Occupational Balance Status among Mothers of Children with Cerebral Palsy: A Cross-sectional Study.

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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Statement of Authorship

Except where it is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis presented by me for any other degree or seminar. No other person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the award of any other degree in any other tertiary institution. The ethical issue of the study has been strictly considered and protected. In case of dissemination of the findings of this project for future publication, the research supervisor will be highly concerned, and it will be duly acknowledged as an undergraduate thesis.

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Dedication

Dedicated to my honorable and beloved parents, my respected all teachers of Bangladesh Health Professions Institute.

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List of Abbreviations

ADL	Activities of Daily Living
CP	Cerebral Palsy
IQR	Interquartile Range
OB	Occupational Balance
OBQ	Occupational Balance Questionnaire
OT	Occupational Therapy
PCWD	Parents of Children with Disability
QoL	Quality of Life
SPSS	Statistical Package for Social Science
SWB	Subjective Well-being
WMA	World Medical Association

Abstract

Background: Mothers of children with cerebral palsy (CP) usually take on most of the daily caregiving. These responsibilities can limit their chances to rest, take care of themselves and participate in meaningful activities, which may disturb their occupational balance.

Aim: This study aims to examine the status of occupational balance among mothers of children with CP.

Methods: This study was conducted by the quantitative approach with a cross sectional design and purposive sampling. Data was collected through a face-to-face survey among 157 participants by using a standard questionnaire (OBQ11). Data were collected through a semi-structured sociodemographic questionnaire and the Occupational Balance Questionnaire (OBQ-11). Chi-square and Fisher's exact tests were used to examine the association between occupational balance status (low vs. high) and selected sociodemographic variables.

Results: Most mothers were young adults, married, living in combined families and not engaged in paid employment. OBQ-11 responses showed that a large proportion of mothers had difficulties maintaining a satisfactory balance between activities done for themselves and for others. Many reported dissatisfaction with the time available for rest, relaxation and leisure. Overall, more than half of the participants were classified as having low occupational balance. No statistically significant associations were found between occupational balance status and any of the examined sociodemographic variables ($p > 0.05$).

Conclusion: Mothers of children with CP in this Bangladeshi context commonly experience occupational imbalance, regardless of their sociodemographic background.

These findings highlight the importance of including caregiver-focused assessment of occupational balance and related occupational therapy interventions.

Keywords: occupational balance, mothers, cerebral palsy, occupation, caregivers, cross-sectional study.

CHAPTER I: INTRODUCTION

1.1 Background

One of the emerging nations in South Asia is Bangladesh. Based on the preliminary findings of the 2022 Population and Housing Census, there were approximately 169,828,921 people living there. Disability is a universal element in the human condition to which no one is protected (*Population and Housing Census*, n.d.). The National Survey of Persons with Disabilities (NSPD) 2021 estimates that 2.8% of Bangladesh's population is disabled. There are around 46.2 lakh people here.

The prevalence of cerebral palsy (CP) is 3.4 per 1000 children in rural Bangladesh (Khandaker et al., 2019). Cerebral palsy (CP) is primarily a neuromotor disorder that affects the development of movement, muscle tone and posture (Colver et al., 2014; Rosenbaum et al., 2007). CP refers to a collection of long-term mobility and postural abnormalities that limit activities and are thought to be caused by nonprogressive disruptions in the developing fetus or immature brain. Spasticity, dyskinesia, hypotonia, and ataxia are the most common neurologic impairments of the motor system in children with cerebral palsy (Dilip R. Patel et al., 2020; Patel et al., 2010). Mixed presentations are not uncommon. There are also cases of hypotonia with or without accompanying spasticity, usually truncal hypotonia and spasticity of the extremities. CP is typically categorized as spastic, dyskinetic, hypotonic, or mixed based on clinical findings (Dilip R Patel et al., 2020).

The subjective perception of having the appropriate number of occupations and the appropriate variation between occupations in one's occupational pattern is known as

occupational balance (OB) (Wagman et al., 2012a). Mothers of children with cerebral palsy devote more time to work associated with their children than mothers of children with typical development (Rassafiani et al., 2012a). Mothers of children with CP prioritize sleep, rest, and childcare, while mothers of children with typical development prioritize leisure, work, and self-care (Riyahi et al., 2019). A mother's routine and the balance of her family life can be upset by having a child with special needs because a mother's involvement is affected by a number of factors, including her physical environment, the child's age, her health, and others (Wahyu et al., n.d.). The burden of care, exhaustion, and psychological symptoms are some of the factors that have a negative impact on the quality of life (QoL) of mothers of children with cerebral palsy (Farajzadeh et al., 2020). The quality of life (QoL) of mothers of children with cerebral palsy (CP) is lower than that of mothers of children with typical development (Glinac, 2017). Parental caregiving is a common and integrated task, but when a child has a disability and needs that will lead to long-term dependence, the role assumes a completely different significance. Thus, this chronic reliance makes it difficult to engage in fulfilling and purposeful work and could endanger a person's health et al., 2017).

1.2 Justification of the study

One of the fundamental ideas of occupational therapy is occupational balance, which is linked to personal health and well-being (Wagman & Håkansson, 2019a). Poor self-rated health and high levels of perceived stress have been linked to occupational imbalance or lack of it (Håkansson et al., 2017).The expertise of occupational therapists could be applied to improve mother's occupational balance and raise awareness of the value of occupational balance within health services (Uthede et al., 2023).

It is crucial to learn more about mothers' occupational balance because CP is a topic that is becoming more and more popular both nationally and internationally. The student researcher is interested in researching the occupational balance status of mothers of children with CP. Occupational therapists can use this information to help create interventions that address the support needs of different genders. Additionally, occupational therapists supported a significant improvement in the mother's occupational balance through this research. It may be necessary to combine occupational therapy with other professional contributions, such as counselors or psychologists, depending on the mother's overall life circumstances and the reason for the occupational imbalance.

1.3 Operational Definition

1.3.1 Occupation

The term "occupation" refers to any activity an individual performs in a setting or any aspect of daily life, including paid work, education, home chores, rest, or leisure. Typically, the term "occupation" are associated with the paid labor or a profession (Lee et al., 2012).

In the occupational therapy context, occupation is defined as ‘activities and tasks of everyday life, named, organized, and given value and meaning by individuals and a culture’. The area of human occupation includes activities of daily living (ADLs), instrumental activities of daily living (IADL), rest, sleep, education, work, play, leisure and social participation (“Occupational Therapy Practice Framework: Domain and Process (3rd Edition),” 2014).

1.3.2 Occupational Balance

The term "occupational balance" (OB) refers to a person's subjective perception of

having an appropriate number of professions and an appropriate level of diversity between them (Wagman et al., 2012b).

Occupational balance is defined as the harmony between all the many vocations one engages in on a daily basis and as the degree to which one's particular occupational patterns when considered in their context allow one to fulfill necessities for one's own well-being and standard of living.

1.4 Aim of the study

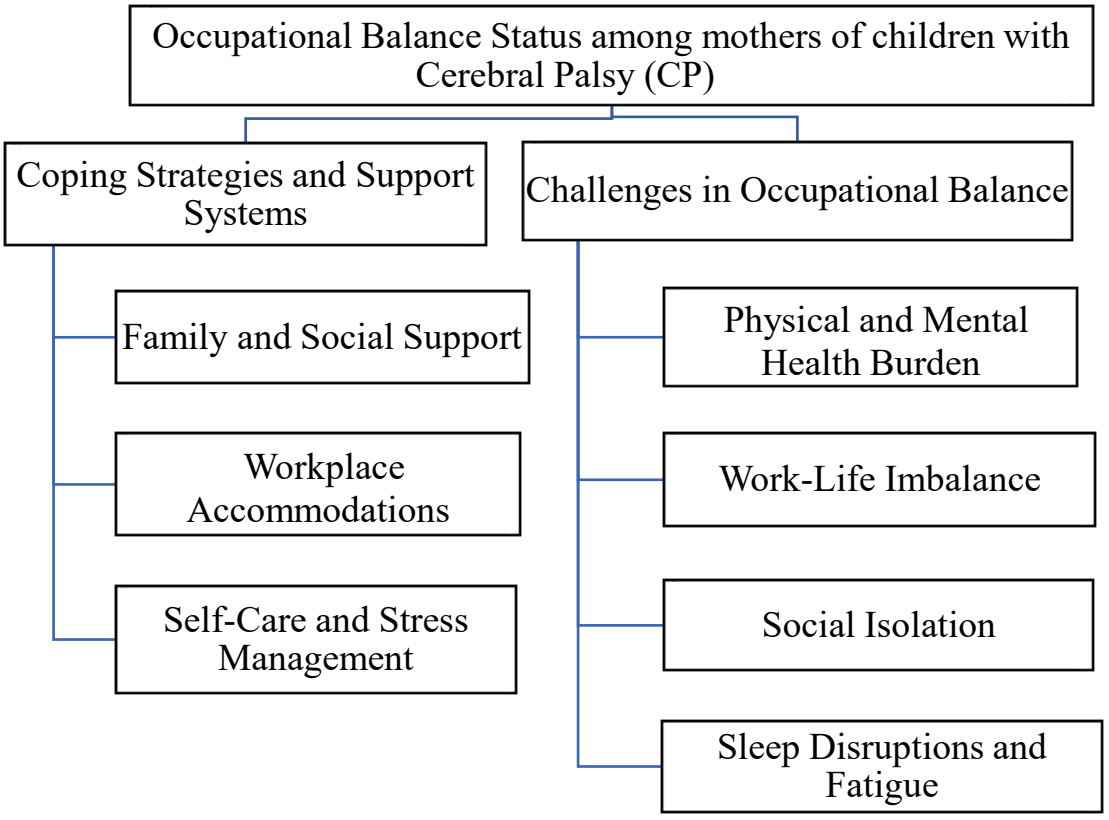
This study aims to examine the status of occupational balance among mothers of children with CP.

CHAPTER II: LITERATURE REVIEW

This chapter reviews several key areas addressing the research literature regarding understanding the life of a mother with a child with cerebral palsy. It provides a summary of CP, work-life balance, and the main obstacles mothers face. This review focuses on articles which were published in databases including Google Scholar, PubMed, ResearchGate.

Figure 2.1

Overview of Literature Findings



2.1 Challenges in Occupational Balance

2.1.1 Physical and Mental Health Burden

Caregiving duties like lifting and helping with mobility put physical strain on mothers of children with cerebral palsy. In addition, their rates of stress, anxiety, and depression are higher than those of mothers of children with typical development (Raina et al., 2005a). A cross-sectional study of 158 mothers of children with cerebral palsy showed that there was also a significant positive association between maternal depressive symptoms and experience of time pressure (SAWYER et al., 2011). Another cross-sectional study (N = 180) were mothers of children with CP recruited from clinical and school-based settings in Korea revealed that the sample's physical health-related quality of life (HRQOL) scores were higher than its mental ones. Higher physical HRQOL was significantly correlated with children's longer duration of disability and mothers' fewer chronic conditions. Higher mental HRQOL was substantially correlated with reduced parenting stress, more free time, HPB participation, and increased social support (Lee et al., 2019).

2.1.2 Work-Life Imbalance

Many mothers reduce their working hours or quit their jobs due to the difficulty of juggling work and caregiving, which puts a strain on their finances (Lilly, 2011). These difficulties are made worse by a lack of workplace flexibility (Shearn & Todd, 2000). A research showed that Child age, number of children, childcare availability, relationship status, perception of one's work role, and type and severity of the child's disability were all individual factors that affected work-family balance (WFB). Workplace policies, organizational culture, and supervisor support were organizational factors that affected WFB (Brown & Clark, 2017).

