) আপনার থাকার জায়গা থেকে টয়লেটের দূরত্ব কতটুকু?

- সেখানে পর্যাপ্ত জায়গা আছে আপনার স্যানিটারি ন্যাপকিন পরিবর্তন ও পরিষ্কার পরিচ্ছন্নতা করার জন্য?

- না থাকলে, কোথায় এবং কীভাবে স্যানিটারি ন্যাপকিন ব্যবহার করেন?

- এবং কোথায় এবং কীভাবে স্যানিটারি ন্যাপকিন পরিবর্তন করেন? ব্যবহার করা স্যানিটারি ন্যাপকিনটা কোথায় এবং কীভাবে ফেলে দেন?

৭) মাসিকের সময় সবসময় ব্যক্তিগত স্বাস্থ্যবিধি বা পরিষ্কার পরিচ্ছন্ন থাকার গুরুত্বতা সম্পর্কে জানেন?

- জানলে, কি কি জানেন বিস্তারিত বলেন?

- পরিষ্কার পরিচ্ছন্নতার জন্য আপনি কি কি ব্যবহার করেন?

- পরিষ্কার পরিচ্ছন্নতার জন্য যা যা দরকার সেগুলো কি আপনার কাছে সব সময় পর্যাপ্ত পরিমাণে থাকে?
  - পরিষ্কার পরিচ্ছন্নতার জন্য যা যা দরকার সেগুলো আপনাকে কে কিনে এনে দেয়?
  - মাসিকের সময় আপনার পরিষ্কার পরিচ্ছন্নতার রুটিন কি?
  - এ সম্পর্কে কিছু না জানলে কেনো জানেন না?
- ৮) মাসিকের ব্যবস্থাপনার এবং পরিষ্কার পরিচ্ছন্নতার জন্য যা যা দরকার সেগুলো আপনার বাসার কোথায় থাকে?
- জিনিসগুলো কি আপনার ব্যবহারের জন্য সহজগম্য যায়গায় থাকে?
  - আপনি কি নিজে নিয়ে ব্যবহার করতে পারেন নাকি কেউ সাহায্য করে? নিজে পারলে, কিভাবে করেন? কেউ সাহায্য করলে, কে সাহায্য করে? কিভাবে সাহায্য করে?
- ৯) মাসিকের সময় ব্যক্তিগত পরিষ্কার পরিচ্ছন্নতা এবং স্বাস্থ্যবিধি মেনে না চললে বিভিন্ন ধরনের সংক্রমণ জনিত সমস্যা হতে পারে। এ সম্পর্কে কিছু জানেন?
- জানলে তার জন্য কীভাবে সতর্ক থাকেন?
  - আপনি কী কোন ধরনের সংক্রমণ জনিত রোগের বা কোন সমস্যার সম্মুখীন হয়েছিলেন? হলে, কি ধরনের সমস্যার সম্মুখীন হয়েছেন? তখন কি করেছেন সমস্যা প্রতিকার ও প্রতিরোধ করার জন্য?
- ১০) মাসিকের সময় আপনি কি প্রতিদিন গোসল করেন?
- করলে, কিভাবে করেন?
- ১১) মাসিকের সময় আপনি কোন ধরনের জামা কাপড় পরেন?
- ১২) আপনি কি বিশেষ কোন রুটিন মেনে চলেন?
- এ সময় আপনার খাওয়া-দাওয়ার রুটিন কি?
  - খাওয়া-দাওয়ার ক্ষেত্রে কোন সমস্যার সম্মুখীন হন?
- ১৩) মাসিকের সময় অনেক সময়ের জন্য হুইলচেয়ারে কীভাবে বসে থাকেন?
- এত সময় বসে থাকার ফলে কোন সমস্যা হয়?

