



Faculty of Medicine  
**University of Dhaka**

## **BARRIERS OF RECEIVING REHABILITATION SERVICES FOR THE PATIENTS ATTENDING AT CRP**

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Bachelor of Science in Physiotherapy

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We the undersigned certify that we have carefully read and recommended to the Faculty of Medicine, University of Dhaka, for the acceptance of this dissertation entitled

**BARRIERS OF RECEIVING REHABILITATION SERVICES FOR THE PATIENTS ATTENDING AT CRP**

Submitted by **Md. Shakirun Islam**, for the partial fulfillment of the requirement for the degree of the Bachelor of Science in Physiotherapy (B.Sc. in PT)

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## DECLARATION

I declare that the work presented here is my own. All sources used have been cited appropriately. Any mistakes or inaccuracies are my own. I also declare that for any publication, presentation or dissemination of information of the study. I would bound to take written consent from the Department of Physiotherapy, BHPI.

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## ACRONYMS

ACC	Anti-Corruption Commission
BHPI	Bangladesh Health Professions Institute
BMRC	Bangladesh Medical Research Council
CRP	Centre for the Rehabilitation of the Paralysed
PWD	Patient with disability
PHC	Primary health care
SCI	Spinal Cord Injury
WHO	World Health Organization

## ABSTRACT

**Purpose:** To explore the barriers of receiving rehabilitation services for the patient's receiving treatment in CRP. **Objectives:** To explore socio-demographic characteristics of patient, to find out the barriers of attitudinal, communication, physical, schedule, accommodation and transportation barriers. **Methodos:** A cross sectional study was used to conduct the study. 200 patients were recruited in this study. The sample was selected by convenient sampling method. The data were collected using semi-structured questionnaire form; finally, the data are analyzed and presented quantitative analysis. **Results:** Following themes have been emerged on the basis of data analysis. These include, during treatment at CRP schedule barriers and treatment expense are major problem, other barriers like attitudinal barrier, physical barrier, communication barrier, accommodation barrier and transportation barrier may prevent them from taking treatment from CRP in some of the cases. Among the 200 participants, 11% have experienced attitudinal barrier, 2% have experienced communication barrier, 6% have experienced physical barrier, 25% have experienced schedule barrier, 6% have experienced accommodation barrier. Some recommendations of the patients to prevent those barriers. This study explored the barriers of receiving rehabilitation services for the patients attending at CRP. The study demonstrated some common problems they faced. Schedule barrier and treatment expense at CRP are the major barriers. Patients and career may face many problems during receiving treatment at CRP. In CRP, treatment cost they told it is costly but it is limited. Other barriers like attitudinal barrier, physical barrier, communication barrier, accommodation barrier and transportation barrier may prevent them from taking treatment from CRP in some of the cases.

**Keywords:** Barriers, CRP, Rehabilitation.

**Word Count:** 9,277

**1.1 Background**

The number of people with disabilities living in low- and middle-income countries is steadily growing, primarily due to population growth and increases in chronic health conditions and injuries (WHO 2005). The number of disabled persons in low and middle-income nations is anticipated to double by 2025. Despite the increasing prevalence of disabilities among people, the requirements of persons with disabilities are still unmet in many countries (Parnes et al., 2009). According to the newly released World report on disability (World Health Organization [WHO] 2011), 15% of the global population is disabled, with physical disability being the most common. These changes generate massive demand for health and rehabilitation services, which is far from being satisfied, particularly in low-income nations (WHO 2005).

There are various types of persons who require rehabilitation treatments. The following prevalent conditions are encountered in most rehabilitation centers: Arthritis, spinal cord damage, head injury, neuromuscular disorders, stroke, fractures, and amputations are all examples of medical conditions (Metro District Health Services [MDHS] 2009).

Many disabled persons on the same level as other people require health promotion programs, yet evidence suggests that PWD frequently have worse levels of health than the general population (Holliday et al., 2007).

Although PWD's poor health is not always a direct result of their impairment, it can be linked to issues with access to services and programs. But based on international evidence, disabled people have many unmet health and rehabilitation needs and face barriers to access to health services (Leach E et al., 2010).

Govender stated the major structural barriers to health are usually legislative, policy, or regulative measures that hinder the practice of good health (Govender, 2005). The most frequent organizational barrier to during rehabilitation was lack of time, especially when there was an emphasis on involving patients in the process (Levack et al., 2011)

Other barriers included the need to coordinate staff, which was hampered by inflexible working practices and shift patterns, duplication and difficulty transferring information between multiple record systems, integrating goal-setting with other rehabilitation processes, staff turnover, which necessitated ongoing training and support for less experienced and skilled staff, and the pressure of competing priorities, particularly to provide 'hands-on therapy.' (Scobbie et al., 2013).

The environmental barriers identified were most commonly limitations in the physical environment and poverty related issues. Although, a substantial number of supportive programmes have been established, the challenges of travel and finances may limit their accessibility to people with disabilities. To this end, there is a major role for advocacy and cooperation between the ministries of health, labour and education. The limited attention to the needs of people with disabilities by the government was also identified as an environmental barrier.

Contemporary rehabilitation practice models indicate a shift away from medically-led approaches towards ones that incorporate the views of all health professionals, as well as the patient and their family. Successful rehabilitation is seen as holistic, involving a team approach with an increasing focus on the patient and attainment of goals rather than resolution of problems. These changes represent important paradigm shifts in the care of patients with greater emphasis on the patient role, patient preferences, family involvement and the functioning of multidisciplinary/interdisciplinary.

This is also in line with the primary health care (PHC) approach to health in South Africa, which highlights that 'specific rehabilitative services should include a basic assessment of people with disabilities, followed by an appropriate treatment programme, in consultation with the disabled person and his family' (Department of Health 2000:43).

More recently, the National Bureau of Statistics conducted first major survey on people with disabilities.. Despite the recognition of the prevalence of people with disabilities in Tanzania, the limited human resources, infrastructure, and financial capacity is likely to impact on the capacity of the country to strengthen the rehabilitation services in the country to meet the raising needs of the number of people with disabilities (Njelesani, 2011).

## **1.2Rationale:**

It is evident from the studies that patients with varying conditions access rehabilitation services and that they have positive and negative experiences regarding the service. As many people come CRP for receiving treatment, they face many barriers. If these barriers are not focused, awareness about people's problem cannot be raised. So, to improve the quality of treatment and to lessen the patients' sufferings, it is important to focus on the patients' barriers which they face. By identifying barriers, faced by the patients attending at CRP, it will be easy to provide qualitative service. So, it's been imperative to look forward the barriers of receiving rehabilitation services for the patients attending at CRP.

### **1.3 Research question**

What are the barriers of receiving rehabilitation services for the patients attending at CRP??

### **1.4 Aim of the study**

The aim of the current study is to explore the rehabilitation services for people with disabilities, in order to identify the barriers to accessing such services.

### **1.5 General objective**

To assess the barriers of receiving rehabilitation services for the patients attending at CRP

#### **Specific objective**

- To explore socio-demographic characteristics of patients attending at CRP.
- To find out the quality of treatment that is provided to the patients.
- To find out the attitudinal, communication, physical, schedule, accommodation, and transportation barrier.
- To find the patients own opinion about the barriers during treatment.

### **1.6 Operational definition**

**Barriers:** An obstacles faced by the participations in their own community as well as their everyday tasks.

**Rehabilitation:** Restoration of an entity to its normal or near-normal functional capabilities after the occurrence of a disabling event. Rehabilitation is the process of helping an individual achieve the highest level of function, independence, and quality of life possible. Rehabilitation does not reverse or undo the damage caused by disease or trauma, but rather helps restore the individual to optimal health, functioning, and well-being. The success of rehabilitation depends on many variables, including the following: The nature and severity of the disease, disorder, or injury .The type and degree of any resulting impairments and disabilities .The overall health of the patient family support.



According to a statistic provided by WHO, 15% of the world's population has a disability. More than a billion people in the globe are disabled, and 200 million of them have severe difficulties with daily activities. Individuals with disabilities are the most marginalized population in the Asia-Pacific area. 15–20 percent of the world's poorest individuals are disabled (Kleinitz et al., 2012).

According to a study, absolute poverty in eleven Asian countries was 14 percent more than previously reported. This does not account for out-of-pocket health care expenses (Van Doorslaer et al., 2006). The Convention on the Rights of Persons with Disabilities (CRPD) is permitted to consider the right to health enjoyment of people with disabilities. Therefore, Article 25 of the Convention mandates that states "recognize the right of persons with disabilities to enjoy the best achievable standard of health, irrespective of disability." Articles 20 (Access) and 26 (Rehabilitation) require Member States to guarantee that individuals with disabilities have access to health services, including gender-based rehabilitation (Galderisi et al., 2018).

There is a significant and growing demand for rehabilitation services worldwide, which is especially acute in low- and middle-income nations. Global figures from 2008 based on Global Burden of Disease data indicate that 92 percent of the global disease burden is attributable to factors for which rehabilitation specialists may be able to provide aid. The increasing frequency of non-communicable diseases and the aging population indicate that the demand for rehabilitation in countries will continue to rise (Gupta, Castillo-Laborde & Landry, 2011).

Experts in disability issues, including health policy and clinical ratings, acknowledged in a global survey that persons with disabilities face challenges in gaining access to acceptable levels of health services, and demonstrated how these barriers can be addressed. Due to reasons such as population expansion, increased chronic disease, aging, and medical developments that can prolong the quality of life of the disabled, the number of persons with disabilities in the globe is rising. These concerns generate

unrealistic demands for health care and rehabilitation, particularly in developing nations (Tomlinson et al., 2009).

Health promotion programs are required for many impaired individuals who are at the same level as others. However, the research indicates that PWD frequently have poorer health than the general population. Although a PWD's poor health is not necessarily a direct result of their impairment, it may be related to their inability to access necessary services and programs (Rimmer and Rowland, 2008). According to worldwide studies, however, disabled individuals have several unmet health and rehabilitation requirements and encounter access barriers to health care (Yen et al., 2011).

According to Govender, the most significant structural obstacles to health are typically legislative, policy, or regulatory actions that impede the practice of good health. Additionally, health service concerns are a significant obstacle for people with disabilities (Johnson et al., 2011). Therefore, the primary objectives of rehabilitation are health promotion, disease prevention, preventing and lowering disability and the individual corrective function, and reducing the handicap phenomena. It will be feasible to avoid disharmony, duplication, and waste of resources if the projects are treated holistically, as opposed to as a series of individual tasks (Kamali, 2011).

The literature study on rehabilitation programs revealed that the health capacities of people with disabilities are frequently disregarded. Consequently, they are frequently excluded from the nation's health promotion programs. The health of PWD is dependent on a variety of variables, and the health sector cannot shoulder the entire burden (Kroll, Jones, Kehn & Neri, 2006).

Poor health outcomes are exacerbated by limited access to healthcare services. In a study, it was discovered that Mori who reported difficulty getting healthcare services for injury had a greater chance of long-term disability after injury. In addition, ACC has documented that Mori utilize services differently and has identified that social, cultural, economic, and geographical limitations play a role in this. 26 Existing literature, which highlights discrepancies in injury prevalence, morbidity, mortality, bad outcomes after injury, and access to injury-related care among Mori, indicates a need to better

comprehend the challenges injured Mori face in gaining access to healthcare services (Reid, Cormack & Crowe, 2016).

Patients with transportation hurdles bear a greater disease burden, which may be attributable in part to the correlation between poverty and transportation accessibility (Wallace, Hughes-Cromwick, Mull and Khasnabis, 2005). Understanding the relationship between transportation constraints and health may be crucial for improving the health of the poorest and most vulnerable populations. Transportation is frequently regarded as a key obstacle to accessing health care. In as little as 3 percent and as many as 67 percent of the studied population, transportation impediments impede access to health care, according to research. It is challenging to evaluate the final effect of transportation constraints on health due to the large variation in study results (Kim et al., 2007).