2.1.3 Social Isolation

Mothers often struggle to maintain friendships and engage in leisure activities (Kuhaneck et al., 2010). Hermeneutic phenomenology was used for fifteen parents participated in semi-structured interviews and the result showed that supporting parents who are raising children with complex needs requires new perspectives and a deeper comprehension of the experiences of parents. In addition to mitigating appropriate and supportive practices and services within and across medical, social, and family systems, an understanding of parents' experiences could lessen social exclusion and isolation (Currie & Szabo, 2020).

2.1.4 Sleep Disruptions and Fatigue

Sleep disturbances brought on by caring for a child with cerebral palsy frequently result in exhaustion and impede everyday functioning (Padden & James, 2017). Chronic partial sleep deprivation is the result of severe sleep disruptions experienced by caregivers of children with chronic illnesses, particularly those who are dependent on ventilators (Meltzer, 2006). A research with ninety children (50 girls and 40 boys) with spastic CP and their mothers and the purpose of the study is to evaluate fatigue in the mothers of children with cerebral palsy (CP), and to determine its associations with clinical parameters of CP, depression and quality of life. This research demonstrated mothers of CP children experience higher levels of fatigue than mothers of healthy children, and this is linked to depression and a decline in their quality of life, which includes physical, social, and emotional functioning. When creating a family-centered rehabilitation program for kids with cerebral palsy, this should be taken into account (Garip et al., 2017).

2.2 Coping Strategies and Support Systems

2.2.1 Family and Social Support

A research with 50 children with CP and their respective caregivers participated in this study. This study revealed that core and extended family members (i.e. husband, mother, siblings) and friends are the most common providers of support. The main source of social support for caregivers is their family, and they expressed satisfaction with the assistance they received (Pfeifer et al., 2014). Another Australian research showed that maternal wellbeing was not significantly correlated with the severity of the disability, but both separately and in combination, perceived stress and perceived social support were significant predictors of wellbeing. It was discovered that social support played a minor to moderate role in mitigating the effects of stress on these mothers (Skok et al., 2006).

2.2.2 Workplace Accommodations

Flexible work policies and financial assistance can support mothers in balancing employment and caregiving (Kyzar et al., 2012). A semi-structured interviews based on the Work Environment Impact Scale (WEIS-S) were done with nine mothers who had a child with a cognitive disability showed that mother highlighted physical and psychological health problems caused by their work situation. The mothers frequently worked overtime, had low occupational balance, and had ambiguous job descriptions. By concentrating on their occupational balance and the physical and psycho-social aspects of the workplace, occupational therapists could enhance the working environment (Ranehov & Håkansson, 2019). Another qualitative research revealed that there is a lack of organizational legislation that supports these mothers, a lack of workplace flexibility, and a lack of awareness among coworkers and superiors of the difficulties these mothers face. Mothers of children with intellectual disabilities should

receive support from their workplaces to prevent them from facing discrimination in the workplace (Al Oraini, 2023).

2.2.3 Self-Care and Stress Management

Engaging in self-care activities, counseling, and stress management programs can improve mothers' well-being (White et al., 2003). A qualitative study was conducted utilizing a grounded theory framework with twenty-four mothers showed that parent's life can be impacted by caring for a child with cerebral palsy in both positive and negative ways. When planning programs and providing services for children and their families, it is beneficial for both parents and kids to take parental concerns and QOL determinants into account (Davis et al., 2010). Another research showed that compared to parents of healthy children, caregivers of children with cerebral palsy typically experience higher levels of stress and depression and a lower quality of life (Pousada et al., 2013).

CHAPTER III: METHODS & MATERIALS

3.1 Study Question, Aim, Objectives

3.1.1: Study Question:

What is the status of Occupational Balance among Mothers of Children with CP?

3.1.2: Aim of the study:

This study aims to examine the status of occupational balance among mothers of children with CP.

3.1.3: Objectives

- To find out the sociodemographic characteristics of the mother's having CP children.
- To find out the level of occupational balance among the mothers of Children with CP.
- To find out the association between sociodemographic characteristics and the occupational balance status of the respondents.

3.2 Study Design

3.2.1 Study Method

A quantitative study design was chosen because the researcher described events or circumstances that affect people using quantitative methodologies. It was put into place in order to use surveys and closed-ended questions to gather data from the whole population. The results of this investigation are clearly visible due to the data and statistics employed. It was advantageous as the researcher collected data from a sizable and diverse sample of participants (Bloomfield & Fisher, 2019).

3.2.2 Study Approach

An observational study that examines data from a population or a representative subset at a particular point in time is called a cross-sectional descriptive study (Setia, 2016). Cross-sectional studies are distinguished by the gathering of pertinent data at a certain moment in time (Kesmodel, 2018). Researchers simultaneously evaluate the research participants' exposures and results in a cross-sectional study. It is defined as capturing a "snapshot" of a collection of people (Wang & Cheng, 2020a).

3.3 Study Setting and Period

3.3.1 Study Setting

The student researcher would be collected data from Pediatric department of Centre for the Rehabilitation of the Paralysed (CRP) and other special schools also.

3.3.2 Study Period

This study was conducted from 15 June 2025 to 15 December 2025.

3.4 Study Participants

3.4.1 Study Population

Mothers of diagnosed children with CP.

3.4.2 Sampling Techniques

Participants were chosen for the study using a purposive sampling technique based on some inclusion and exclusion criteria. Purposive sampling procedures steer clear of any sort of random sampling and work to ensure that types of cases of people who might be included are represented in the research study's final sample. Purposive sampling is used because it better matches the sample to the aim and objectives of the research. Purposive type of non-probability sampling technique would be use in this research. enhancing the study's rigour and the reliability of the data and findings (Campbell et

al., 2020). The more purposeful the sample is, the more inclusion and exclusion sample selection criteria there are, each with a specific goal in mind (Andrade, 2021).

3.4.3 Inclusion and Exclusion Criteria

Inclusion Criteria:

• Mothers of children with CP with all occupations are included such as housewife, private and government job holder, and Business.

Exclusion Criteria:

• Paid care-givers have been excluded from this study.

• Pregnant and mentally retarded mothers are excluded from this study

3.4.4 Sample Size

The student researcher was followed by the below method of calculation where the student researcher used 95% confidence interval and 5% sampling error for this study. Here, the confidence interval Z=1.96 and sampling error is (d)=0.05. Here, Prevalence of cerebral palsy (CP) is 3.4 per 1000 children in rural Bangladesh (Khandaker et al., 2019).

Sample size calculation:

$$n = \frac{z^2 \times p(1-p)}{d^2}$$

Here,

n = sample size;

p= percentage of sample population

z= level of confidence (95%);

d= confidence error (5%);

So;

$$n = \frac{z^2 \times p(1-p)}{d^2}$$

$$n= (1.96)^2 \times 0.34(1-0.34) / (0.05)^2$$

n= 344.822≈345

Calculating sample was 345. However, as the research was conducted as an academic purpose so there were time limitations. So, researcher had taken 157 samples for the study.

3.5 Ethical Consideration

3.5.1 Ethical Approval from IRB

The ethical clearance was given by the Institutional Review Board (IRB) through the Department of Occupational Therapy, Bangladesh Health Professions Institute(BHPI) with a brief description of the aim and objectives. The IRB number CRP BHPI/TRB/10/2023/756. Also, permission was taken from the Head of the Occupational Therapy department of BHPI in order to collect data from Centre for the Rehabilitation of the Paralysed (CRP)-Savar and Mirpur, and also from other organizations. All ethics were followed by the ethical principles, WMA created for medical research (World Medical Association et al., 2022)

3.5.2 Informed Consent

Written consent would be taken from the participants as they were interview in face to face. The student researcher ensured that all willing participants were informed about objectives, purpose and process of the research with fully understood on what they were agreeing with which includes possible risks and benefits through an information sheet. Researcher also took signed consent through a consent form to obtain written informed consent with a concise overview of the study and its methodologies, the possible benefits and issues of participation, duration, and the researcher's contact information confirming the willingness and informed involvement.

3.5.3 Unequal relationship

The student researcher did not have any unequal or dependent relationship that may influence their decision in participation or providing the data. Also the power relationship was strictly prevented as researcher collected data using standardized questionnaire therefore there was no scope for influencing any participants.

3.5.4 Risk and Beneficence

The participants of the study were not involved in any kind of risks because of the research process. The participants did not have benefit directly or financially from the researcher, this research result can contribute to benefit of the overall population and future practice regarding elderly individuals.

3.5.5 Confidentiality

In the research protocol, a robust plan was meticulously designed to ensure data protection. Researcher adhered to this strict protocol for data confidentiality and anonymity, protecting participants' identities and personal information as it is meticulously described in detail in the information sheet. Data was stored securely whether it was electronic and physical form, and only authorized personnel who were bound by confidentiality agreement, particularly researcher and supervisor had access to it.

3.6 Data Collection Process

3.6.1 Participant Recruitment Process

The participants were recruited through meeting the inclusion and exclusion criteria.

3.6.2 Data Collection Method

The data would be taken from face-to-face survey through a socio-demographic questionnaire, and the Occupational Balance Questionnaire (OBQ11). The student researcher would physically present and the OBQ11 questionnaire would administer by the student researcher. Face-to-face survey maintained the quality of data and decreased the potential biasness (Doyle, 2005).

3.6.3 Data Collection Instrument

3.6.3.1 Demographic Variables

The student researcher used a semi-structured questionnaire for socio-demographic and other relevant information. Different socio-demographic variables like- age, education level, occupation, marital status, monthly family income, number of children etc. were include in this questionnaire.

3.6.3.2 Measurement Variables of Data Collection Tool

There are eleven pieces on the instrument. A four-point ordinal scale is used to rate each issue, ranging from "strongly disagree" (scoring 0) to "strongly agree" (scored 3). Higher scores indicate greater occupational balance. Every item may be examined independently. A total score (from 0 to 33, where greater is preferable) may also be calculated by adding together the components (Wagman & Håkansson, 2014).

3.6.4 Field Test

As preliminary survey, the student researcher conducted field test with two people. For the field test, researcher used Bengali translated questionnaire through forward and backward translation of the data collection instruments. Through this field test enriched the researcher perspective of what is in a "real world" setting and the challenges and how to bring out the actual responses. The field test aided in refining survey questions. Some wording of the Bengali questionnaire was simplified without changing the actual

meaning for the sake of respondent's better understanding.

3.7 Data Management and Analysis

The document was presented in the Microsoft office word was used to make tables. The data collected from the participants will initially store in a excel database to be sure the data and time of the data collection. After that the researcher input data in the SPPS. Data were analyzed by Statistical Package for Social Science (SPSS) and descriptive analysis of the data. The presentation of data organized in SPSS version 2. The chi-square and fisher exact test were done to find out the association between occupational balance and sociodemographic characteristics.

3.8 Quality Control and Quality Assurance

All the data collection procedure was accurately done with the concern of the respective study supervisor. The student researcher tried to follow every instruction of the responsible supervisor. The investigator ensured that the methods of the study were fit for the purpose of the study. All participants received similar questions and environments so that the quality was assured for all participants. The response from the participants were authentic as the investigator did not impose his thoughts and bias. Nothing about the data was manipulated. The data was analysed using SPSS, therefore that's what determined the outcome. All participants received similar questions and environments so that the quality was assured for all participants. The response from the participants were authentic as the investigator did not impose his thoughts and bias.

CHAPTER IV: RESULTS

This chapter represents the study's results. The findings are displayed in tables, highlighting the socio-demographic information of the mothers.