- হ্যাঁ হলে, কি ধরনের সমস্যা হয়?
- ১৪) এ সময় আপনার কী কারো সাহায্যের প্রয়োজন হয়?
- হ্যাঁ হলে, কার সাহায্যের প্রয়োজন হয়? কীভাবে সে সাহায্য করে?
- ১৫) আপনি নিজে নিজে সব করলে কীভাবে করেন?
- সকাল থেকে রাত পর্যন্ত একটা দিনের কি কি করেন এ সময়ে বিস্তারিত বলেন।
- ১৬) এ সময় আপনি আপনার কাজে যান?
- গেলে কীভাবে পরিচালনা করেন?
  - এই সময়ে আপনার চাকরি-সংক্রান্ত কাজ বজায় রাখার জন্য রুটিন কী?
  - সেখানে একারণে কখনো কোন সমস্যার সম্মুখীন হয়েছে?
- ১৭) আপনার কাজের সহকর্মীরা কী বন্ধুত্বপূর্ণ আচরণ করে?
- কাজ করার সময় কী সহকর্মীদের কাছে কোন সাহায্যের প্রয়োজন হয় এসময়ে?
- ১৮) মাসিকের চলাকালীন সময় কি কি ধরনের সমস্যার সম্মুখীন হয়েছেন?
- ১৯) মাসিকের সময় আপনার পরিবারের সদস্যদের আপনার সাথে আচার ব্যবহার কেমন থাকে?
- কোন ধরনের বিব্রতিকর সমস্যায় পড়তে হয়?
  - হলে, তা কেমন?
- ২০) আপনার আশেপাশের মানুষের ব্যবহার কেমন ?
- এ সময় সামাজিক কোন সমস্যায় পড়েছেন?
- ২১) মাসিকের সময় মানসিক কোন সমস্যা হয়? যেমনঃ মন খারাপ, মেজাজ খারাপ, বিরক্তি ভাব।
- ২২) মাসিকের কারণে কী আপনার দৈনন্দিন জীবনে সকল কাজকর্মে কোন প্রভাব পরে?
- পরলে কী রকমের প্রভাব পরে? আপনি কীভাবে সেটা নিয়ন্ত্রণ করেন?
- ২৩) আপনার যদি মাসিকের সময় সংক্রান্ত আরো কোন অভিজ্ঞতা থাকে বলতে পারেন?
- ২৪) আপনার কোন সুপারিশ থাকলে বলেন?

## Appendix E: Supervision Record Sheet

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



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

Title of thesis: Experience of female wheelchair users personal hygiene management during menstruation period.

Name of student: Nusrat Jahan Rinke

Name and designation of thesis supervisor: Arifa Jahan Ema  
 Lecturer

Department of Occupational Therapy

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	17.08.22	BHPI Building	5th Schedule, Content. Methods.	45 min	Ask about Method	Nusrat Jahan	
2	20.08.22	Library	• Research Methods, • Qualitative Research	2 hour. 15 minutes	Review literature, Explore video and doing homework preparation by herself.	Nusrat Jahan	

3	21.08.22	Library	<ul style="list-style-type: none"> <li>Aim</li> <li>Objectives</li> <li>Methodology</li> <li>Sampling</li> </ul>	2 hours 35 minutes	<ul style="list-style-type: none"> <li>Complete the methodology for next day</li> <li>Literature review</li> </ul>	Nusrat Jahan	Ajwa 21.08.22
4	25.08.22	Office Building	<ul style="list-style-type: none"> <li>Presentation feedback</li> </ul>	15 minutes	<ul style="list-style-type: none"> <li>Complete full presentation.</li> <li>Make an interview guide</li> </ul>	Nusrat Jahan	Ajwa 25.08.22
5	28.08.22	Office Building	<ul style="list-style-type: none"> <li>Powerpoint presentation feedback</li> <li>Social demographic presentation guideline</li> </ul>	1 hour 50 minutes	<ul style="list-style-type: none"> <li>Complete PPT according to feedback.</li> <li>Social demographic form</li> </ul>	Nusrat Jahan	Ajwa 28.08.22
6	20.09.22	Office Building	<ul style="list-style-type: none"> <li>Research proposal feedback.</li> <li>Information Note</li> <li>Consent, withdrawal form</li> </ul>	45 minutes	<ul style="list-style-type: none"> <li>Complete research proposal according to feedback.</li> <li>Make a information form, consent and withdrawal form</li> </ul>	Nusrat Jahan	Ajwa 20.09.22
7	01.10.22	Office Building	<ul style="list-style-type: none"> <li>Advising about information note, consent and withdrawal form, interview guide translation on bangla</li> </ul>	45 minutes	<ul style="list-style-type: none"> <li>Complete the whole topics translate from english to bangla</li> </ul>	Nusrat Jahan	Ajwa 01.10.22
8	06.10.22	Office Building	<ul style="list-style-type: none"> <li>Feedback on bangla translation transcription.</li> </ul>	1 hour 10 min	<ul style="list-style-type: none"> <li>Concentration the bangla translation according to feedback</li> </ul>	Nusrat Jahan	Ajwa 06.10.22
9	16.10.22	Office Building	<ul style="list-style-type: none"> <li>Feedback on bangla translation transcription.</li> <li>Data collection</li> <li>Literature review</li> </ul>	1 hour 40 min	<ul style="list-style-type: none"> <li>English translation.</li> <li>Data collection continue</li> <li>Literature review</li> </ul>	Nusrat Jahan	Ajwa 16.10.22