Individuals with disabilities, who make up 15 percent of the world's population, frequently face obstacles when engaging in daily life activities, even in the absence of COVID-19, such as barriers to community mobility (Jónsdóttir and Polgar, 2018), difficulties accessing public transportation, reduced access to healthcare services, and communication barriers. Individuals with impairments have a higher risk of depression, lower life satisfaction, and greater loneliness than the general population (Brunes, B. Hansen & Heir, 2019).

A global pandemic has the potential to exacerbate the difficulties faced by persons with disabilities daily and may have a higher impact than on the general population. Indeed, people with disabilities are frequently directly harmed by healthcare system deficiencies and gaps (Disability language in the Disability and Health Journal, 2014). They may be at a greater risk of getting COVID-19 and experiencing significant problems as a result of additional impediments to comply with social separation procedures. For instance, people with disabilities may rely on public and adapted transportation, have regular healthcare or rehabilitation appointments, require close contact from caregivers or health professionals to accomplish daily tasks, or have a diminished ability to communicate with face masks (both speaking and hearing others) (World Health Organization, 2020).

Transportation has been identified in the research as a significant obstacle to socioeconomic engagement and healthcare access for people with disabilities and low

incomes. Edwards et al. (2020) discovered that transportation hurdles were a major concern when analyzing obstacles to accessing cancer services for persons with a physical impairment. According to three research included in the study, access to an upgraded and/or dependable transportation service or a referral to a nearby clinic would have positively affected health seeking behaviors. Maart and Jelsma (2014) surveyed 1,083 families in a disadvantaged neighborhood of Cape Town, South Africa, which included 152 people with disabilities. Seventy-one percent of PWD said that access to healthcare services was hampered by financial and transportation constraints (72 percent). Clarke et al. (2011) discovered that PT played a little role compared to high traffic, street quality, and household security in Chicago, US, for PWD's participation in interpersonal interaction, preventive healthcare, and voting. Syed, Gerber, and Sharp (2013) examined 61 papers on travel obstacles and healthcare access in the United States and found that for people with lower incomes, transport barriers were a significant hindrance. Given that PWD have lower incomes than those without disability, with a median gross personal income half that of those without disability (Temple, Dow, and Baird, 2019), this may contribute to their transportation hurdles. While several research have established transportation as a major obstacle for PWD in accessing healthcare and other activities of daily life, few have studied whether better PT relates to disability-specific healthcare utilization.

There is a need for a deeper understanding of the relationship between PT availability and healthcare utilization in PWD and how this relates to PT's function in the general population. Addressing the difficult subject of the impact of PT in healthcare usage disparities necessitates a precise measure of PT availability that considers both the proximity to a PT stop and the frequency of service. But for those with disabilities, accessibility may not necessarily correspond to availability. Bezyak et al. (2019) found that various impediments to PT have an immediate impact on the ability of PWD to fully engage in community life. The PT needs and barriers of individuals with disabilities vary by impairment type (Beyzak et al., 2019; Rachele et al., 2020).

A barrier is anything that impedes an individual or group's equitable access to products, services, or information. Define obstacles as "environmental factors that, through their

absence or presence, impede disability." These include an inaccessible environment, a lack of necessary assistive technology (assistive, adaptive, and rehabilitative devices), negative attitudes towards disability, and policies that either do not exist or impede the participation of all people with a health condition in all aspects of life (Acemoglu & Angrist, 2001).

Attitude barriers are the most fundamental and contribute to the existence of other barriers. Since physical and other barriers are not a result of the attributes of the individual or group, but rather the attitudes of others towards that individual or group, they can be overcome. Negative attitudes frequently result in the denial of basic human and civil rights accorded to other community members. Attitudes are the feelings, beliefs, and behavioral patterns an individual attributes to a certain abstract or physical object, such as a person, place, item, or event. The imposition of inferiority on people with disabilities may constitute an attitude barrier. People with disabilities are sometimes considered "second-class citizens" because they may be hampered in one of the major life functions (Reiter & Bryen, 2010).

In the article by Harrison and Palmer, the barriers are location and transportation, the capacity to absorb complex information and focus, weariness, and communication impediment. Location and transportation obstacles One individual says, "Where I live, I'm fairly distant from the major hospitals...if I were much closer to them, I could do much more," while another says, "I am so far away that I cannot do anything," which is really aggravating. In addition, I can no longer drive due to my health. One person exemplified the ability and concentration required to comprehend complex information by stating, "I tend to speak a bit less because technical subjects are more difficult, so I'm listening very intently to figure out what they're saying...sometimes I feel rather out of my depth in these meetings." In communication impairment, one individual states: You have an issue if someone has difficulties with speech and it is more difficult for them to express themselves (Harrison & Palmer, 2015).

Despite a lack of consensus over the meaning of the term "motivation," rehabilitation specialists feel that patient motivation has a significant influence in influencing outcome 1–3. According to Maclean, 14 of the 22 disabled individuals undergoing rehabilitation

have strong motivation, whereas eight have low motivation. Several components are required for motivation, including 1) an understanding of rehabilitation, 2) comparisons to other patients, 3) information and support, etc (Maclean et al., 2000).

Most of the research on environmental barriers encountered by disabled individuals was undertaken in affluent nations. The results of linked investigations can be categorized as physical, social, and attitude-based environmental barriers. The frequency and incidence of stroke in Rwanda are 1.7% and 0.2%, respectively. There were five female participants (50 percent) and five male individuals (50 percent). The participants ranged in age from 24 to 79 years (mean age = 56,3 years, standard deviation = 16.7 years) (Urimubenshi and Rhoda, 2011). Five male and six female participants were interviewed face-to-face in England, according to Harrison and Palmer. The mean age of the participants was 68 (ranging from 59 to 85) years old (Harrison and Palmer, 2015). In Taiwan, there are 76 members, 39 men and 37 women, with a mean age of 59.9 years (Huang et al., 2009). In Bangladesh, Miah et al. discovered that out of 102 patients, 17 were young adults and 85 were elderly. The ages of young adults were 39.67 6.37, and the ages of the elderly were 65.06 11.24. In young age, males included 41.17 percent and female's 58.82 percent, whereas in old age, males comprised 65.88 percent and female's 34.11 percent (Miah et al., 2012).

The home is one of the most significant environments in life. Accessible housing is a global issue for persons with disabilities, especially those with mobility problems such as spinal cord injury (SCI) sufferers. Survey results indicate that disabled individuals in southern Africa live in housing that is inferior to that of non-disabled people. For individuals with SCI, it may be difficult to leave the rehabilitation facility if their housing involves obstacles like as stairs, limited toilets, and inaccessible kitchens, which effectively make them prisoners in their own houses. The result may be what is often known as bed-blocking, which occurs when patients who are well enough to return home are compelled to remain in the hospital owing to a lack of accessible accommodation (WHO, 2013).

A study provided an overview of the several dimensions of barriers to accessing health care in less-developed nations, notably availability, affordability, geography, and

acceptable access to overcoming these hurdles, as well as a summary of the solutions that exist to address these issues (Jacobs et al., 2012).

"Increasing access" and "optimizing utilization" are the results of rehabilitation services deemed most important by stakeholders. The WHO global action plan on disability for 2014–2021 outlines the activities that rehabilitation stakeholders, including Member States and national and international partners, must take to strengthen and expand rehabilitation. Incorporating rehabilitation into universal health coverage efforts is a crucial step toward achieving Sustainable Development Goal 3, "Ensure healthy lives for all at all ages," and especially target 3.8 – "Achieve universal health coverage, including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all." The integration of rehabilitation services across all levels of the health system will contribute to person-centered care by organizing health services to meet the needs of individuals rather than health problems (Darzi, Officer, Abualghaib & Akl, 2016).

With data from nine of the 28 nations, the Western Pacific region provided a solid body of evidence. In terms of CR and rehabilitation services after stroke, evidence from Taiwan, New Zealand, Australia, Malaysia, China, and South Korea demonstrated that the demand greatly exceeded the supply. Rehabilitation services for people with injuries, intellectual disabilities, cancer, and other non-communicable diseases had high rates of unmet needs. In 2008, just 5.62 percent of all hospital admissions in Taiwan that could have benefited from rehabilitation received such services (Lin, Wu & Tsauo, 2012).

The attitudes and behaviors of family members, friends, health-care providers, neighbors, and strangers contribute to the environmental factors that influence the lives of people with disability, both as barriers and as facilitators; in fact, physical, attitudinal, and policy barriers in the environment are viewed as having as great an impact or a greater impact than the underlying organ system impairments in determining a person's activity limitations, participation restrictions, and independent living abilities. As a result, disability activists are frequently more concerned in modifying or adapting the environment to fit the specific requirements of persons with disabilities than in adhering

to the medical model, which implies the problem resides within the individual and not the environment (Rimmer et al., 2005).

People who have left the rehabilitation hospital may have some difficulties in accessing their accommodation due to some barriers such as stairs, small bathrooms, and inaccessible kitchens. This effectively makes them "prisoners in their own homes," and as a result, they become "bed-blocking." This is the reason why patients who are healthy enough to go home but are forced to stay in the hospital due to unsatisfactorily accessible housing and transportation barriers are one of the most irrational aspects of the healthcare system. But the core issues are flaws in the system, such as breaks in the "travel chain," which prevent wheelchair users from reaching their destination (Wee & Paterson, 2009).



### 3.1 Study Design

The purpose of the study was to find out the barriers of taking rehabilitation services for the patients attending at CRP. Cross sectional study was conducted to find out the objectives.

### 3.2 Study site

Outdoor unit & Physiotherapy Department of Centre for the Rehabilitation of the Paralysed.

### 3.3 Study Population

The study populations are the patients of all department and units attending at CRP for receiving Rehabilitation services.

### 3.4 Sampling technique

Convenient sampling technique is used to collect data from CRP.

### 3.5 Sample size

Sampling procedure for cross sectional study done by following equation-

$$n = \frac{Z^2 Pq}{d^2}$$

Where,

d is the desired level of precision (i.e. the margin of error).

p is the (estimated) proportion of population which has the attribute in question.

If  $p = 0.5$  now let's say we want 95% confidence, and at least 5% plus or minus precision.

A 95% confidence level gives us Z values of 1.96, per the normal tables, so we get,

Sample size:

$$n = \frac{Z^2 Pq}{d^2}$$

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2}$$

$$= 384.16$$

$$= 384$$

The actual number might vary due to the pandemic situation and the availability of the patients.

### **3.6 Inclusion criteria**

1. Age  $\geq$  18 years is included.
2. patients who took long time treatment in CRP.
3. Both male and female patients are included.

### **3.7 Exclusion criteria**

1. Mentally ill and medically unstable patient.
3. Non-co-operative patients.
4. Person who were not interested to attend the program at the time of data collection.

### **3.8 Data collection tools**

A consent form and questionnaire (Bangla) will be used.

### **3.9 Procedure of data collection**

A written consent will be taken from the patients. A Questionnaire will be used to accumulate data by face-to-face conversation.

### **3.10 Data analysis procedure**

Data will be analyzed through Statistical package of Social Science (SPSS). A descriptive and inferential statistical analysis will be conducted. The statistical decision will take place according to the nature of the data, objective, and expert opinion.