4.1 Socio-demographic characteristics of the participants

Table 4.1
Sociodemographic information of the participants

Variable	Category	Frequency, (n = 157)	Percentage (%)
Mother's age	18-26	84	53.5
	27-45	73	46.5
Educational Qualification	Primary	44	28
	Secondary	92	58.6
	Higher secondary	21	13.4
Number of children	one	70	44.6
	two	60	32.2
	three and more	27	17.2
Children's age	1-3 years	109	60.4
	4-15 years	48	30.6
Family Status	Single	43	27.4
	Combined	114	72.6
Income status	5000-13000	69	43.9
	13001-50000	88	56.1
Marital status	Married	151	96.2
	Widow	6	3.8
Mother's Occupation	Housewife	136	86.6
	Business	13	8.3
	Private job holder	8	5.1
Diagnosed with Cerebral palsy	Before 6 months	91	58.0
	6-24 months	58	36.9
	After 2 years	8	5.1
Spending hours by caregiving	3-4 hours	67	42.7
	5-8 hours	90	57.3

This table shows that, among the 157 participants, about 53.5% (84) were between the ages of 18 and 26, around 46.5% (73) were between the ages of 27 and 45. The mothers who participated in this study came from a diverse range of backgrounds. Most of them were young adults, with just over half aged between 18 and 26 years.

Most respondents had completed secondary education 58.6% (92), while 28% (44) had primary education and 13.4% (21) had attained higher secondary qualifications. In terms of education, many had completed secondary school, while others had studied up to the primary or higher secondary levels.

In terms of family size, 44.6% (70) of the mothers had one child, 32.2% (60) had two children, and 17.2% (27) reported having three or more children.

Nearly half of the mothers were raising only one child, although a considerable number were caring for two or more children. The age distribution of the children with cerebral palsy showed that 60.4% (109) were between 1 and 3 years old, whereas 30.6% (48) were aged 4–15 years. Most of the children with cerebral palsy were very young, with the majority between 1 and 3 years old.

Regarding family structure, the majority of respondents 72.6% (114) lived in combined families, and over half 56.1% (88) belonged to households with a monthly income ranging from 13,001 to 50,000 BDT. Therefore, the participants mostly lived in combined family settings, and more than half belonged to households earning between 13,001 and 50,000 BDT per month. A substantial proportion of the mothers were married 96.2% (151), with only 3.8% (6) identified as widowed. Almost all of the mothers were married at the time of data collection.

Occupationally, most respondents were housewives 86.6% (136), followed by those engaged in business 8.3% (13) and private employment 5.1% (8). The vast majority identified themselves as housewives, while a smaller portion were engaged in business or private jobs.

Clinical history revealed that a large proportion of the children had been diagnosed with cerebral palsy before six months of age 58% (91), while 36.9% (58) received the diagnosis between 6 and 24 months, and 5.1% (8) after two years.

Many of the children had received their CP diagnosis early in life—most before they were six months old. Caregiving demands were considerable, with 57.3% (90) of the mothers spending 5–8 hours per day providing care, whereas 42.7% (67) spent 3–4 hours daily. Caring for these children required a significant amount of time, and more than half of the mothers reported spending five to eight hours each day on caregiving tasks.

4.2 Results of individual items of the OBQ11 among the participants

Table 4.2
Results of individual items of the OBQ11 among the participants

Item	Strongly Disagree (0)	Disagree (1)	Agree (2)	Strongly Agree (3)
1. In a typical week, I feel are just enough things to do.	10.2% (16)	52.9%(83)	33.1%(52)	3.8%(6)
2. There is a balance between things I do for myself and things I do for others.	8.9% (14)	53.5%(84)	33.8%(53)	3.8%(6)
3. I make sure I do things I really want to do.	10.8% (17)	54.1%(85)	32.5% (51)	2.5% (4)
4. I balance the different kinds of activities in my life, e.g., work, household chores, leisure, rest, and sleep.	36.9%(58)	38.9%(61)	22.9% (36)	1.3% (2)
5. I have enough time to do the things that I must do.	11.5% (18)	53.5%(84)	31.8% (50)	3.2% (5)
6. I have a balance among my physical, social, intellectual and restful activities.	14.0%(22)	52.2%(82)	30.6% (48)	3.2% (5)
7. I am satisfied with the amount of time that I spend on my various daily activities.	5.7% (9)	58.6%(92)	33.1% (52)	2.5% (4)
8. In a typical week, I am satisfied with the number of activities that I take part in.	8.3% (13)	60.5%(95)	28.7% (45)	2.5% (4)
9. There is enough variation between things that I must do and things that I want to do.	12.7%(20)	56.1%(88)	29.9% (47)	1.3%(2)
10. There is a balance between activities that give me energy versus those that drain my energy.	22.9% (36)	51.6%(81)	23.6% (37)	1.9% (3)

11. I am satisfied with the amount of time That I spend relaxing, recovering, and sleeping.	28.0%(44)	45.2%(71)	25.5% (40)	1.3%(2)

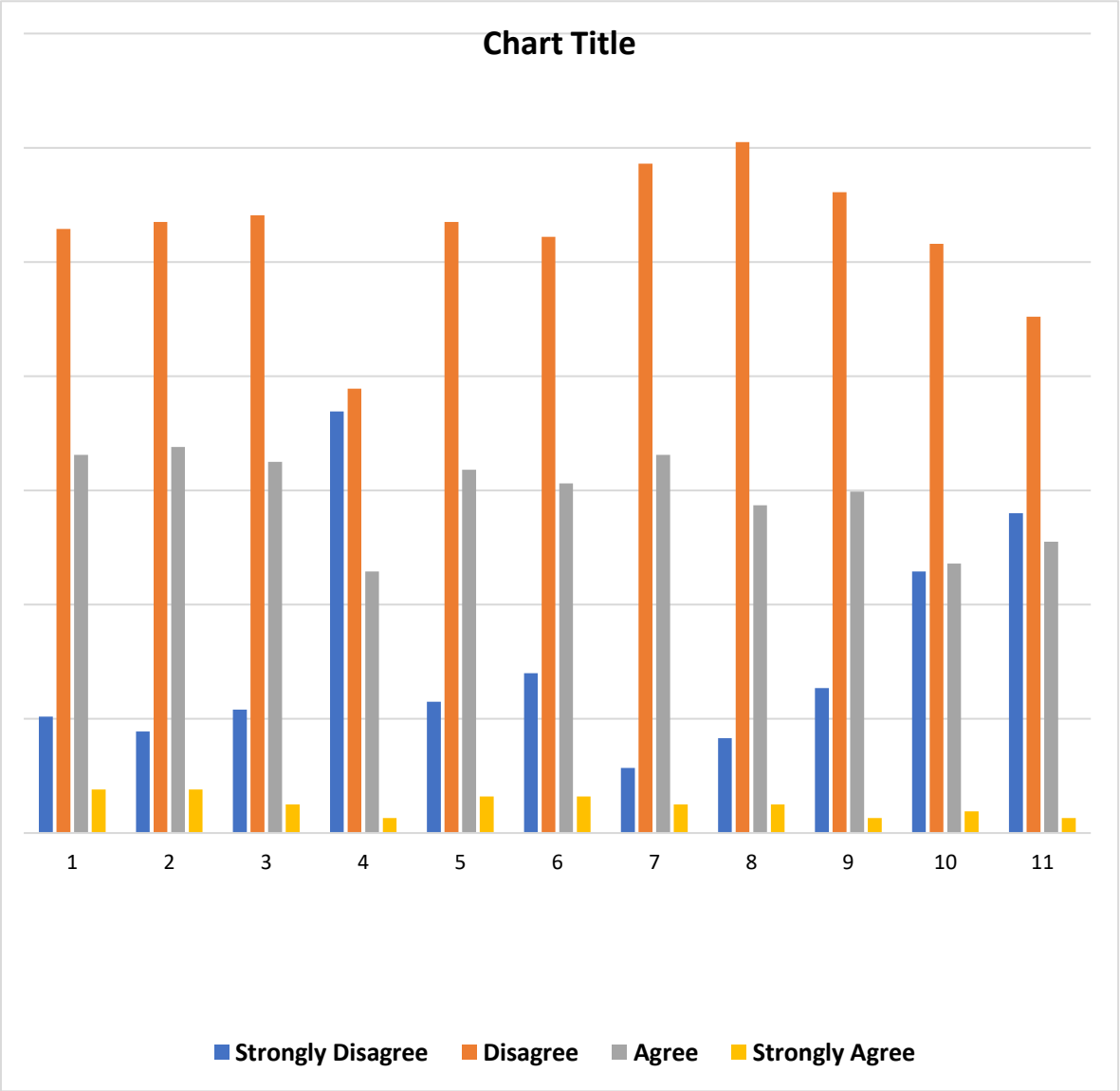
Scale 0-3; Strongly disagree 0; disagree 1; Agree 2; Strongly agree 3
Median = 10.0; (IQR = 8.00-19.50)

The dataset's central tendency was shown by the median score of 16.5 obtained from the occupational balance questionnaire (OBQ-11). The middle 50% of the scores appear to be within the interquartile range, which extends from the first quartile (Q1) at 8.00 to the third quartile (Q3) at 19.50. With a minimum of 0 and a maximum of 33 points, the overall score variation gave insight into the wide range of responses among the population in this study. The results of the study offer insightful information on occupational balance among mothers regarding various items. The purpose of this survey was to assess participants' perceptions of balance in their daily lives how well they manage their time, energy, and activities between personal needs, work, and rest. The questionnaire used a four-point Likert scale (0 = Strongly Disagree; 1 = Disagree; 2 = Agree; 3 = Strongly Agree). The findings revealed that the median score was 10.0, with an Interquartile Range (IQR) of 8.00–19.50, suggesting that most participants experience a moderate level of life balance, though not complete satisfaction.

Results showed that about, Among the 157 participants, 52.9%(83) of participants disagreed that they have just enough things to do in a typical week, and 53.5%(84) disagreed that they maintain a balance between doing things for themselves and for others. Similarly, 54.1%(85) indicated they do not make enough time for activities they truly want to do. When it comes to balancing different life domains work, household chores, leisure, and rest a large portion 36.9%(58) strongly disagree and 38.9%(61) disagree, reported difficulty maintaining this balance. More than half 53.5%(83) felt they do not have enough time for tasks they must complete, and

52.2%(82) felt they could not maintain a balance among physical, social, intellectual, and restful activities. In terms of satisfaction with how they spend their time on daily activities, 58.6%(92) expressed dissatisfaction, while only about one-third felt satisfied. Likewise, 60.5%(95) of respondents were not satisfied with the number of activities they participate in each week. More than half 56.1%(88) reported that there is not enough variation between things they have to do and things they want to do, and 51.6%(81) struggled to balance activities that give versus drain their energy. Regarding rest and recovery, a relatively smaller portion 25.5%(40) said they were satisfied, while most expressed at least some dissatisfaction. Overall, the findings indicate that participants experience a moderate-to-low sense of life balance. Many respondents expressed dissatisfaction in areas such as time management, activity diversity, and rest. The results highlight the need for interventions that encourage better time management, opportunities for meaningful leisure, adequate rest, and greater awareness of self-care and occupational balance in daily life.

4.3 OBQ11 overall ratings among the participants



The chart presents responses to questions (1–11) using a Likert scale with four categories: Strongly Disagree, disagree, agree, strongly Agree. Each category shows percentage values for questions 1 to 11.“Disagree” has the highest percentages overall. Values are generally between 38.9% and 60.5%. The highest value appears in Question 8 (about 60.5%).“Agree” is the second most common response Percentages range roughly from 22.9% to 33.8%. This shows a moderate level of agreement, but less than disagreement. “Strongly Agree” is very low. Values range from 1.3% to 3.8%.