10	02.11.2022	Office Building	<ul style="list-style-type: none"> <li>Review interview guide</li> <li>Guide feedback on bangla-transcription</li> <li>Instruction on data-collection</li> </ul>	30 minutes	<ul style="list-style-type: none"> <li>Re-write interview-Guide</li> <li>English translation</li> <li>Data collection</li> </ul>	Nusrat Jahan	AMU 02.11.22
11	22.11.2022	Office Building	<ul style="list-style-type: none"> <li>Check transcription and translation</li> <li>Data Analysis</li> </ul>	30 minutes	<ul style="list-style-type: none"> <li>Transcription</li> <li>Translation</li> <li>Data Analysis</li> <li>Complete Data collection</li> </ul>	Nusrat Jahan	AMU 22.11.22
12	24.11.2022	Office Building	<ul style="list-style-type: none"> <li>Write up schedule</li> <li>Data analysis</li> </ul>	1 hour	<ul style="list-style-type: none"> <li>Transcription</li> <li>Translation</li> <li>Data analysis</li> </ul>	Nusrat Jahan	AMU 24.11.22
13	29.11.2022	Office Building	<ul style="list-style-type: none"> <li>Check translation and analysis</li> <li>Feedback on translation and analysis</li> </ul>	30 minutes	<ul style="list-style-type: none"> <li>Translation</li> <li>Analysis</li> </ul>	Nusrat Jahan	AMU 29.11.22
14	20.12.2022	Office Building and class room (103)	<ul style="list-style-type: none"> <li>Check coding</li> <li>Theme and sub-theme</li> <li>Methodology</li> </ul>	2 hours	<ul style="list-style-type: none"> <li>Write up result</li> </ul>	Nusrat Jahan	AMU 20.12.22
15	02.12.2022	Office Building	<ul style="list-style-type: none"> <li>check theme and sub-theme</li> </ul>	30 minutes	<ul style="list-style-type: none"> <li>Write up result</li> </ul>	Nusrat Jahan	AMU 02.12.22
16	04.01.2023	Office Building	<ul style="list-style-type: none"> <li>Guideline for write-up</li> <li>Discussed Discussion and conclusion</li> </ul>	30 minutes	<ul style="list-style-type: none"> <li>Write up literature Discussion, Introduction and Conclusion</li> </ul>	Nusrat Jahan	AMU 04.01.23



17	07-01-2023	Office Building	• Guideline for discussion and conclusion	10 minutes	• Write up and complete 1st draft for submission.	Nusrat Jahan	Ajma 07.01.23
18	01-03-2023	Office Building	• Feedback on first draft	15 minutes	• Start write up for second draft	Nusrat Jahan	Ajma 01.03.23
19	08-04-2023	Office Building	• Check literature review figure.	5 minutes	• Re-write and re-correct literature review	Nusrat Jahan	Ajma
20	09-04-2023	Office Building	• check literature review figure and table according to APA-7 format	5 minutes	• Write up second draft.	Nusrat Jahan	Ajma
21	11-04-2023	Office Building	• Feedback on methodology. • Discuss about discussion, result chapters.	55 minutes	• Write up discussion and result.	Nusrat Jahan	Ajma 11.04.23
22	26-04-2023	Office Building	• Feedback of methodology and literature review.	50 minutes	• Full write up on second draft	Nusrat Jahan	Ajma 26.04.23
23	30-04-2023	Office Building	• Guideline on power point presentation	17 minutes	• Complete full power point presentation	Nusrat Jahan	Ajma 30.04.23

Note:

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

24	08.05.2023	Office Building	Feedback on full second draft.	2 hours 20 minutes	<ul style="list-style-type: none"> <li>• Rewrite up according to feedback.</li> <li>• Prepare presentation for defence.</li> </ul>	Nusrat Jahan	Ajma
25	11.05.2023	Library	Feedback on abstract.	1 hour	<ul style="list-style-type: none"> <li>• Prepare presentation for defence.</li> </ul>	Nusrat Jahan	Ajma
26	14.05.2023	Office Building	<ul style="list-style-type: none"> <li>• Check Power Point Presentation</li> <li>• Checked full thesis.</li> </ul>	1 hour 20 minutes	<ul style="list-style-type: none"> <li>• Prepare for presentation in defence</li> <li>• Complete full thesis.</li> </ul>	Nusrat Jahan	Ajma
27	03.06.2023	Library		2 hours 10 minutes		Nusrat Jahan	Ajma
28							
29							
30							

Note:

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2. Students will require submitting this completed record during submission your final thesis.