### **3.11 Ethical consideration:**

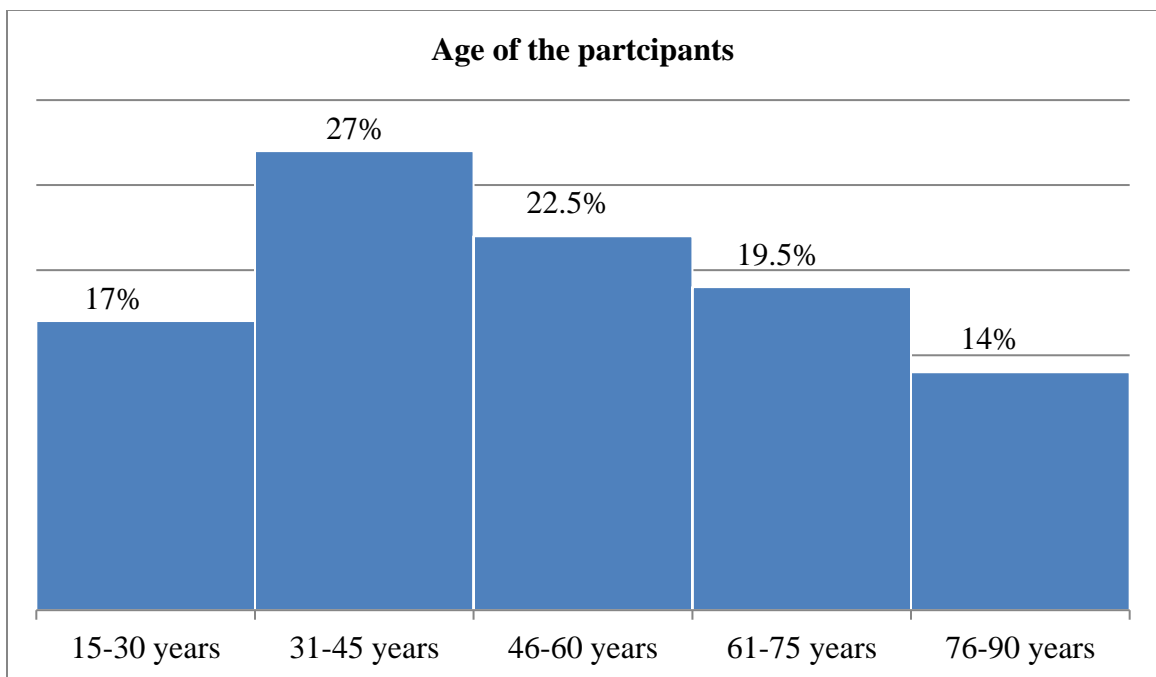
The whole process of this research project will be conducted by following the guidelines of Bangladesh Medical Research Council (BMRC), Institution Review Board (IRB) and World Health Organization (WHO) Research guidelines. Informed consent will be taken from all participants. Participants' rights and privileges will be ensured. All the participants will be informed about the aim and objectives of the study. Maximum confidentiality of data will be ensured. No harmful act will be taken and the participant can withdraw themselves at any time.

### **3.12 Informed Consent:**

Each participant received written material before beginning the questionnaire. The participant's and their parents' role in the study is explained by the researcher to them. A formal consent form was signed by each participant and given to the researcher. As a result, the participant attested to their comprehension of the consent form and their willingness to participate. Participants who were under the age of 18 had their parents or other legal guardians provide the data. The researcher promised the participants that the study wouldn't have any unfavorable consequences on them. Although the study may not have benefited the participants directly, it might have in the future for circumstances like theirs. The participants had the right to withdraw at any time and stop taking part.

**Socio-demographic information:****4.1. Age of the participants**

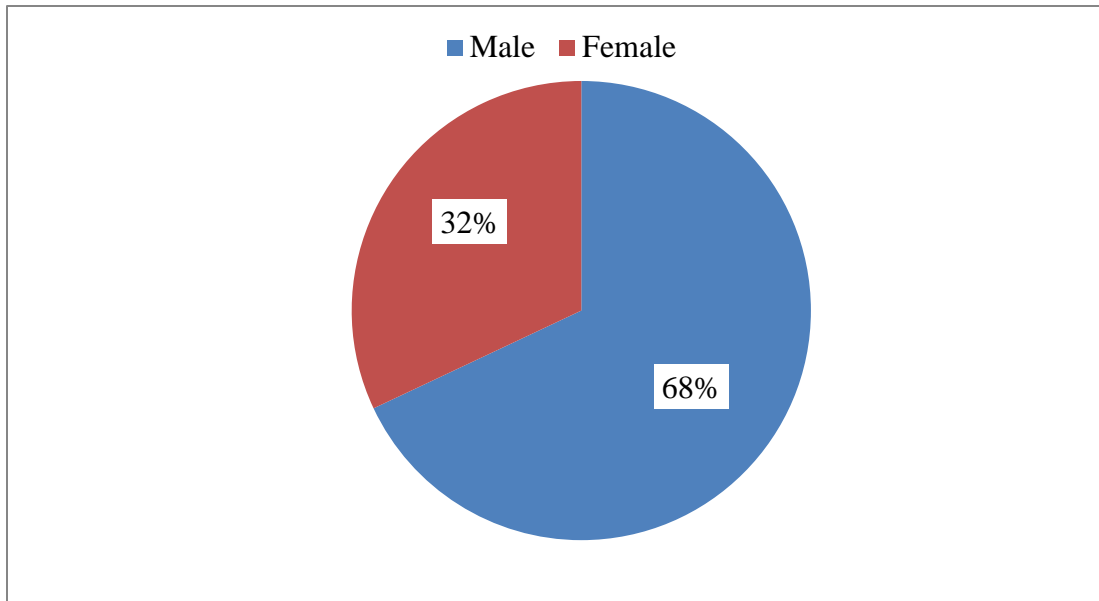
The number of total participants was 200. Table shows the mean age of participants among 200 participants and the mean age was 40.68 with standard deviation  $\pm 15.07$ , median 40.00, mode 22, maximum age 82, minimum age 17.



**Figure:** Age of the participants

#### 4.2 Gender of the participants

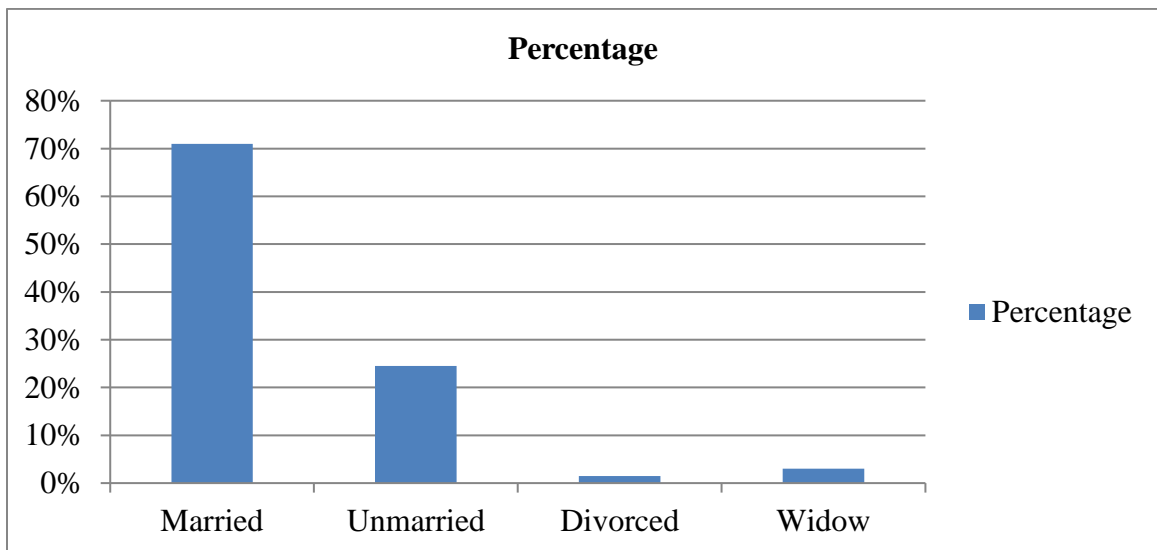
Among 200 participants, 136 participants were male and 64 participants were female. In percentage 68% participants were male and 32% participants were female.



**Figure:** Gender of the participants

#### 4.3 Marital status

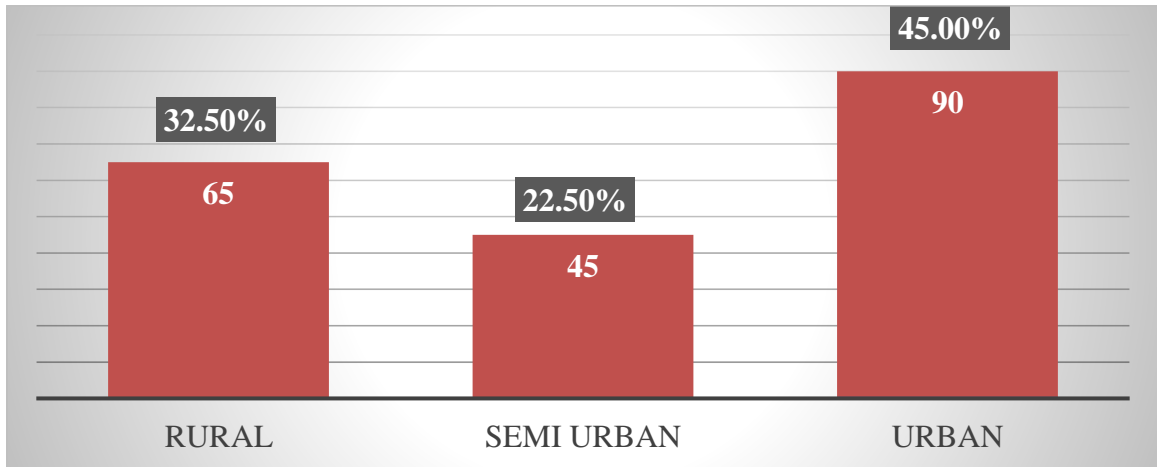
Among all the 200 participants, 71.0% (n=142) were married, 24.5% (n=49) were unmarried, 1.5% (n=3) were divorced and 3% (n=6) were widow.



**Figure:** Marital status of the participants

#### 4.4 Residential area

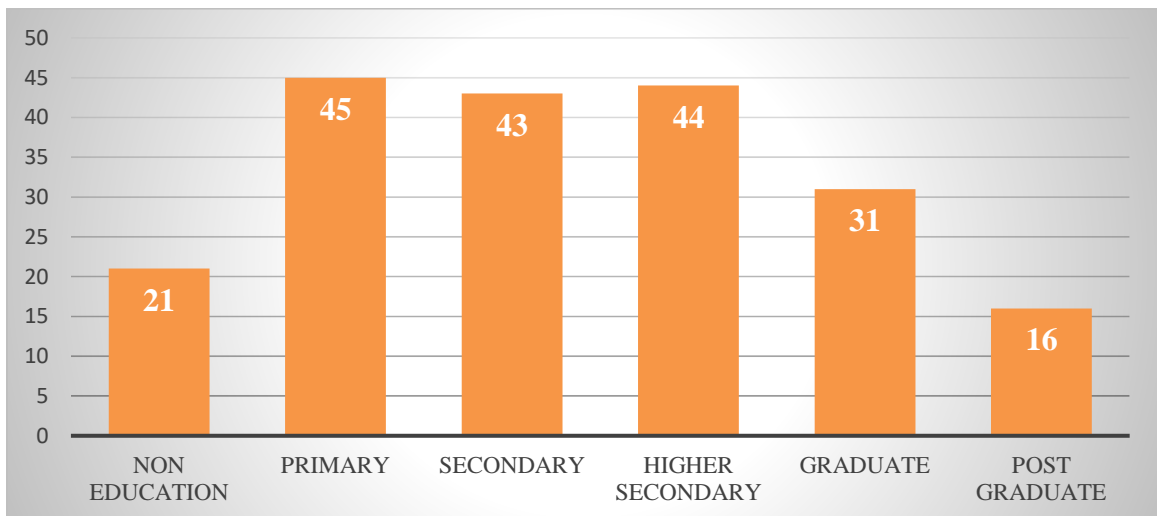
Out of 200 participants, 32.5% (n=65) participants came from rural area, 22.5% (n=45) participants came from semi urban area and 45% (n=90) participants came from urban area.



**Figure:** Residential area of the participants

#### 4.5 Educational Status of the participants

Among of the total participants 10.5% (n=21) were non educate, 22.5% (n=45) of the participants had only primary education, 21.5% (n=43) had passed Secondary School Certificate, 22% (n=44) had Higher secondary level education, 15.5% (n=31) participants had graduation and 8% (n=16) participants had post-graduation level education.