4.4 Association between sociodemographic characteristics and Occupational balance status of the participants

Table 4.3

Association between sociodemographic characteristics and Occupational balance status of the participants

Variable	Category	Low Occupational Balance, % ;(n)	High Occupational Balance, % ;(n)	X_2 / Fisher's Exact Test	*P* value
Mother's age	18-26	35.0% (55)	18.5%(29)	0.001[a]	0.971
	27-45	30.6%(48)	15.9%(25)		
Educational qualification	Primary	19.7%(31)	8.3%(13)	.737[a]	0.622
	Secondary	36.9%(58)	21.7%(34)		
	Higher secondary	8.9%(14)	4.5%(7)		
Number of children	one	28.0%(44)	16.4%(26)	.446[a]	0.800
	two	26.1%(41)	12.1%(19)		
	three and more	11.5%(18)	5.7%(9)		
Children's age	1-3 years	45.2%(71)	24.2%(38)	.035[a]	0.853
	4-15 years	20.4%(32)	10.2%(16)		
Family Status	Single	15.3%(24)	12.1%(19)	2.516[a]	0.113
	Combined	50.3%(79)	12.3%(35)		
Income status	5000-13000	28.0%(44)	15.9%(25)	.184[a]	0.736
	13001-50000	37.6%(59)	18.5%(29)		
Marital status	Married	62.1%(99)	33.1%(52)	.003[a]	1.00
	Widow	2.5%(4)	1.3%(2)		
Mother's Occupation	Housewife	56.7%(89)	29.9%(47)	1.603[a]	0.486
	Business	6.4%(10)	1.9%(3)		
	Private job holder	2.5%(4)	2.5%(4)		
Diagnosed with CP	Before 6 months	41.4%(65)	16.6%(26)	3.351[a]	0.173
	6-24 months	21.0%(33)	15.9%(25)		
	After 2 years	3.2%(5)	1.9%(3)		
Spending hours by caregiving	3-4 hours	29.3%(46)	13.4%(21)	.482[a]	0.487
	5-8 hours	36.3%(57)	21.0%(33)		

[a]Chi-square; $p < 0.05$

A chi-square and fisher exact test were used to assess whether the socio-demographic characteristics were related to occupational balance status of the participants. In table 4, shows the distribution of low and high occupational balance among mothers according to their sociodemographic characteristics. The results indicate that there was no statistically significant association between occupational balance and most sociodemographic variables, as all p-values were greater than 0.05. Mother's age did not significantly influence their occupational balance ($p = 0.971$). Similarly, educational qualification ($p = 0.622$), number of children ($p = 0.800$), children's age ($p = 0.853$), family status ($p = 0.113$), income status ($p = 0.736$), marital status ($p = 1.00$), mother's occupation ($p = 0.486$), time since child's cerebral palsy (CP) diagnosis ($p = 0.173$), and hours spent caregiving ($p = 0.487$) were also not significantly associated with occupational balance. Although not statistically significant, the descriptive results showed that mothers aged 18–26 years (35.0%) and those with secondary education (36.9%) reported a higher proportion of low occupational balance. Most mothers who were housewives (56.7%) also demonstrated a low level of occupational balance compared to those employed in business or private jobs.

CHAPTER V: DISCUSSION

The study aimed to examine the status of occupational balance among mothers of children with CP. The discussion is based on 157 mothers who had children with CP.

The present cross-sectional study investigated the occupational balance status among mothers of children with cerebral palsy (CP) and examined whether selected sociodemographic characteristics were associated with occupational balance. Using the Occupational Balance Questionnaire (OBQ-11), the overall pattern of findings suggests that many mothers experience challenges in maintaining a satisfactory balance between caregiving responsibilities, household duties, personal self-care, rest, and social or leisure activities. This aligns with the broader literature indicating that parenting a child with CP places substantial demands on mothers' time, energy, and emotional resources and often disrupts their everyday routines and quality of life (Raina et al., 2005).

Combined or extended family structures were common, which theoretically could provide additional practical or emotional support. However, the findings suggest that, despite living in larger households, mothers still carry the main burden of caregiving. Similar observations have been reported in South Asian and other low- and middle-income country (LMIC) contexts, where gender norms and expectations often place the bulk of childcare and domestic work on mothers, even when other adult family members are present (Raina et al., 2005).

With respect to occupational balance, mothers in this study generally reported low to moderate satisfaction with the amount, variety, and distribution of their daily occupations. Many participants found it difficult to achieve a balance between activities done for others (childcare, housework) and those done for themselves (self-care,

leisure, or social participation), as well as between energy-draining and energy-restoring activities. These findings resonate with the conceptualisation of occupational balance as the subjective experience of having the "right" amount and variation of occupations over time (Wagman et al., 2012).

Research from general adult populations in Sweden and elsewhere has shown that occupational balance is positively associated with self-rated health and life satisfaction, whereas imbalance is related to stress, poorer health, and reduced well-being (Wagman & Håkansson, 2014).

The use of the OBQ-11 in this study is consistent with current occupational therapy research that employs this instrument to operationalise occupational balance. The OBQ and its revised 11-item version have demonstrated acceptable reliability and validity in community and clinical populations, including evidence from Rasch analyses and studies in adults with chronic diseases (Wagman & Håkansson, 2014).

By applying this tool among mothers of children with CP, the present study contributes to the growing body of evidence that occupational balance is a useful and clinically meaningful construct in family and caregiving contexts as well. Although the OBQ-11 was originally developed in Sweden, its application here suggests that the fundamental idea of balance between different types of occupations is relevant even in non-Western, collectivist settings such as Bangladesh. An important aspect of occupational balance highlighted in this study concerns time use for rest, sleep, and recovery. Many mothers indicated dissatisfaction with the amount of time available for relaxation and reported difficulties balancing mandatory tasks with activities they found enjoyable or restorative. This mirrors previous research showing that caregivers of children with chronic conditions commonly experience disturbed sleep, fatigue, and decreased daytime functioning.

Such disruptions are not trivial; poor sleep quality has been associated with increased depressive symptoms, reduced coping capacity, and lower quality of life among caregivers (Meltzer, 2006).

In the present sample, mothers' reports of insufficient rest and imbalance between energy-giving and energy-draining occupations provide a plausible mechanism linking caregiving demands to poorer health and well-being, even though these outcomes were not directly measured. One reason for this could be that mother sacrifice their prior hobbies and activities out of a lack of desire to care for their children and their jobs, which results in a low occupational balance.

The broader literature on caregivers of children with CP consistently demonstrates high levels of stress, anxiety, depression, and caregiver burden. Systematic reviews and recent cross-sectional studies have shown that caring for a child with CP is associated with impaired quality of life, particularly in physical, emotional, and social domains (Raina et al., 2005).

At the same time, other research has found associations between caregiver outcomes and factors such as lower income, lower education, or limited social support (Raina et al., 2005).

For mothers of children with CP, this may require intentional support to reorganise daily routines, redistribute caregiving tasks within the family, and create protected time for rest, social participation, and personally meaningful activities. Interventions could include training on time management and energy conservation, environmental modifications to simplify caregiving tasks, and structured involvement of other family members in daily care routines. Furthermore, given the strong links in the literature between caregiver burden, mental health, and child outcome (Raina et al., 2005). Collaboration between occupational therapists, physiotherapists, psychologists,

and social workers is essential to provide holistic support to families.

These results suggest that programmes supporting families of children with CP should move beyond purely child-focused interventions to include strategies that promote mothers' participation in paid work or education where desired, provide financial assistance, and improve access to respite and psychosocial support.

Finally, this study has several implications for future research. Longitudinal designs would allow investigation of how mothers' occupational balance changes over time as the child grows and as rehabilitation and support services evolve. Including more detailed measures of child functional level and behavioural problems could also clarify how child characteristics interact with occupational balance. Mixed-methods approaches, combining OBQ-11 scores with qualitative interviews, could deepen understanding of how mothers subjectively experience occupational balance and what they identify as key barriers and facilitators in their everyday lives. Such research would respond to the call in occupational balance literature for more studies in non-Western contexts and among populations with significant caregiving (Wagman & Håkansson, 2019).

CHAPTER VI: CONCLUSION

6.1 Strength and Limitation

6.1.1 Strength

• A cross-sectional study design was selected due to its affordability and flexibility in meeting the requirements of the participants.

• On the other hand, a cross-sectional study is useful for establishing preliminary evidence as it gives some indications of the associations that can be used in the planning of further studies (Wang & Cheng, 2020).

• The study's validity is increased when a valid and reliable questionnaire like the OBQ11 used (Wagman & Håkansson, 2019).

6.1.2 Limitation

• However, a limitation with OBQ11 is that it doesn't have a clear cut-off number, which means that participants' perception of occupational balance might be over or under-estimated.

• Additionally, the short duration of the study might have restricted the scope of data collection, potentially affecting the comprehensiveness of the results.

• Another limitation of the study is that only mothers were included in the study where father was excluded.

• However, it might be challenging to draw conclusions about causality from this kind of study since the exposure and outcome variables are evaluated at the same time.

6.2 Practice Implication

6.2.1 Recommendation for Future Practice

In pediatric OT services, treating OB in PCWD is a procedure that is often neglected. In this study, the majority of the participants had low occupational balance. Since occupational imbalance has been linked to an increased risk of stress-related mental health problems (Håkansson & Ahlborg, 2018).

Occupational therapy settings should be prioritized for maintaining occupational balance for mothers of young children.

Evidence suggests a connection between health and well-being and both the patterns of everyday activities and occupational balance (Håkansson et al., 2009).

In terms of practical implication, occupational therapists may recommend that their clients should utilize the OBQ11 in conjunction with time-use diaries to establish practical and attainable goals.

6.2.2 Research Recommendation

Some research recommendations are as follows:

• Occupational Balance in parents of children with CP: Potential difference between father and mother.

• Explore how the presence of siblings, especially neurotypical siblings, influences the occupational balance of mothers of children with CP.

• Examine the role of social support networks in maintaining occupational balance for mothers of children with CP. Investigate how family, friends, and community support contribute to or hinder their ability to engage in meaningful activities.

6.3 Conclusion

This cross-sectional study explored the occupational balance status of 157 mothers of children with cerebral palsy (CP) attending the paediatric department of CRP and selected special schools in Bangladesh, using the Occupational Balance Questionnaire (OBQ-11).

Overall, the findings indicate that most mothers experience a high-to-low level of occupational balance, with many reporting dissatisfaction regarding time for meaningful activities, balance between doing for self versus others, and adequate rest and recovery.

These results are consistent with the conceptualisation of occupational balance as a subjective perception of having the right amount and variety of occupations in daily life (Wagman et al., 2012; Wagman & Håkansson, 2019) and support earlier evidence that caregiving demands for a child with CP can negatively affect parental health, quality of life and participation in personally meaningful activities (Raina et al., 2005). The study further demonstrated that no sociodemographic variable showed a statistically significant association with occupational balance status, including mothers' age, education, number of children, income, marital status, occupation, child's age, time since diagnosis, and daily caregiving hours (all $p > 0.05$).

This suggests that occupational imbalance is a widespread experience across different background groups, rather than being limited to mothers with specific sociodemographic characteristics. This pattern echoes previous work showing that stress, caregiver burden and reduced quality of life are commonly reported among parents of children with CP irrespective of socioeconomic status or disability severity(Raina et al., 2005).

In addition, prior research on time use has shown that mothers of children with CP devote more time to child-related tasks and less to leisure and self-car, which may help explain the moderate-to-low occupational balance observed in this study (Rassafiani et al., 2012).