**Figure:** Educational status of the participants

#### 4.6 Occupation of the participants

Out of 200 participants, 8% (n=16) of them were farmer, 1%(n=2) of them were rickshaw puller,3.5%(n=7) of them were garment worker,2.5%(n=5) of them were driver,13%(n=26) of them were businessmen,6%9n=12) of them were teacher, 17.5% (n=35) of them were student, 4%(n=8) of them were unemployed and others were 44.5%(n=89).

**Table:** Occupation of the participants

<b>Occupation</b>	<b>Frequency</b>	<b>Percent</b>
Farmer	16	8.0%
Rickshaw puller	2	1.0%
Garment worker	7	3.5%
Driver	5	2.5%
Businessmen	26	13.0%
Teacher	12	6.0%
Student	35	17.5%
Unemployed	8	4.0%
Others	89	44.5%

#### 4.7 Family member of the participants

The majority of the 200 participants(n=64) had a household population of 6 or more (36%), accordingly 58 participants had 4 family members (26.5%),48 participants had 5 family members (24%),19 participants had 3 family members (9.5%) and 2 participants had 2 family members.

**Table:** Family member of the participants

Family member	Frequency	Percentage
2 persons	2	1.00%
3 persons	19	9.5%
4 persons	57	28.5%
5 persons	48	24.00%
6 or more person	74	37.00%

#### 4.8 Number of households earning member of the family

The majority of the 200 participants(n=123) had a 1 earning member (61.5%), accordingly 49 participants had 2 earning members (24.5%),20 participants had 3 earning members (10%),4 participants had 5 earning members (2%),2 participants had 7 earning members (1%),1 participant had 6 earning members (0.5%) and 1 participant had 4 earning members (0.5%).

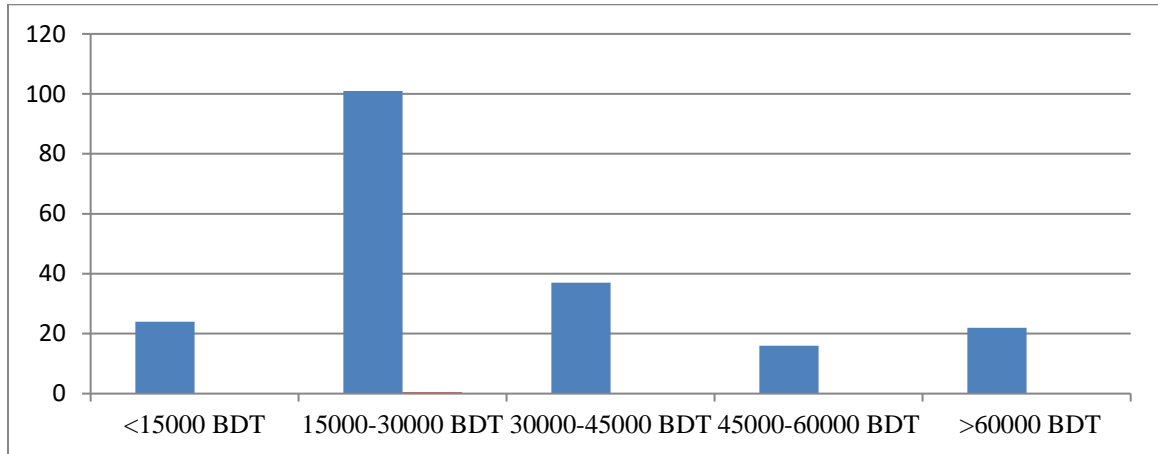
**Table:** Number of households earning member of the participants

Earning member	Frequency	Percentage
1 person	123	61.5%
2 persons	49	24.5%
3 persons	20	10.00%
4 persons	1	0.5%
5 persons	4	2.00%
6 persons	1	0.5%
7 persons	2	1.00%



#### 4.9 Monthly income of the participants

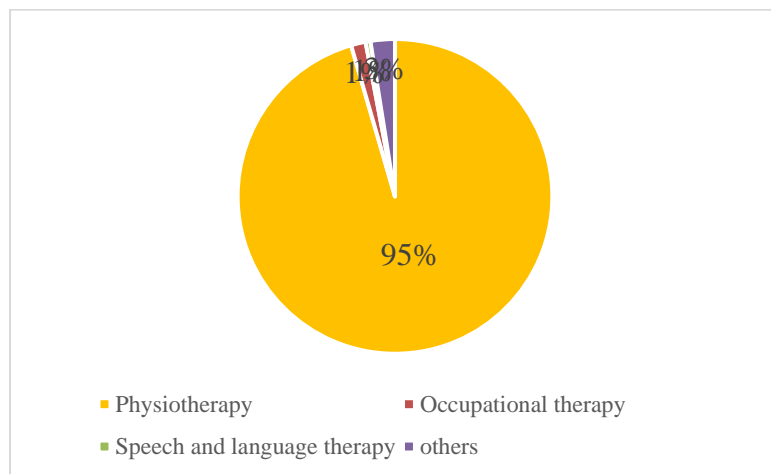
Among the 200 participants, 24 participants (12%) had monthly income under 15000 BDT, 101 participants (50.5%) had monthly income between 15000-30000BDT, 37 participants (18.5%) had monthly income between 30000-45000BDT, 16 participants (8%) had monthly income between 45000-60000BDT and rest of the 22 participants (11%) had monthly income above 60000BDT.



**Figure:** Monthly income of the participants

#### 4.10 Rehabilitation services received by the participants

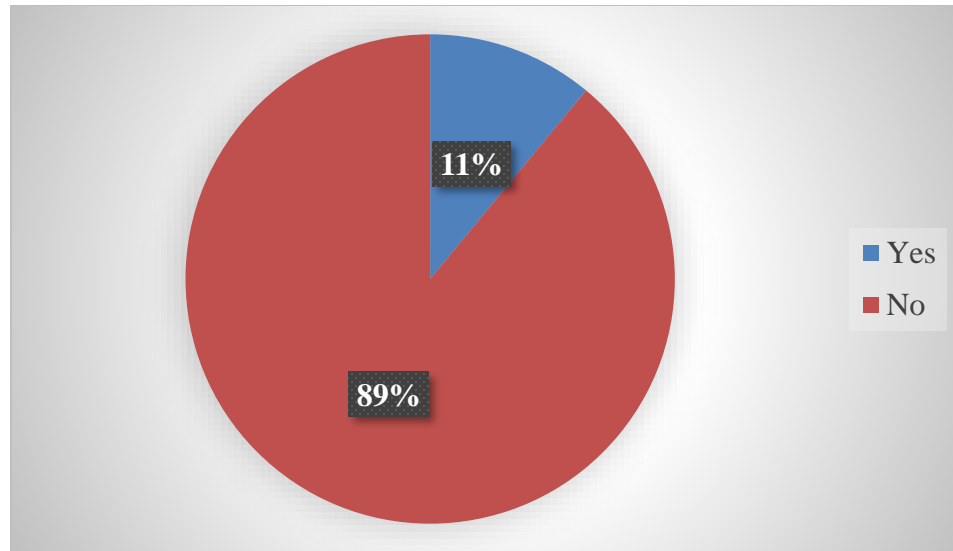
Among the 200 participants, 191 participants (95.5%) have received Physiotherapy service, 3 participants (1.5%) have received Occupational service, 1 participant has received Speech and language therapy service and rest of the 5 participants (2.5%) have received others services.



**Figure:** Rehabilitation services received by the participants

#### 4.11 Attitudinal barrier faced by the participants

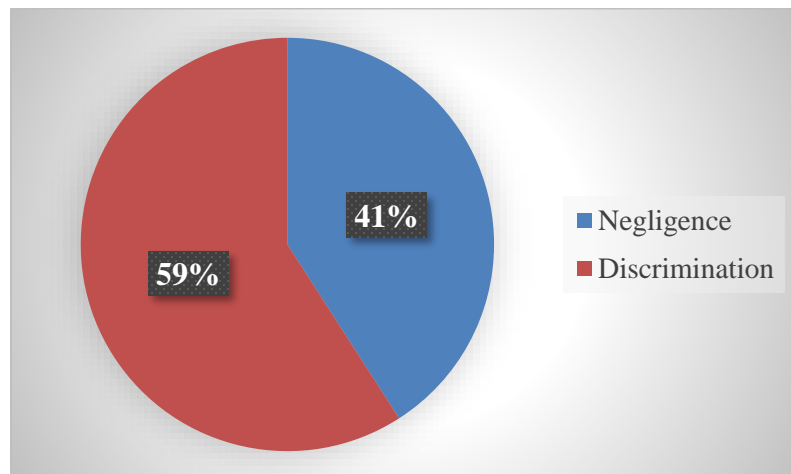
Among the 200 participants, 22 participants (11%) have experienced attitudinal barrier.



**Figure:** Attitudinal barrier faced by the participants

#### 4.12 Types of attitudinal barriers faced by the participants

The researcher has found that among the 200 participants, 9 participants (41%) have faced negligence and 13 participants (59%) have faced discrimination.



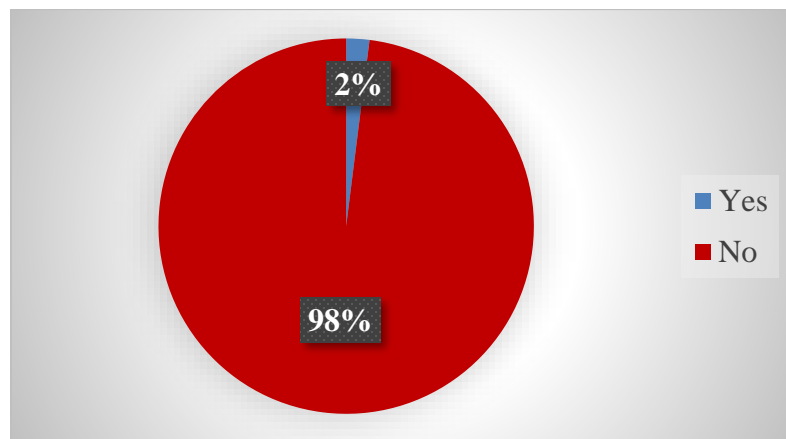
**Figure:** Types of attitudinal barriers faced by the participants

#### 4.13 Does this barrier prevent from taking treatment?

Among the 200 participants, 5 participants (2%) think that this attitudinal barrier prevents them from taking treatment.

#### 4.14 Communication barrier faced by the participants

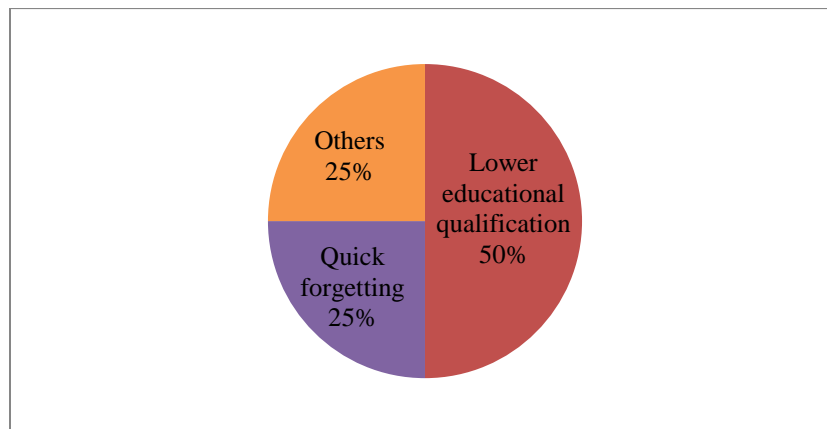
Among the 200 participants, 4 participants (2%) have experienced communication barrier.



**Figure:** Communication barrier faced by the participants

#### 4.15 Types of communication barriers faced by the participants

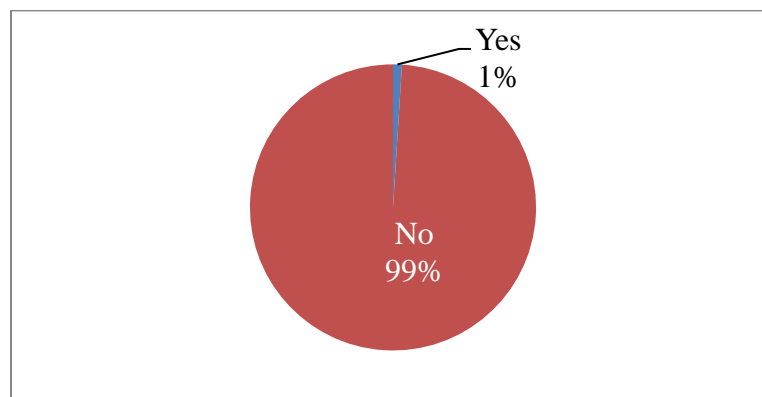
The researcher has found that among the 200 participants, 2 participants (50%) have faced communication barrier due to lower educational qualification, 1 participant (25%) has faced this barrier due to quick forgetting and 1 participant (25%) has faced this barrier due to other cause.



**Figure:** Types of communication barriers faced by the participants

#### 4.16 Does this barrier prevent from taking treatment?

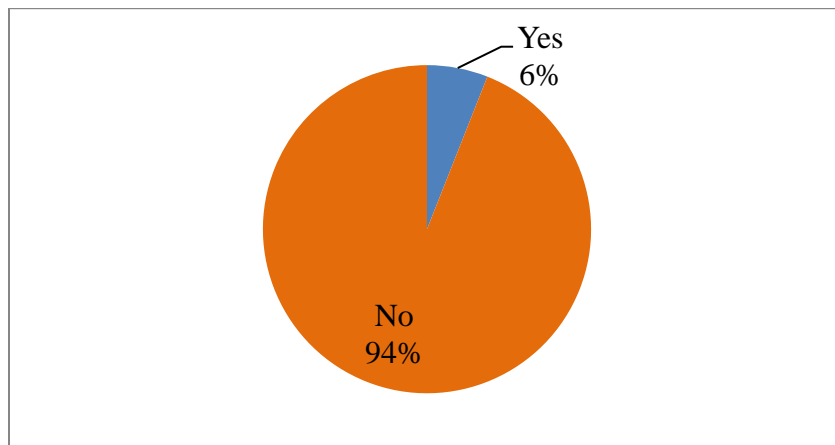
Among the 200 participants, 2 participants (1%) think that this communication barrier prevents them from taking



**Figure:** Prevent from taking treatment (Communication barrier)

#### 4.17 Physical barrier faced by the participants

Among the 200 participants, 12 participants (6%) have experienced physical barrier.



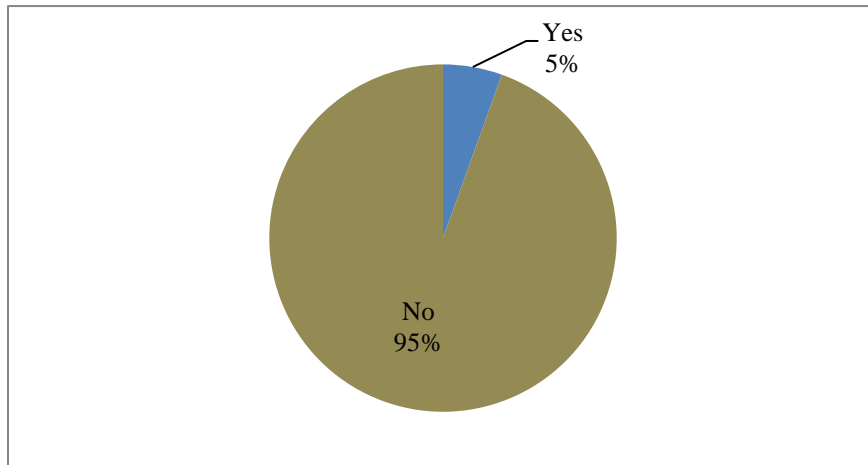
**Figure:** Physical barrier faced by the participants

#### 4.18 Types of physical barriers faced by the participants

The researcher has found that among the 200 participants, 3 participants (25%) have faced physical barrier due to steps and curbs that block them from entering a building and 9 participants (75%) have faced this barrier due to no accessible line or waiting area or service counter, lack of accessible parking and washroom.

#### 4.19 Does this barrier prevent from taking treatment?

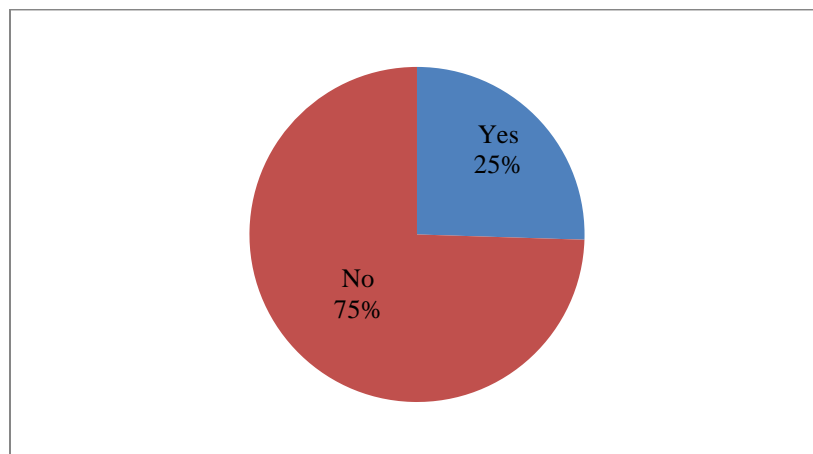
Among the 200 participants, 11 participants (5%) think that this physical barrier prevents them from taking treatment.



**Figure:** Prevent from taking treatment (Physical barrier)

#### 4.20 Schedule barrier faced by the participants

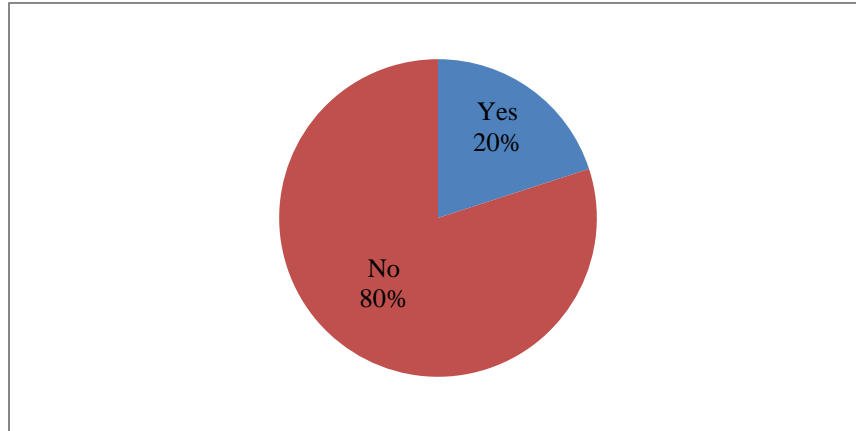
Among the 200 participants, 51 participants (25%) have experienced schedule barrier.



**Figure:** Schedule barrier faced by the participants

#### 4.21 Does this barrier prevent from taking treatment?

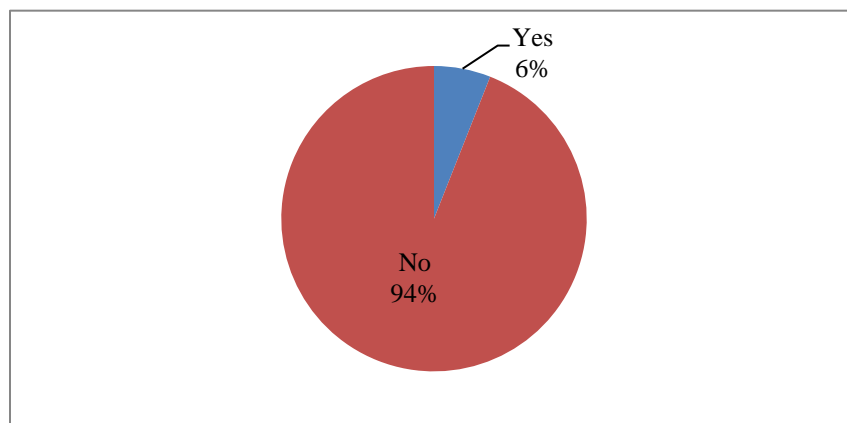
Among the 200 participants, 40 participants (20%) think that this schedule barrier prevents them from taking treatment.



**Figure:** Prevent from taking treatment (Schedule barrier)

#### 4.22 Accommodation barrier faced by the participants

Among the 200 participants, 12 participants (6%) have experienced accommodation barrier.



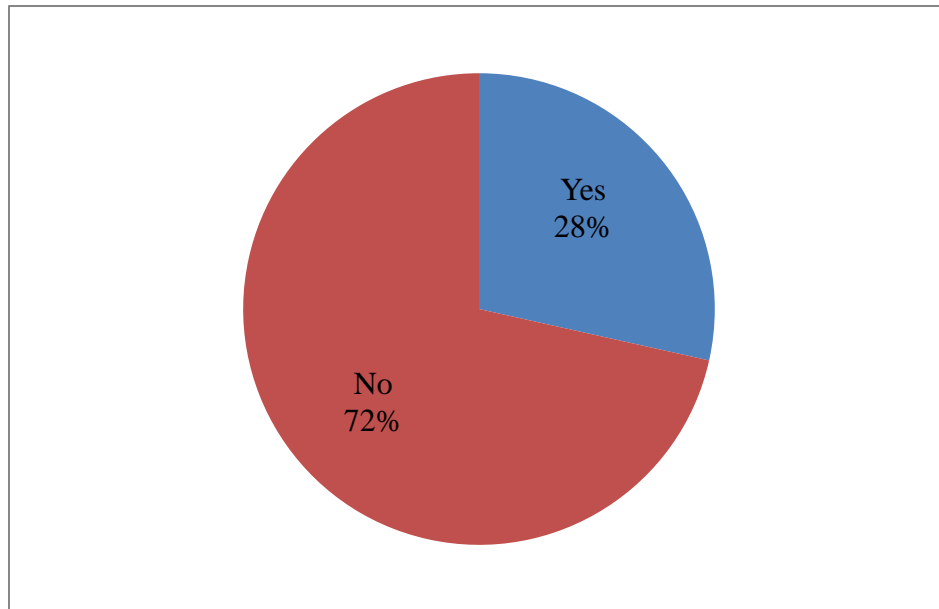
**Figure:** Accommodation barrier faced by the participants

#### 4.23 Types of accommodation barriers faced by the participants

The researcher has found that among the 200 participants, 3 participants (1.5%) have faced accommodation barrier due to lack of seat number at hospital setting, 8 participants (4%) have faced this barrier due to costly accommodation and 1 participant (.5%) has faced this barrier due to lack of facilities for disable people.

#### 4.24 Do you think the cost of treatment in CRP is expensive?

Among the 200 participants, 57 participants (28.5%) think that the treatment cost of CRP expensive and rest of the participants do not think so.