These findings highlight that caring for a child with CP has a substantial impact on how mothers distribute their time, energy and roles, often leading to constrained opportunities for rest, leisure and personally meaningful occupations. Addressing occupational balance should therefore be considered a core component of family-centred and occupation-based services for children with CP. Occupational therapists are well placed to assess occupational balance using tools such as the OBQ-11 and to design interventions that support time management, role negotiation, self-care, social support and workplace flexibility (Wagman & Håkansson, 2019).

This study provides important baseline evidence that mothers of children with CP in Bangladesh face notable challenges in maintaining occupational balance. Integrating caregiver-focused goals and occupational balance–oriented strategies into paediatric rehabilitation, community-based rehabilitation and policy initiatives is essential to support the long-term health, well-being and sustainable caregiving capacity of these mothers, alongside the functional outcomes of their children. Future research with larger and more diverse samples, inclusion of fathers and other caregivers, and longitudinal or mixed-methods designs is recommended to further elucidate determinants of occupational balance and to evaluate the effectiveness of targeted interventions in this population.

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Wagman, P., & Håkansson, C. (2019). Occupational balance from the interpersonal perspective: A scoping review. *Journal of occupational science*, *26*(4), 537–545. https://doi.org/10.1080/14427591.2018.1512007

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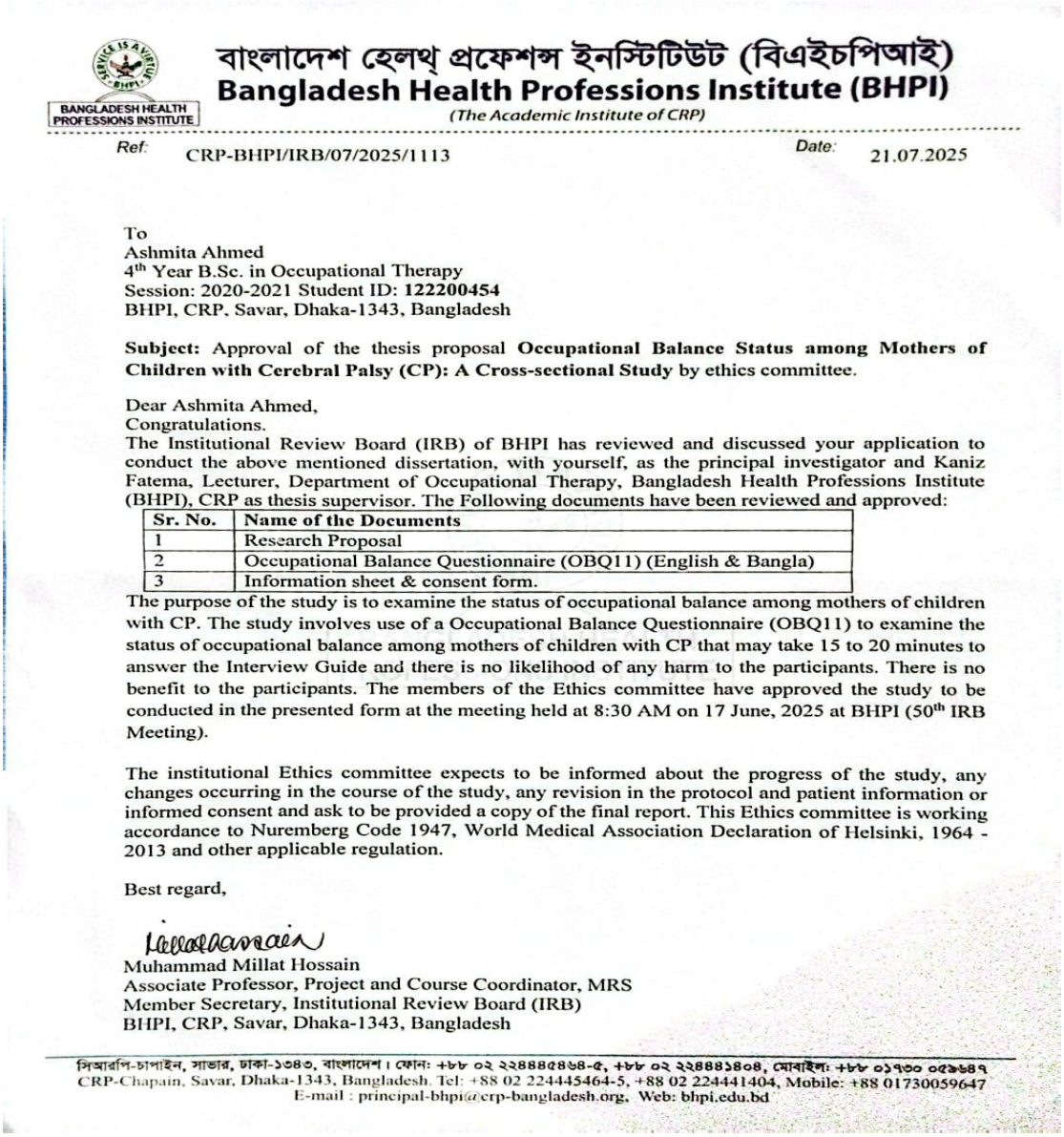
APPENDICES

Appendix A: Approval / Permission Letter

IRB ApprovalLetter



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

BANGLADESH HEALTH PROFESSIONS INSTITUTE

Ref: CRP-BHPI/IRB/07/2025/1113 Date: 21.07.2025

To
Ashmita Ahmed
4th Year B.Sc. in Occupational Therapy
Session: 2020-2021 Student ID: **122200454**
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal **Occupational Balance Status among Mothers of Children with Cerebral Palsy (CP): A Cross-sectional Study** by ethics committee.

Dear Ashmita Ahmed,
Congratulations.
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above mentioned dissertation, with yourself, as the principal investigator and Kaniz Fatema, Lecturer, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP as thesis supervisor. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Research Proposal
2	Occupational Balance Questionnaire (OBQ11) (English & Bangla)
3	Information sheet & consent form.

The purpose of the study is to examine the status of occupational balance among mothers of children with CP. The study involves use of a Occupational Balance Questionnaire (OBQ11) to examine the status of occupational balance among mothers of children with CP that may take 15 to 20 minutes to answer the Interview Guide and there is no likelihood of any harm to the participants. There is no benefit to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 8:30 AM on 17 June, 2025 at BHPI (50th IRB Meeting).

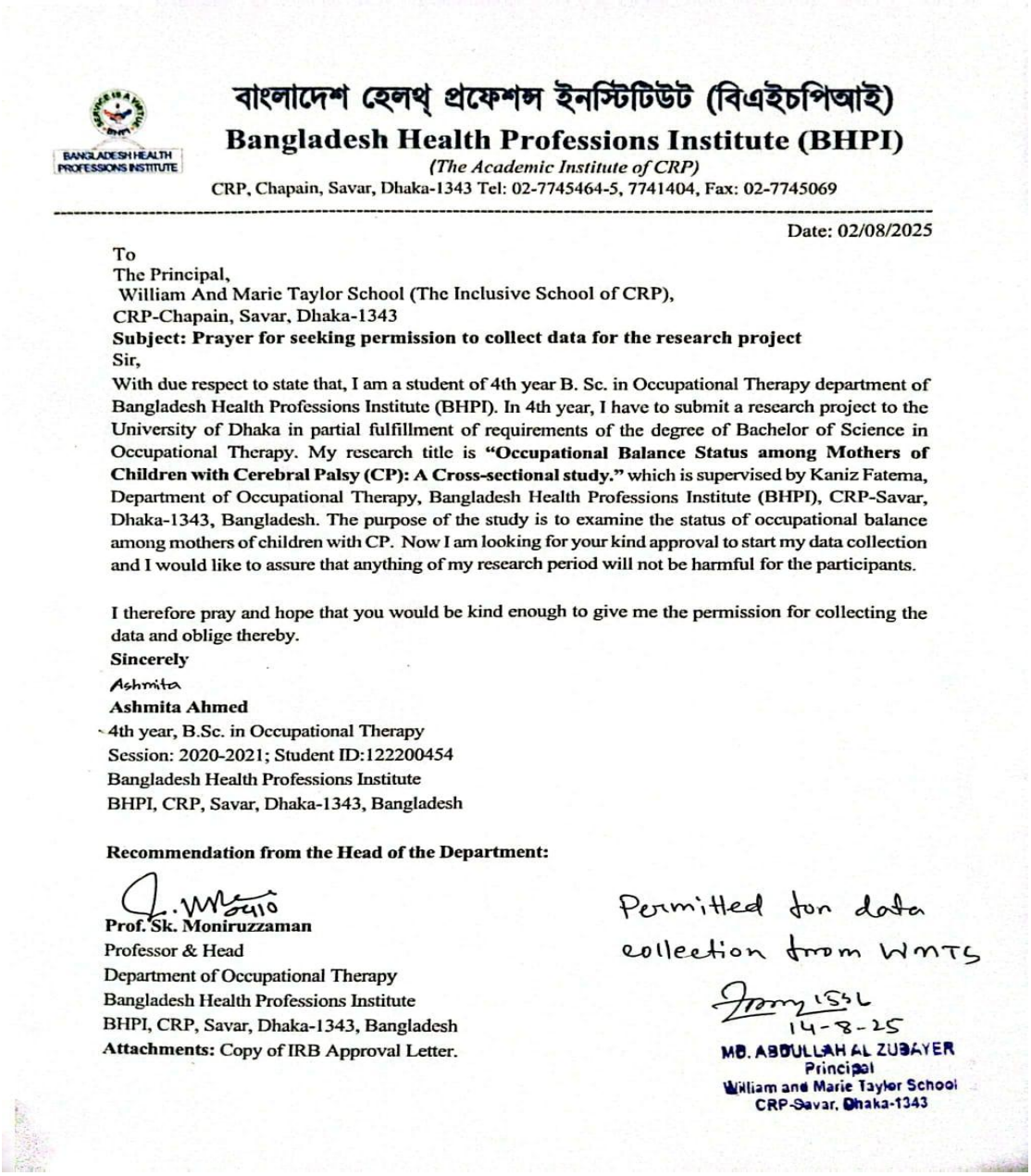
The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance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

Best regard,

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

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

Permission Letter [William And Marie Taylor School (The Inclusive School of CRP)]



বাংলাদেশ হেলথ্ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

Bangladesh Health Professions Institute (BHPI)

(The Academic Institute of CRP)

CRP, Chapain, Savar, Dhaka-1343 Tel: 02-7745464-5, 7741404, Fax: 02-7745069

Date: 02/08/2025

To
The Principal,
William And Marie Taylor School (The Inclusive School of CRP),
CRP-Chapain, Savar, Dhaka-1343

Subject: Prayer for seeking permission to collect data for the research project

Sir,

With due respect to state that, I am a student of 4th year B. Sc. in Occupational Therapy department of Bangladesh Health Professions Institute (BHPI). In 4th year, I have to submit a research project to the University of Dhaka in partial fulfillment of requirements of the degree of Bachelor of Science in Occupational Therapy. My research title is **"Occupational Balance Status among Mothers of Children with Cerebral Palsy (CP): A Cross-sectional study."** which is supervised by Kaniz Fatema, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343, Bangladesh. The purpose of the study is to examine the status of occupational balance among mothers of children with CP. Now I am looking for your kind approval to start my data collection and I would like to assure that anything of my research period will not be harmful for the participants.

I therefore pray and hope that you would be kind enough to give me the permission for collecting the data and oblige thereby.

Sincerely

Ashmita

Ashmita Ahmed
4th year, B.Sc. in Occupational Therapy
Session: 2020-2021; Student ID:122200454
Bangladesh Health Professions Institute
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Recommendation from the Head of the Department:

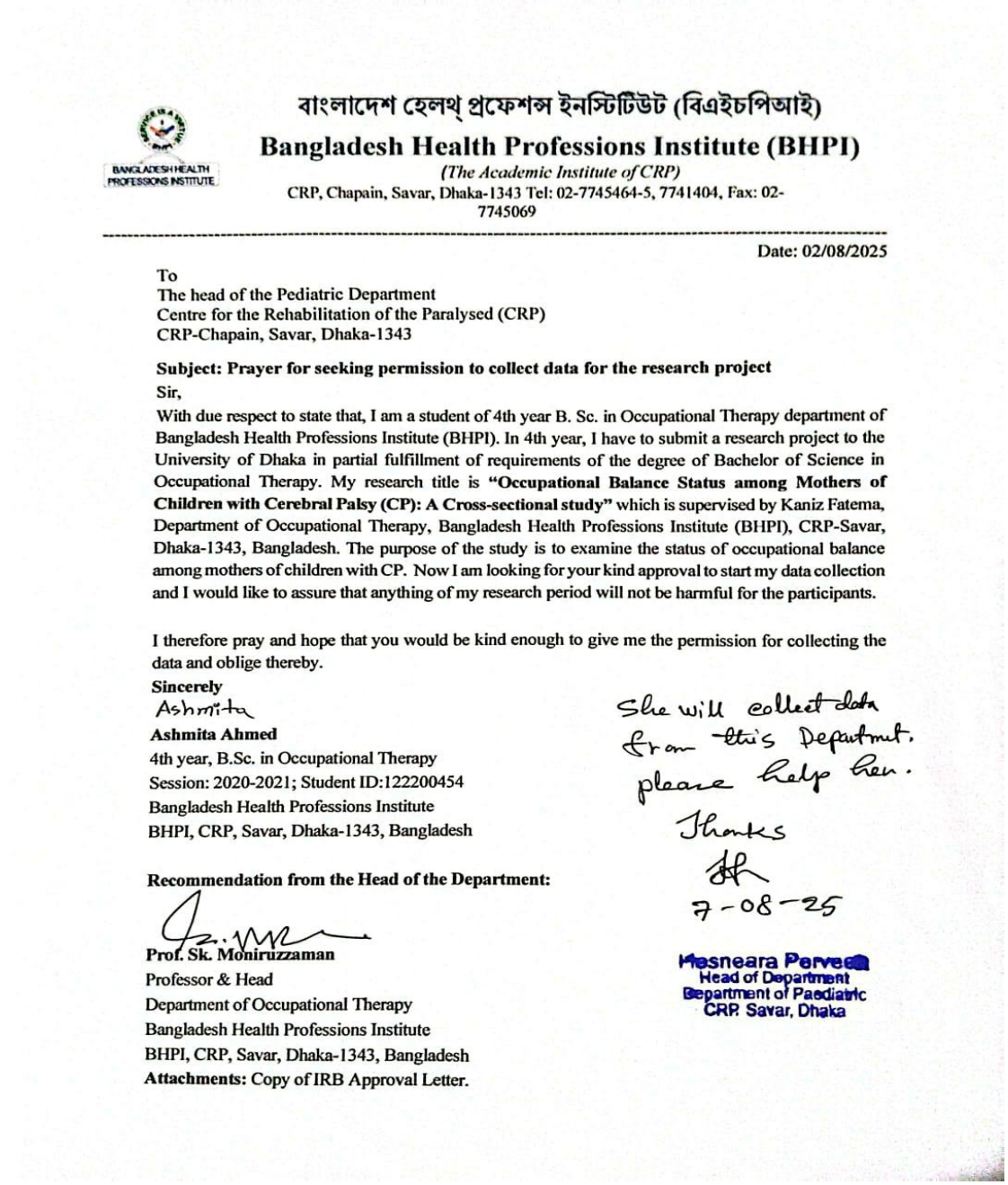
Prof. Sk. Moniruzzaman
Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute
BHPI, CRP, Savar, Dhaka-1343, Bangladesh
Attachments: Copy of IRB Approval Letter.

Permitted for data collection from WMTS

14-8-25

MD. ABDULLAH AL ZUBAYER
Principal
William and Marie Taylor School
CRP-Savar, Dhaka-1343

Permission Letter [Centre for the Rehabilitation of the Paralysed (CRP)]



বাংলাদেশ হেলথ্ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

Bangladesh Health Professions Institute (BHPI)

(The Academic Institute of CRP)

CRP, Chapain, Savar, Dhaka-1343 Tel: 02-7745464-5, 7741404, Fax: 02-7745069

Date: 02/08/2025

To
The head of the Pediatric Department
Centre for the Rehabilitation of the Paralysed (CRP)
CRP-Chapain, Savar, Dhaka-1343

Subject: Prayer for seeking permission to collect data for the research project

Sir,

With due respect to state that, I am a student of 4th year B. Sc. in Occupational Therapy department of Bangladesh Health Professions Institute (BHPI). In 4th year, I have to submit a research project to the University of Dhaka in partial fulfillment of requirements of the degree of Bachelor of Science in Occupational Therapy. My research title is **"Occupational Balance Status among Mothers of Children with Cerebral Palsy (CP): A Cross-sectional study"** which is supervised by Kaniz Fatema, Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI), CRP-Savar, Dhaka-1343, Bangladesh. The purpose of the study is to examine the status of occupational balance among mothers of children with CP. Now I am looking for your kind approval to start my data collection and I would like to assure that anything of my research period will not be harmful for the participants.

I therefore pray and hope that you would be kind enough to give me the permission for collecting the data and oblige thereby.

Sincerely
Ashmita
Ashmita Ahmed
4th year, B.Sc. in Occupational Therapy
Session: 2020-2021; Student ID:122200454
Bangladesh Health Professions Institute
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

She will collect data from this Department. please help her.
Thanks
7-08-25
Mesneara Pervee
Head of Department
Department of Paediatric
CRP, Savar, Dhaka

Recommendation from the Head of the Department:

Prof. Sk. Moniruzzaman
Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute
BHPI, CRP, Savar, Dhaka-1343, Bangladesh
Attachments: Copy of IRB Approval Letter.

Appendix Ba: Information Sheet, Consent Form, Withdrawal Form (English)

Information Sheet

Information Sheet
Research Title: Occupational Balance Status among mothers of children with cerebral palsy (CP): A cross-sectional study.

Name of researcher: Ashmita Ahmed, 4th year, B.Sc. in Occupational Therapy, Roll:29

Supervisor:

Co-supervisor:

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

Background and Aim of this research:

I am Ashmita Ahmed, studying B.Sc. in Occupational Therapy in Bangladesh Health Professions Institute (BHPI) which is under the Medicine faculty of Dhaka University, an academic institute of Centre for The Rehabilitation of Paralysed. As a part of the B.Sc. course curriculum, I am going to conduct a research activity. The topic of the research is Occupational balance status among mothers of children with cerebral palsy (CP): A cross-sectional study. The aim of this study is to examine the status of occupational balance among mothers of children with CP.

What to do to participate in the study?

As I will find out the occupational balance status among the mothers of children with CP, I will use the Occupational Balance Questionnaire (OBQ11) Scale to find out the occupational balance among the mothers of children with CP and a semi-structured

sociodemographic questionnaire to find out the association between socio-demographic characteristics and the occupational balance status of the respondents. All the questions included in these scales of participants should be answered. Time will be taken for 20-25 minutes.

Why are you invited to participate?

As my research topic is Occupational balance status among mothers of children with CP, I will invite all the participants according inclusion and exclusion criteria.

Inclusion Criteria:

- Mothers of diagnosed children with CP of any age.
- Mothers of children with CP with all occupations are included such as housewife, private and government job holder, and Business.

Exclusion Criteria:

- Other family members, paid care-givers have been excluded from this study.
- Pregnant and mentally retarded mothers are excluded from this study

Will you have to participate?

Participation in the research is completely voluntary. Before participation consent should be taken from participation. After the participants participate, they will be accounted for answering all the questions. Participants will be given a consent withdrawal paper so that they can cancel their participation according to their wishes within two weeks after conducting the survey.

What are the possible risks and opportunities of participation?

There is no direct opportunity for this participation which means participation will not get any financial opportunity. Apart from this, there is no negative question in the two scales. Therefore, there is no physical or mental risk to the participants. If any problem is seen after participation, then a doctor will advise. Furthermore, by participating in

this study I will know the occupational balance status among mothers of children with CP.

Will the participation be confidential?

The researcher will strictly maintain the secrecy of the research. Name of the participants will be cited only in the consent paper. To maintain the secrecy of the participants code will be maintained in the question paper of participants. Only the related researcher and supervisor will be able to know about it directly. Information paper will be locked in a drawer and the personal laptop of the researcher.

Promotional results

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

If you have any questions you can contact through the given address Researcher:

Ashmita Ahmed.

Bangladesh Health Professions Institute (BHPI)

B.Sc. in Occupational Therapy

Session: 2020-21, Roll: 29

Savar, Dhaka

E-mail: ashmitaahmed09@gmail.com

Contact number:01917121199

Consent Form (English)

Consent Form

This research is a part of Occupational Therapy course and the name of the researcher is Ashmita Ahmed. I am a student of 4th year B.Sc. in Occupational Therapy in Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of Paralysed (CRP) which is affiliated to University of Dhaka. The study is entitled **"**Occupational Balance Status among mothers of children with cerebral palsy (CP): A cross-sectional study."

In this study, I am …… a participant and I have been clearly informed about the purpose and aim of the study. I have the right to refuse in taking part any time at any stage of the study. I will not be bound to answer to anybody. There will be no impact on my personal life at present and future.

I am also confirmed that all the information collected from the interview will be only used for study purpose and would be kept safety and confidentiality will be maintained. My name and address will not be published anywhere. Only the researcher and supervisor will be eligible to access the information to publish the research result. I have been informed about the above-mentioned and I am willing to participate in their study.

…….. Signature / Fingerprint of the participant	……...…… ….. Date

…… Signature of the Researcher	……. Date

Withdrawal Form (English)

Withdrawal Form

Research Title: “Occupational Balance Status among mothers of children with cerebral palsy (CP): A cross-sectional study.”

Researcher’s Name: Ashmita Ahmed, 4th year, Occupational Therapy.

I, ...(Participant’s Name) wish to withdraw from participating myself as a participant in this study.

Reason for withdrawing:

.....

Name of the participant: ..... Date: .....

Signature of the participant: .....

Date: .....

Name of the researcher: .....

Date: .....

Information Sheet (Bangla)

তথ্যপত্র

গবেষণার শিরোনাম: সেরিব্রাল পালসি আক্রান্ত শিশুর মায়েদের পেশাগত ভারসাম্য অবস্থা।

গবেষক: অসমিতা আহমেদ, ৪র্থ বর্ষ, বিঃ এসঃ সি ইন অকুপেশনাল থেরাপি, রোলঃ ২৯

সুপারভাইজার: কানিজ ফাতেমা, প্রভাষক, অকুপেশনাল থেরাপি বিভাগ

আমি অসমিতা আহমেদ, আপনাকে আমার গবেষণায় অংশগ্রহণের জন্য আমন্ত্রণ জানাচ্ছি। সিদ্ধান্ত নেয়ার আগে আপনাকে জানতে হবে এই গবেষণাটি কেন করা হচ্ছে এবং এটি আপনার সাথে কিভাবে সম্পর্কিত। অনুগ্রহ করে নিচের তথ্যগুলো মনোযোগ সহকারে পড়ুন। পড়ার পরে কোনো সমস্যা হলে বা অতিরিক্ত কিছু জানতে চাইলে, আপনি আমাকে জিজ্ঞাসা করতে পারেন।

গবেষণার পটভূমি ও উদ্দেশ্য:

আমি অসমিতা আহমেদ, বর্তমানে বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট এ ঢাকা বিশ্ববিদ্যালয়ের মেডিসিন অনুষদের অধীনে অকুপেশনাল থেরাপি বিষয়ে পড়াশোনা করছি। বিএসসি কোর্সের একটি অংশ হিসেবে আমি একটি গবেষণা কার্যক্রম পরিচালনা করছি। গবেষণার বিষয় হচ্ছে সেরিব্রাল পালসি আক্রান্ত শিশুর মায়েদের পেশাগত ভারসাম্য অবস্থা। এই গবেষণার মূল উদ্দেশ্য হলো সেরিব্রাল পালসি আক্রান্ত শিশুর মায়েদের পেশাগত ভারসাম্য অবস্থা নির্ণয় করা।

গবেষণায় অংশগ্রহণ করতে হলে কী করতে হবে?