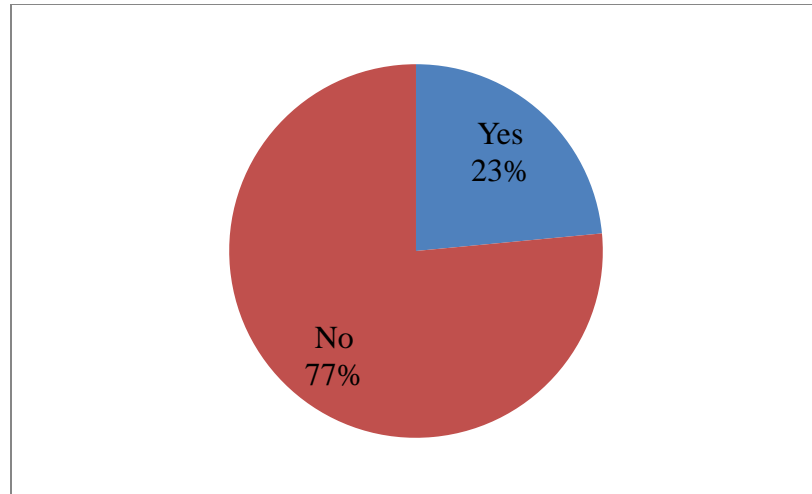


**Figure:** Treatment expense



#### 4.25 Does the treatment cost prevent from taking treatment?

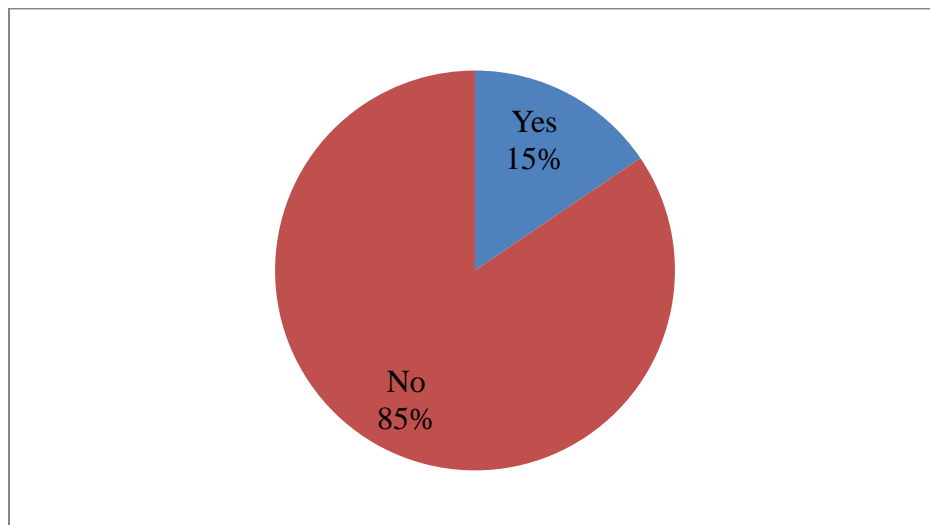
Among the 200 participants, 47 participants (23.5%) think that the treatment cost prevents them from taking treatment from CRP.



**Figure:** Prevent from taking treatment (Treatment cost)

#### 4.26 Transportation barrier faced by the participants

Among the 200 participants, 31 participants (15.5%) have experienced transportation barrier.



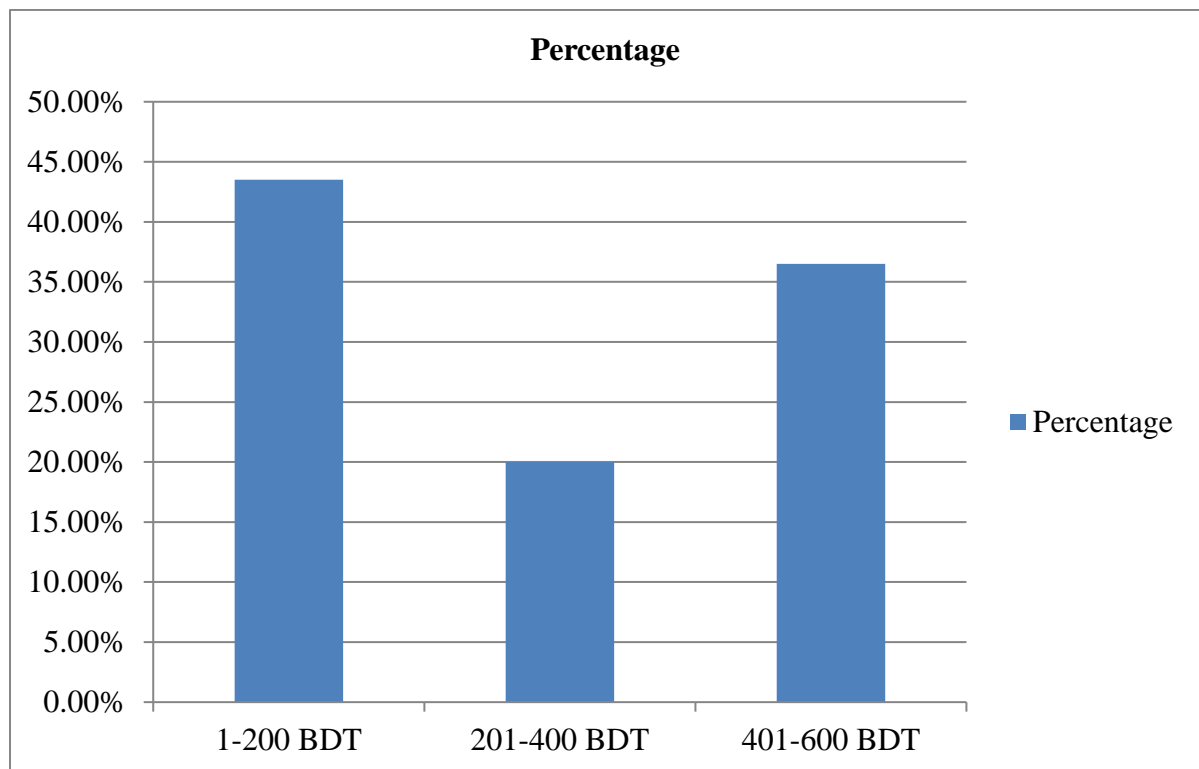
**Figure:** Transportation barrier faced by the participants

#### 4.27 Types of accommodation barriers faced by the participants

The researcher has found that among the 200 participants, 8 participants (4%) have faced transportation barrier due to expensive transportation cost, 12 participants (6%) have faced this barrier because of bad road and 11 participant (5.5%) has faced this barrier due to long distance.

#### 4.28 Transportation cost of the participants

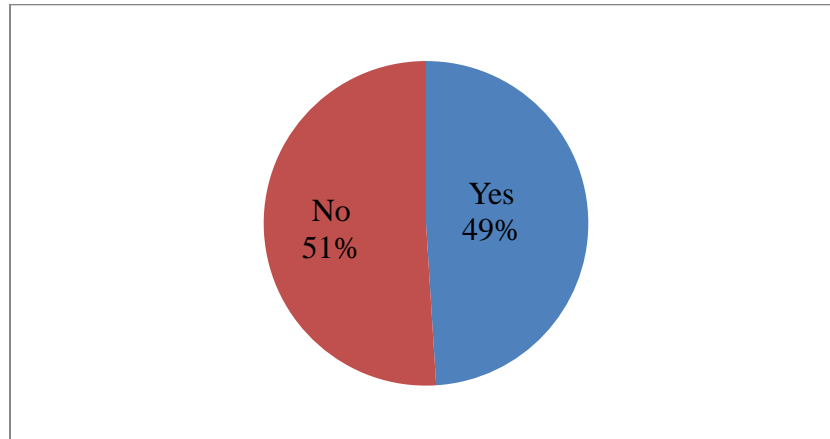
Among the 200 participant, 3 participants (1.5%) didn't need any transportation cost, transportation cost for 86 participants (43%) was between 1-200 BDT, transportation cost for 39 participants (19.5%) was between 201-400 BDT and transportation cost for rest of the 72 participants (36%) was between 401-600.



**Figure:** Transportation cost

#### 4.29 Does the transportation cost prevent from taking treatment?

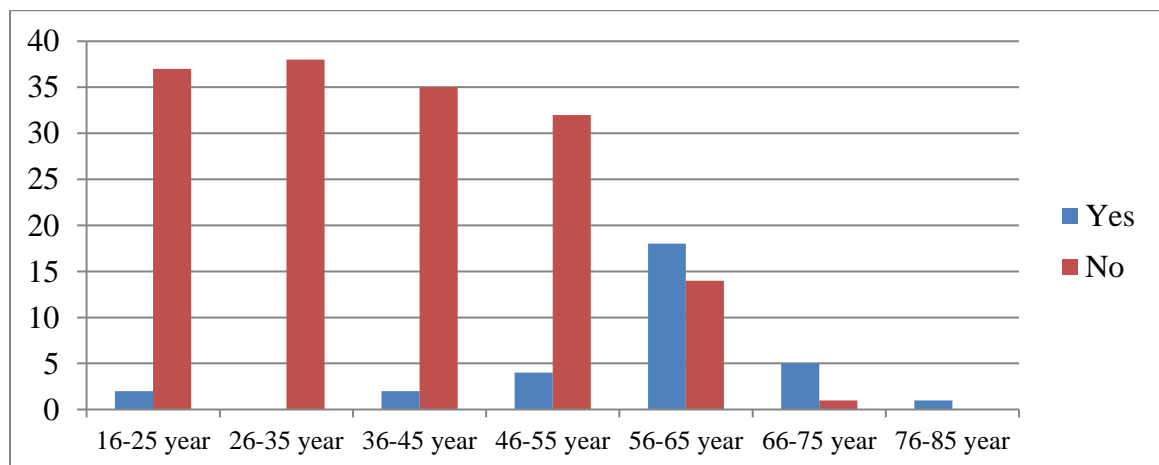
Among the 200 participants, 98 participants (49%) think that the transportation cost prevents them from taking treatment.



**Figure:** Prevent from taking treatment (Transportation cost)

#### 4.30 Cross tabulation between age and attitudinal barriers

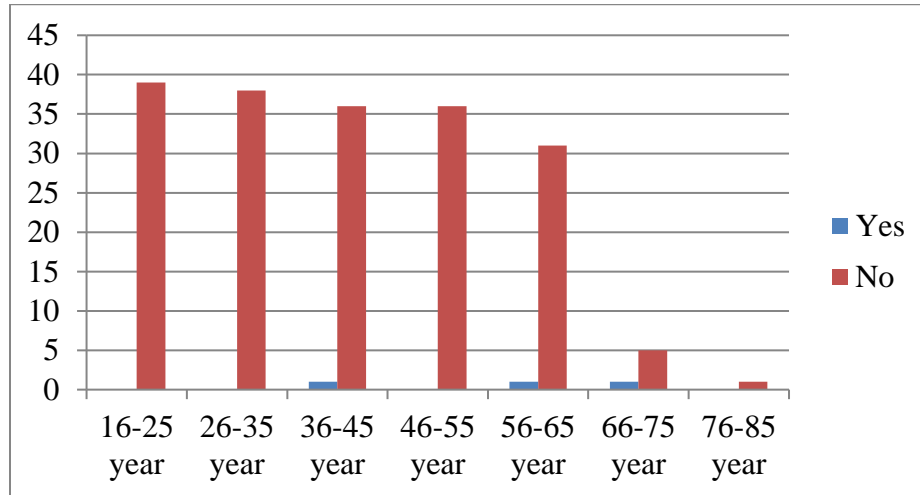
The observed Chi-square value was 74.860 and P-Value was 0.000. The result means Null- hypothesis was rejected and alternative hypothesis was accepted. So, there was an association between age and face attitudinal barrier.



**Figure:** Cross tabulation between age and attitudinal barriers

#### 4.31 Cross tabulation between age and communication barriers

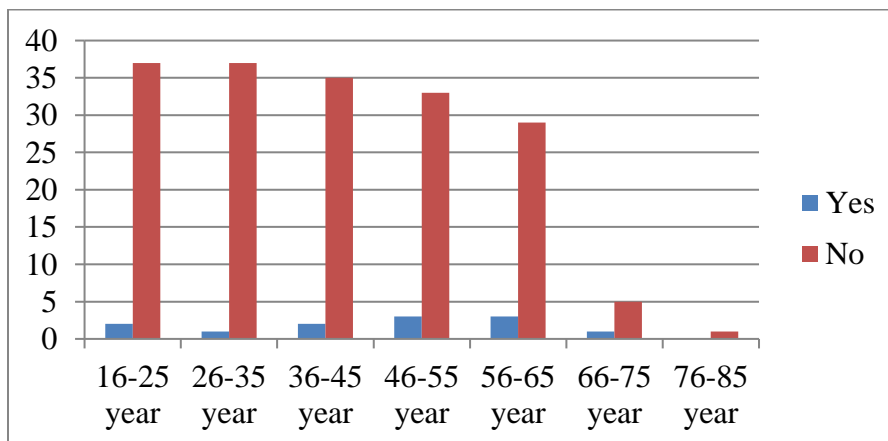
The observed Chi-square value was 11.352 and P-Value was 0.78. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Age and face communication of the participants.



**Figure:** Cross tabulation between age and attitudinal barriers

#### 4.32 Cross tabulation between age and physical barriers

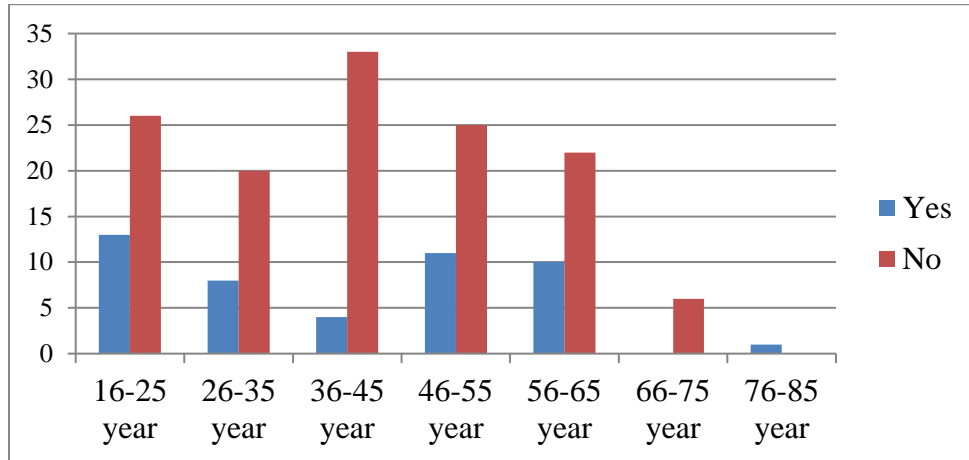
The observed Chi-square value was 2.909 and P-Value was 0.820. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Age and face physical of the participants.



**Figure:** Cross tabulation between age and physical barriers

#### 4.33 Cross tabulation between age and schedule barriers

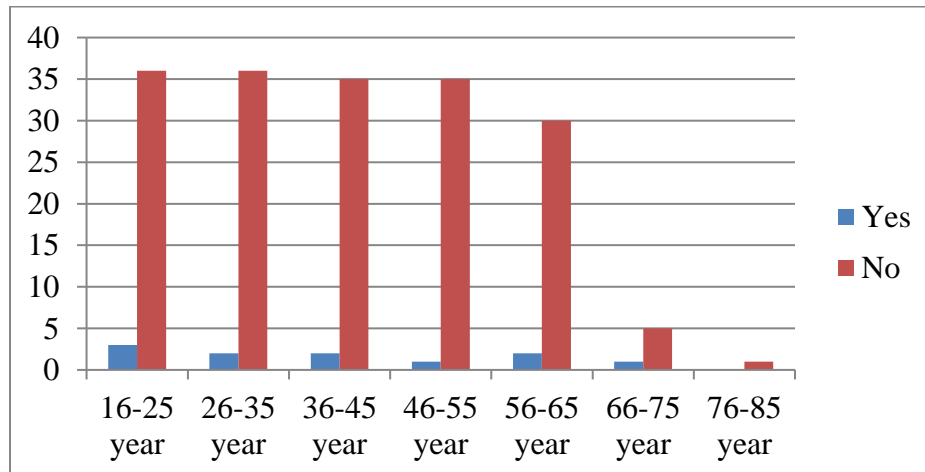
The observed Chi-square value was 12.033 and P-Value was 0.061. The result means Null- hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Age and face schedule of the participants.



**Figure:** Cross tabulation between age and schedule barriers

#### 4.34 Cross tabulation between age and accommodation barriers

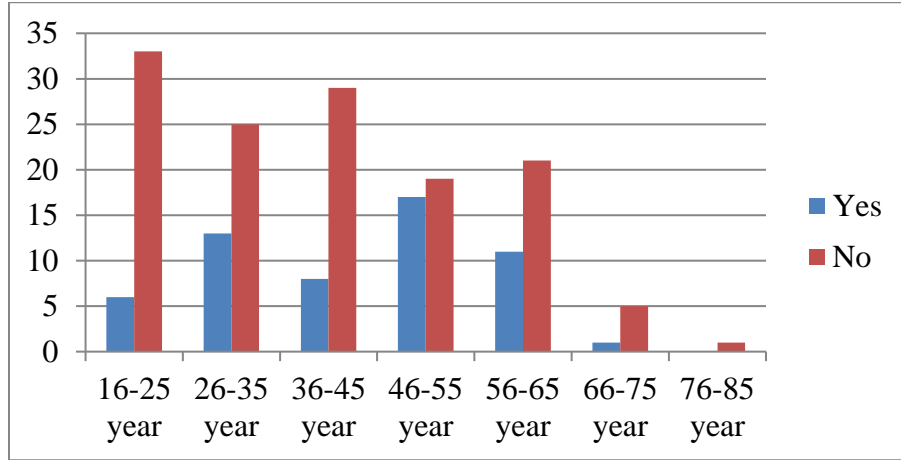
The observed Chi-square value was 2.251 and P-Value was 0.895. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Age and face accommodation of the participants.



**Figure:** Cross tabulation between age and accommodation barriers

#### 4.35 Cross tabulation between age and expensive treatment barriers

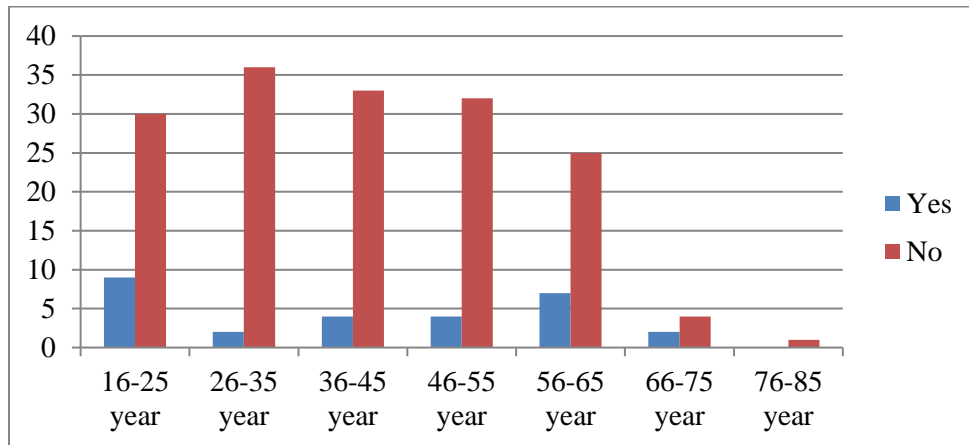
The observed Chi-square value was 11.910 and P-Value was 0.064. The result means Null- hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Age and treatment expensive of the participants.



**Figure:** Cross tabulation between age and expensive treatment barriers

#### 4.36 Cross tabulation between age and transportation barriers

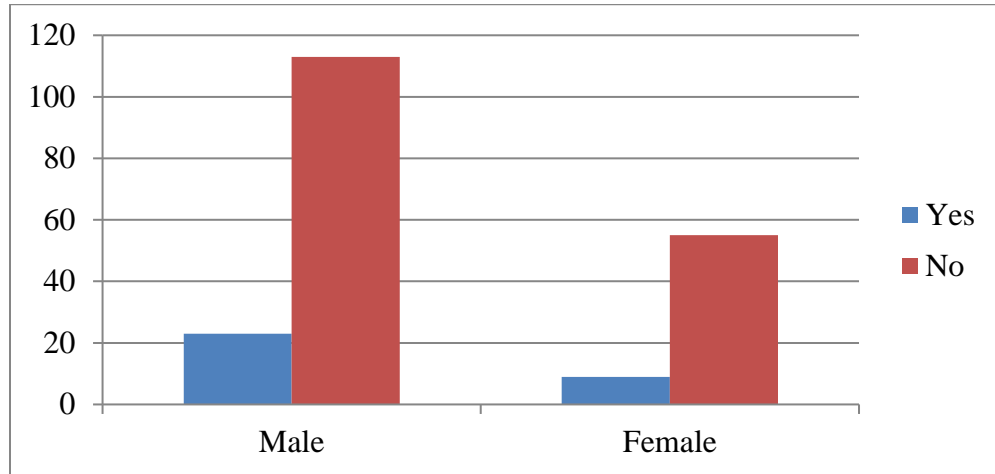
The observed Chi-square value was 8.786 and P-Value was 0.186. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Age and face transportation of the participants.



**Figure:** Cross tabulation between age and transportation barriers

#### 4.37 Cross tabulation between gender and attitudinal barriers

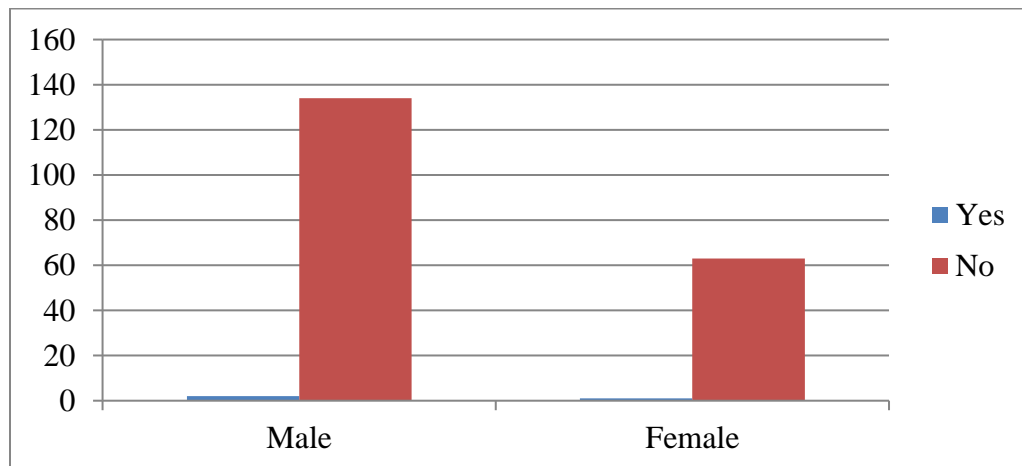
The observed Chi-square value was .263 and P-Value was 0.608. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between gender and face attitudinal barrier of the participants.



**Figure:** Cross tabulation between gender and attitudinal barriers

#### 4.38 Cross tabulation between gender and communication barriers

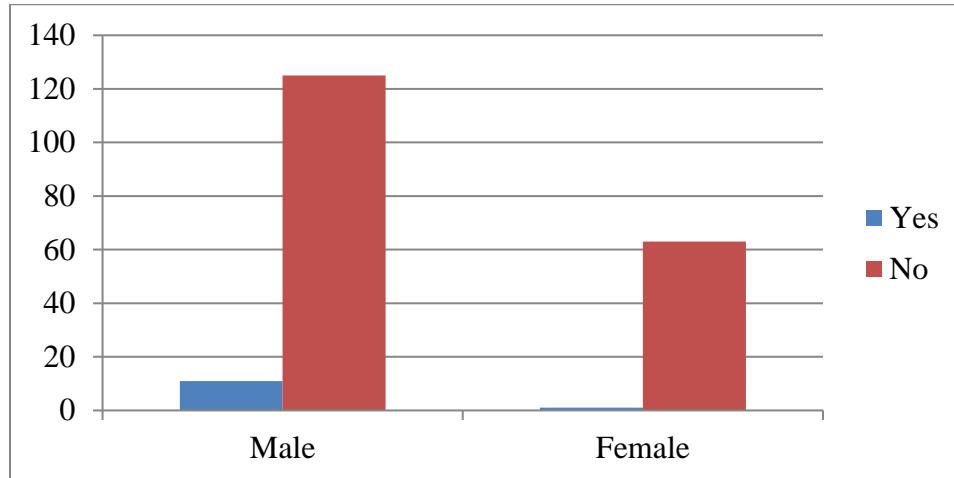
The observed Chi-square value was .002 and P-Value was 0.960. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between gender and face communication barriers of the participants.