আমি অকুপেশনাল ব্যালেন্স কোশ্চেনইয়ার স্কেল এবং সোশিও-ডেমোগ্রাফিক প্রশ্নাবলীর মাধ্যমে মায়েদের পেশাগত ভারসাম্য ও সামাজিক-জনসংখ্যাগত বৈশিষ্ট্য নির্ণয় করবো। আপনাকে উভয় প্রশ্নমালায় উত্তর দিতে হবে। সময় লাগবে আনুমানিক ২০-২৫ মিনিট।

কেন আপনাকে আমন্ত্রণ জানানো হয়েছে?

গবেষণার বিষয়বস্তু অনুযায়ী আমি কিছু নির্দিষ্ট মানদণ্ডে অংশগ্রহণকারীদের নির্বাচন করবো।

অন্তর্ভুক্তির মানদণ্ড:

• যেসব মা CP আক্রান্ত সন্তানের মা, যেকোন বয়সের।

• গৃহিণী, প্রাইভেট ও সরকারি চাকরিজীবী, ব্যবসায়ী – সকল পেশার মা।

বর্জনের মানদণ্ড:

• অন্যান্য আত্মীয়স্বজন, পেইড কেয়ার-গিভারদের এই গবেষণায় অন্তর্ভুক্ত করা হবে না।

• গর্ভবতী ও মানসিকভাবে প্রতিবন্ধী মা এই গবেষণার বাইরে থাকবেন।

অংশগ্রহণ করা কি বাধ্যতামূলক?

এই গবেষণায় অংশগ্রহণ একান্তই স্বেচ্ছামূলক। অংশগ্রহণের আগে লিখিত সম্মতি নেওয়া হবে।

আপনি যদি অংশ নেন, তাহলে আপনাকে সম্পূর্ণ প্রশ্নমালার উত্তর দিতে হবে। গবেষণার পরবর্তী দুই সপ্তাহের মধ্যে আপনি চাইলে অংশগ্রহণ প্রত্যাহার করতে পারবেন।

অংশগ্রহণের সম্ভাব্য ঝুঁকি ও সুযোগ:

এই গবেষণায় সরাসরি কোনো আর্থিক সুবিধা নেই। তবে প্রশ্নমালায় এমন কোনো প্রশ্ন নেই যা শারীরিক বা মানসিক ক্ষতির কারণ হতে পারে। যদি অংশগ্রহণের পরে কোনো সমস্যা দেখা দেয়, তাহলে একজন চিকিৎসকের পরামর্শ নেওয়া হবে। তবে, এই গবেষণার মাধ্যমে আপনি আপনার পেশাগত ভারসাম্য সম্পর্কে জানতে পারবেন।

আপনার তথ্য কি গোপন থাকবে?

গবেষণার গোপনীয়তা কঠোরভাবে রক্ষা করা হবে। শুধুমাত্র সম্মতি পত্রে নাম থাকবে। প্রশ্নপত্রে নামের পরিবর্তে কোড ব্যবহার করা হবে। শুধুমাত্র গবেষক এবং তত্ত্বাবধায়ক তথ্যের সরাসরি অ্যাক্সেস পাবেন। কাগজপত্র একটি তালাবদ্ধ ড্রয়ারে এবং গবেষকের ব্যক্তিগত ল্যাপটপে সংরক্ষিত থাকবে।

গবেষণার ফলাফল:

গবেষণার ফলাফল মুদ্রিত ও ইলেকট্রনিক/সোশ্যাল মিডিয়া, কনফারেন্স ও আলোচনার মাধ্যমে উপস্থাপন করা হবে।

কোনো প্রশ্ন থাকলে যোগাযোগ করুন:

গবেষক: অসমিতা আহমেদ

বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট

অকুপেশনাল থেরাপি বিভাগ

সেশন: ২০২০-২১, রোল: ২৯

ঠিকানা: সাভার, ঢাকা

ই-মেইল: ashmitaahmed09@gmail.com

মোবাইল: ০১৯১৭১২১১৯৯

Consent Form (Bangla)

সম্মতিপত্র

আমি অসমিতা আহমেদ, বর্তমানে ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা অনুষদভুক্ত সি.আর.পির অধীনস্থ বাংলাদেশ হেলথ্ প্রফেশন্স ইন্সটিটিউট(বি.এইচ.পি.আই)-এ বি.এস.সি ইন অকুপেশনাল থেরাপি বিভাগে ৪র্থ বর্ষে অধ্যয়নরত। আমার গবেষণার শিরোনাম- " সেরিব্রাল পালসিতে আক্রান্ত শিশুর মায়েদের মধ্যে পেশাগত ভারসাম্যের অবস্থা সম্পর্কিত গবেষণা। এই গবেষণাতে আমি..... একজন অংশগ্রহণকারী এবং পরিষ্কারভাবে এই গবেষণার উদ্দেশ্য সম্পর্কে অবগত। আমার যেকোনো সময়ে এই গবেষণা থেকে নিজেকে প্রত্যাহার করার অধিকার আছে। এজন্য আমি প্রশ্নের উত্তর প্রদান করার জন্য কারো কাছে দায়বদ্ধ না। এই গবেষণাটি বর্তমানে এবং ভবিষ্যতে আমার চিকিৎসাক্ষেত্রে কোনোরকম প্রভাব ফেলবে না।

আমি আরও অবগত আছি যে, এই কথোপকথন থেকে নেওয়া সমস্ত তথ্যাবলি নিরাপদে এবং গোপনে শুধুমাত্র গবেষণার কাজেই ব্যবহার করা হবে। আমার নাম এবং ঠিকানা কোথাও প্রকাশ করা হবে না। শুধুমাত্র গবেষণাকারীর এবং তার সমন্বয়কারীর সাথে এই গবেষণার পদ্ধতি সম্পর্কে অথবা যে কোনো প্রশ্নের উত্তর জানার জন্য কথা বলতে পারবে। আমি উপরোক্ত তথ্যগুলো ভালোমতো জেনে নিজ ইচ্ছায় এই গবেষণায় অংশগ্রহণ করছি।

Withdrawal Form (Bangla)

প্রত্যাহার পত্র

(শুধুমাত্র স্বেচ্ছায় প্রত্যাহারের জন্য প্রযোজ্য)

গবেষণার শিরোনাম: সেরিব্রাল পালসিতে আক্রান্ত শিশুর মায়েদের মধ্যে পেশাগত ভারসাম্যের অবস্থা সম্পর্কিত গবেষণা।

গবেষক: অসমিতা আহমেদ, ৪র্থ বর্ষ, অকুপেশনাল থেরাপি বিভাগ।

আমি..... (অংশগ্রহণকারীর নাম) এই গবেষণায় একজন অংশগ্রহণকারী হিসেবে নিজেকে অংশগ্রহণ করা থেকে প্রত্যাহার করতে চাই।

প্রত্যাহারের কারন.....

অংশগ্রহণকারীর স্বাক্ষর/টিপসইঃ	তারিখঃ
গবেষকের স্বাক্ষরঃ	তারিখঃ

অংশগ্রহণকারীর নাম.....

তারিখ.....

অংশগ্রহণকারীর স্বাক্ষর.....

তারিখ.....

গবেষকের স্বাক্ষর.....

তারিখ .....

Questionnaire (English)

Research Questionnaire

Section-A

Identifying information

Name	
Contact address	
Mobile number	

Section-B

Socio- demographic Information

Mother's age:
Educational qualification: 1. Illiterate 2. Primary 3. Secondary 4. Higher secondary and above 5. Others
Marital status: 1. Married 2. Widow **1.** 3. Divorced
No of children: 1. One 2. Two

3. Three & more
Age of Children with CP:
Mother's Occupation: 1. Housewife 2. Business 3. Government job holder 4. Private job holder
Family status: 1. Single 2. Combined
Family monthly income status:
Availability of paid help 1. Never 2. Occasionally 3. Part time 4. Full time

Section-C

Occupational Balance Questionnaire (OBQ11)

©Carita Håkansson and Petra Wagman

Questions	*Strongly Disagree (0)*	*Disagree (1)*	*Agree (2)*	*Strongly Agree (3)*
In a typical week, I feel there are just enough thinks to do.				
There is a balance between things I do for myself and things I do for others.				
I make sure I do things I really want to do.				
4. I balance the different kinds of activities in my life, e.g., work, household chores, leisure, rest, and sleep.				
5. I have enough time to do the things that I must do.				
I have a balance among my physical, social, intellectual and restful activities.				
I am satisfied with the amount of time that I spend on my various daily activities.				
I am satisfied with the tasks I accomplish in a typical week.				
There is enough variation between things that I must do and things that I want to do.				
I have a balance in all my work.				
I am satisfied with the amount of time that I spend relaxing, recovering, and sleeping.				

Questionnaire (Bangla)

বাংলায় প্রশ্নপত্র

সেকশন-এ

সনাক্তকরণ তথ্য

নাম	
যোগাযোগের ঠিকানা	
মোবাইল নাম্বার	

সেকশন-বি

সামাজিক সম্পর্কিত তথ্য

মায়ের বয়সঃ
শিক্ষাগত যোগ্যতাঃ ১) নিরক্ষর ২) প্রাইমারী ৩) মাধ্যমিক ৪) সম্মান ও তার চেয়ে বেশি ৫) অন্যান্য
বৈবাহিক অবস্থাঃ ১) বিবাহিত ২) বিধবা ৩) তালাকপ্রাপ্ত
সন্তানের সংখ্যাঃ ১) এক ২) দুই ৩) তিন অথবা অধিক
সেরিব্রাল পালসি আক্রান্ত শিশুর বয়সঃ
মায়ের পেশাঃ ১) গৃহিণী ২) ব্যবসায়ী ৩) সরকারি চাকুরিজীবি ৪) বেসরকারি চাকুরিজীবি

পারিবারিক অবস্থাঃ ১) একক পরিবার ২) যৌথ পরিবার
পরিবারের মাসিক আয়ঃ
অর্থপ্রদত্ত সাহায্যের প্রাপ্যতাঃ ১) কখনো না ২) মাঝেমধ্যে ৩) খন্ডকালীন ৪) পূর্ণ-সময়

সেকশন-সি
পেশাগত ভারসাম্য সম্পর্কিত তথ্য

প্রশ্ন	**জোরালোভাবে অসম্মতি**	**অসম্মতি**	**একমত**	**জোরালোভাবে একমত**
১) আমি মনে করি একটি সাধারণ সপ্তাহে যথেষ্ট জিনিস করা রয়েছে				
২) আমি নিজের ও অন্যের জন্য যে জিনিসগুলো করি তার মধ্যে একটি ভারসাম্য রয়েছে				
৩) আমি ওই জিনিসগুলোই করি যা আমি প্রকৃত করতে চাই				
৪) আমি আমার জীবনের বিভিন্ন কার্যকলাপ এর মধ্যে ভারসাম্য বজায় রাখি যেমনঃ পেশাগত কাজ, গৃহস্থলীর কাজ, অবসর, বিশ্রাম এবং ঘুম				
৫) আমার প্রয়োজনীয় কাজের				

জন্য যথেষ্ট সময় রয়েছে ৬) আমি আমার শারীরিক সামাজিক বুদ্ধিবৃত্তিক এবং বিশ্রাম মূলক কাজের মধ্যে ভারসাম্য বজায় রাখি				
৭) আমি আমার দৈনন্দিন কাজে যে পরিমাণ সময় ব্যয় করি তাতে আমি সন্তুষ্ট				
৮) একটি সাধারণ সপ্তাহে আমি যে সংখ্যক কার্যকলাপে অংশগ্রহণ করি তাতে আমি সন্তুষ্ট				
৯) আমার যে সকল কাজ করতে হবে এবং যে সকল কাজ করতে চাই তার মধ্যে পার্থক্য রয়েছে				
১০) যে সকল কাজ আমার শক্তির যোগান দেয় এবং যে সকল কাজ আমার শক্তির ক্ষয় করে তার মধ্যে ভারসাম্য রয়েছে				
১১) বিশ্রাম, পুনরায় কাজের উৎসাহ এবং ঘুমের মধ্যে যে সময় পায় তাতে আমি সন্তুষ্ট				

Supervisor Contact Sheet

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

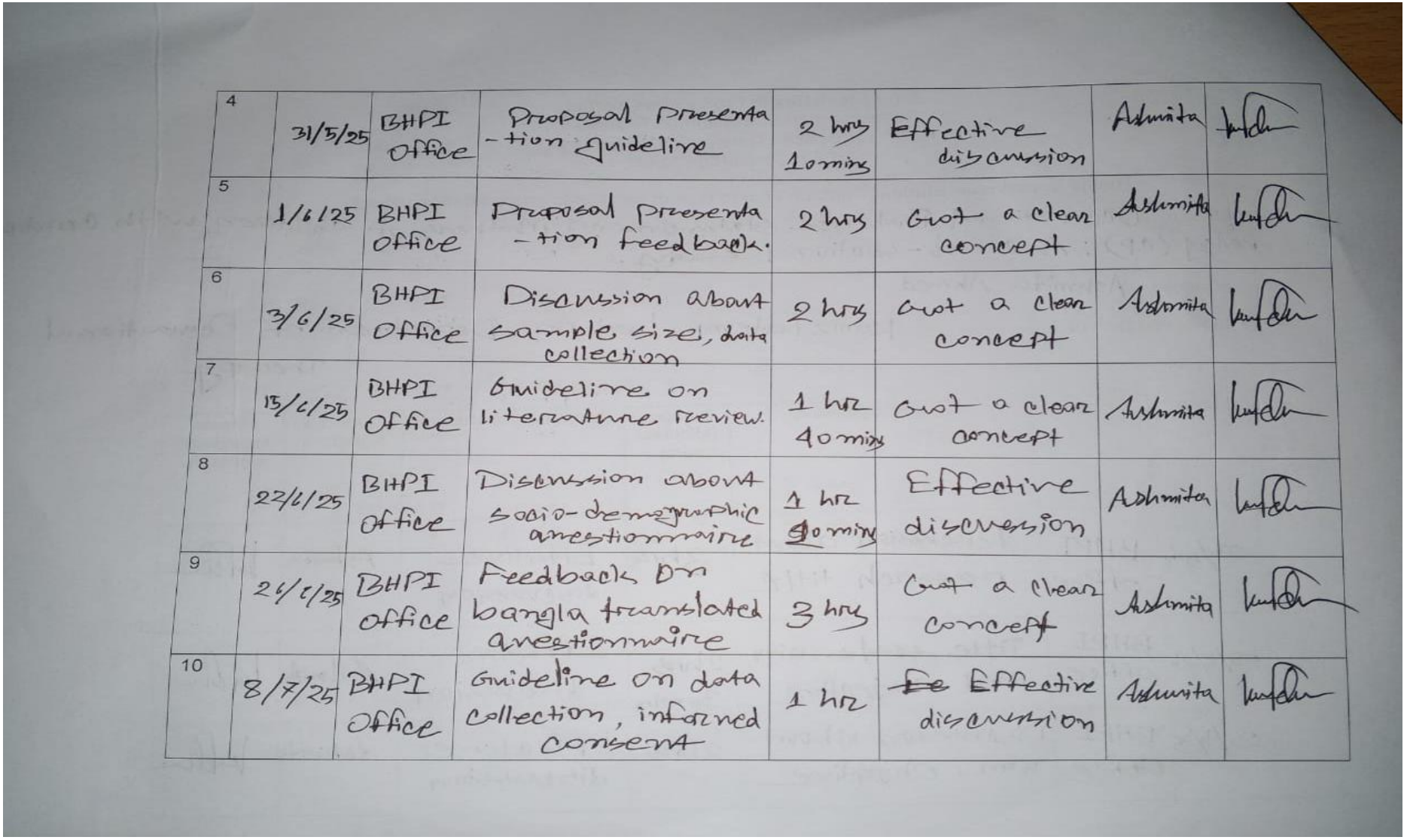
Thesis Supervisor- Student Contact; face to face or electronic and guidance record

Title of thesis: "Occupational Balance status among Mothers of children with Cerebral Palsy (CP): A cross-sectional study."

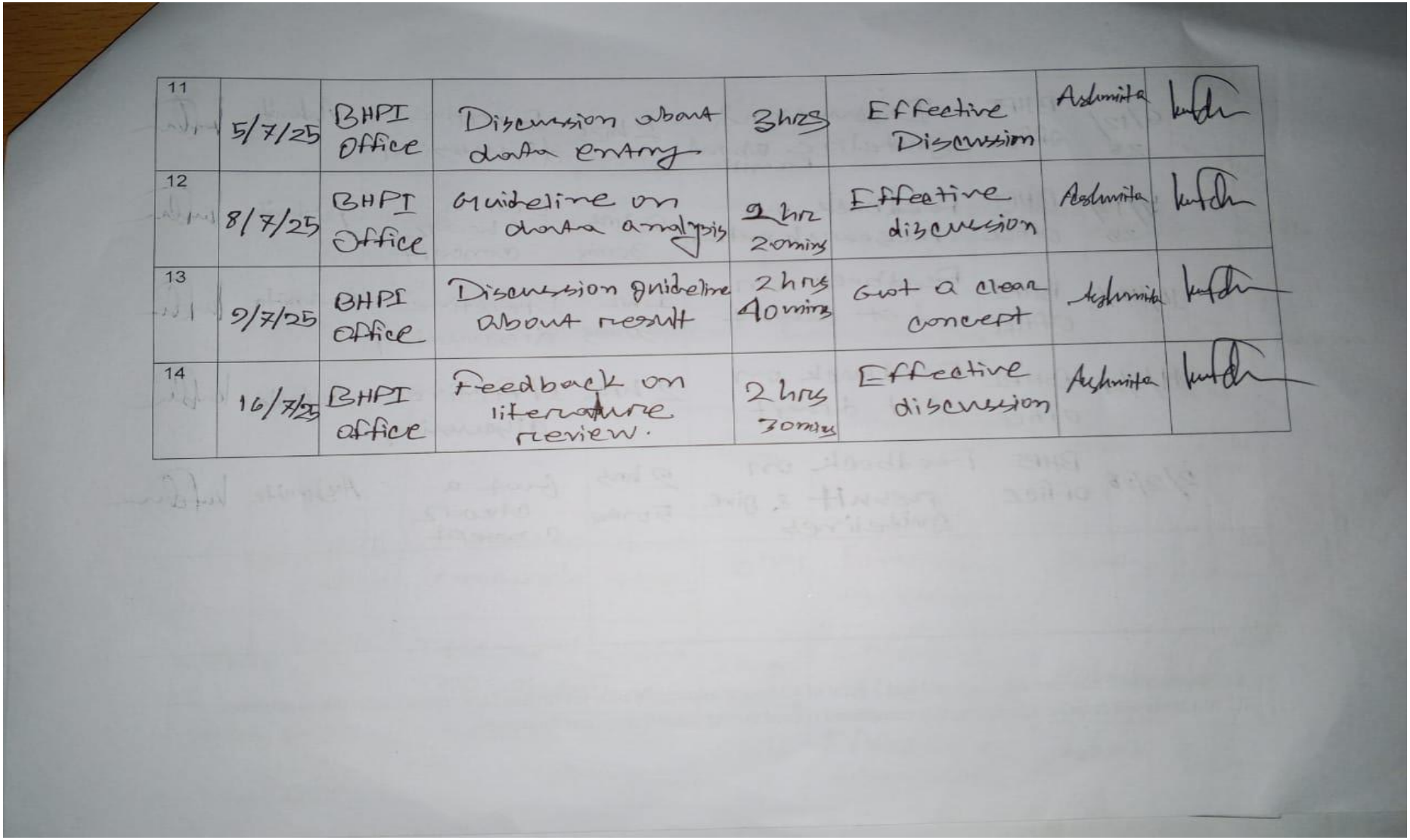
Name of student: Ashmita Ahmed

Name and designation of thesis supervisor: Kaniz Fatema, 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	25/5/25	BHPI office	Discussion about research title	3 hrs	Effective discussion	Ashmita	
2	28/5/25	BHPI office	Title, sample, aim and objective	2 hrs 30 mins	Effective discussion	Ashmita	
3	29/5/25	BHPI office	Discussion about aim, objective	2 hrs	Effective discussion	Ashmita	



4	31/5/25	BHPI Office	Proposal presentation Guideline	2 hrs 10 mins	Effective discussion	Ashmita	
5	1/6/25	BHPI Office	Proposal presentation feedback.	2 hrs	Got a clear concept	Ashmita	
6	3/6/25	BHPI Office	Discussion about sample size, data collection	2 hrs	Got a clear concept	Ashmita	
7	13/6/25	BHPI Office	Guideline on literature review.	1 hr 40 mins	Got a clear concept	Ashmita	
8	22/6/25	BHPI Office	Discussion about socio-demographic questionnaire	1 hr 40 mins	Effective discussion	Ashmita	
9	26/6/25	BHPI Office	Feedback on bangla translated questionnaire	3 hrs	Got a clear concept	Ashmita	
10	8/7/25	BHPI Office	Guideline on data collection, informed consent	1 hr	~~Ee~~ Effective discussion	Ashmita	



11	5/7/25	BHPI Office	Discussion about data entry	3hrs	Effective Discussion	Ashmita	
12	8/7/25	BHPI Office	Guideline on data analysis	2 hrs 20mins	Effeative discussion	Ashmita	
13	9/7/25	BHPI Office	Discussion guideline about result	2 hrs 40 mins	Got a clear concept	Ashmita	
14	16/7/25	BHPI office	Feedback on literature review.	2 hrs 30mins	Effective discussion	Ashmita	

15	6/12/25	BHPI office	Discussion & guideline about result	2 hrs	Effective discussion	Ashmita	
16	7/12/25	BHPI office	Feedback on research methods	2 hrs 30mins	Got a clear concept	Ashmita	
17	16/12/25	BHPI office	Feedback on 1st draft	1 hr 50mins	Effective discussion	Ashmita	
18	19/1/26	BHPI office	Feedback on 1st draft	2 hrs	Effective discussion	Ashmita	
19	2/2/26	BHPI office	Feedback on result & give guidelines	2 hrs 50mins	Got a clear concept	Ashmita	
20							

Note:

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