**Figure:** Cross tabulation between gender and communication barriers

#### 4.39 Cross tabulation between gender and physical barriers

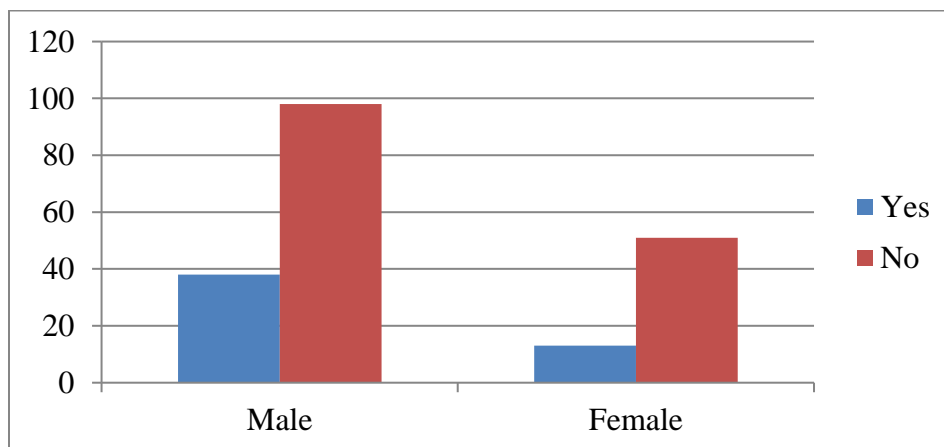
The observed Chi-square value was 3.286 and P-Value was 0.070. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between gender and face physical barriers of the participants.



**Figure:** Cross tabulation between gender and physical barriers

#### 4.40 Cross tabulation between gender and schedule barriers

The observed Chi-square value was 1.333 and P-Value was 0.248. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between gender and face schedule of the participants.

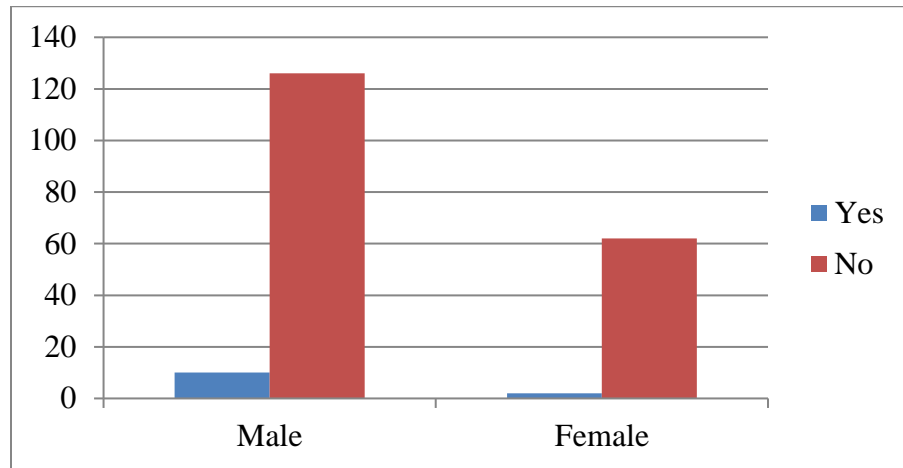


**Figure:** Cross tabulation between gender and schedule barriers



#### 4.41 Cross tabulation between gender and accommodation barriers

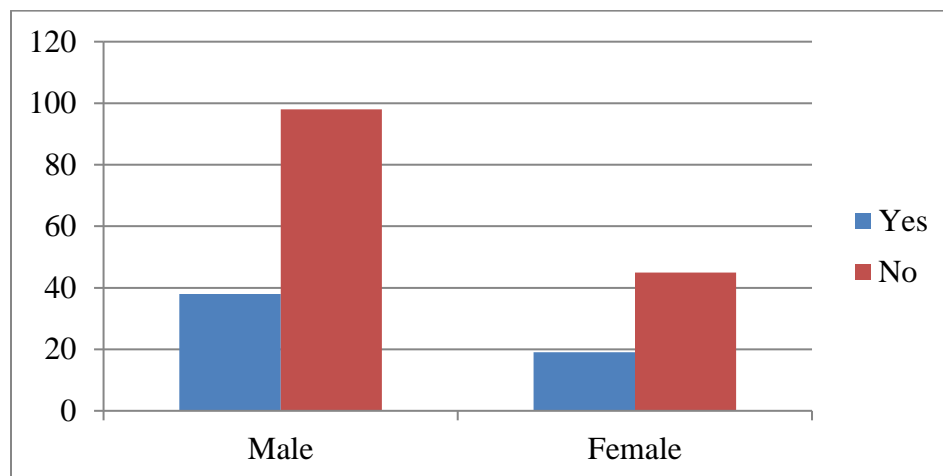
The observed Chi-square value was 1.379 and P-Value was 0.240. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between Sex and face accommodation of the participants.



**Figure:** Cross tabulation between gender and accommodation barriers

#### 4.42 Cross tabulation between gender and expensive treatment barriers

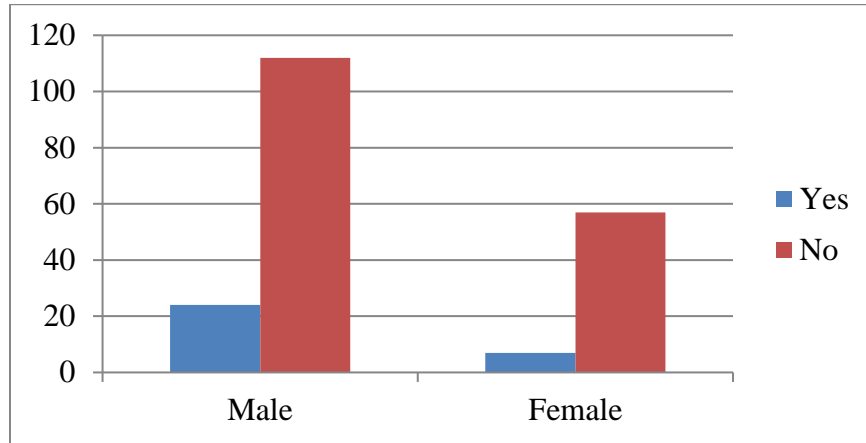
The observed Chi-square value was .065 and P-Value was 0.799. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between gender and treatment expensive barriers of the participants.



**Figure:** Cross tabulation between gender and expensive treatment barriers

#### 4.43 Cross tabulation between gender and transportation barriers

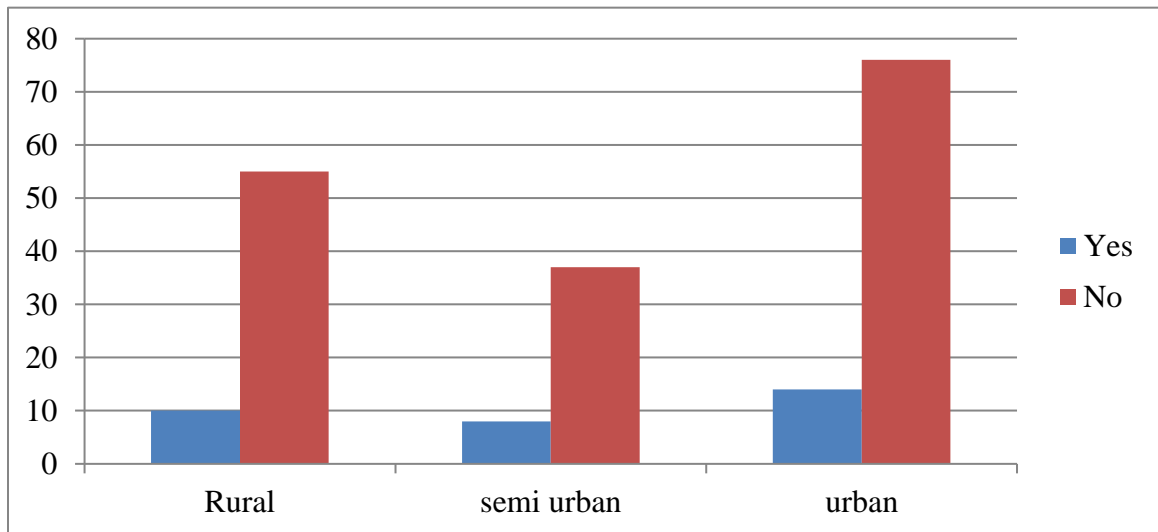
The observed Chi-square value was 1.496 and P-Value was 0.221. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between gender and face transportation barriers of the participants.



**Figure:** Cross tabulation between gender and transportation barriers

#### 4.44 Cross tabulation between living area and attitudinal barriers

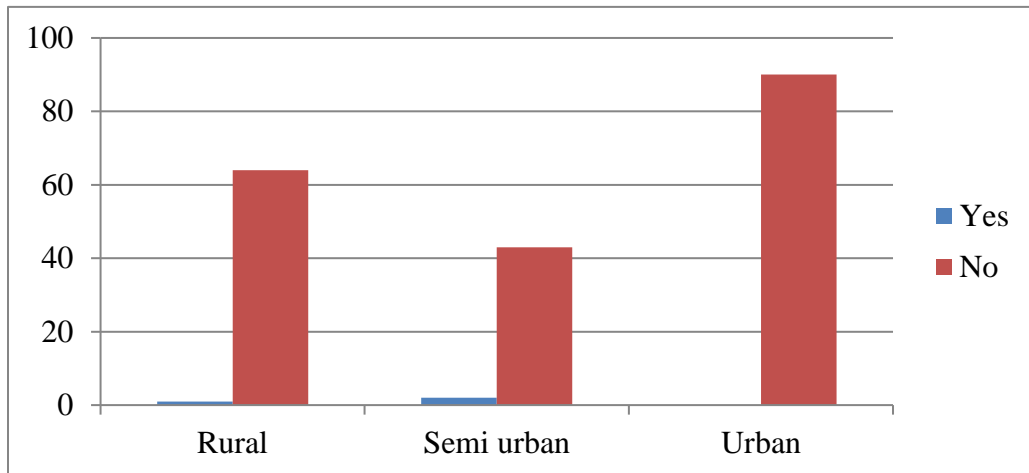
The observed Chi-square value was 0.137 and P-Value was 0.934. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between living area and face attitudinal barrier of the participants.



**Figure:** Cross tabulation between living area and attitudinal barriers

#### 4.45 Cross tabulation between living area and communication barriers

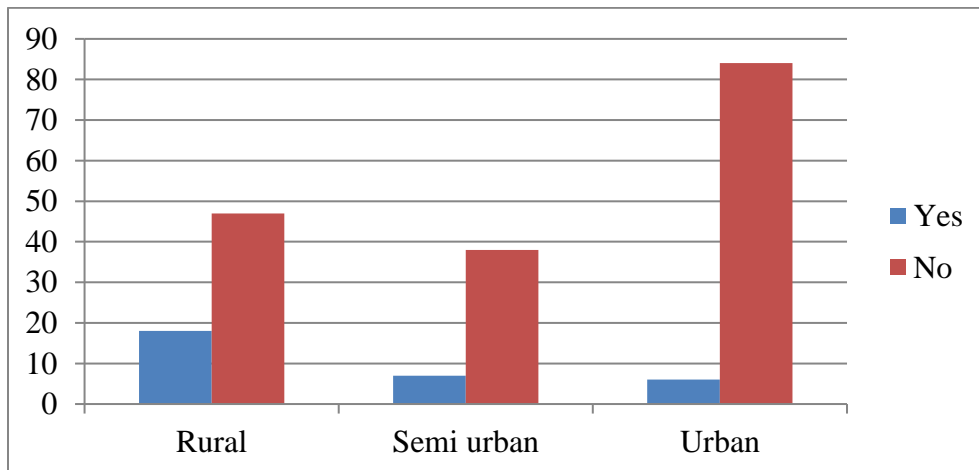
The observed Chi-square value was 1.055 and P-Value was 0.590. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between living area and face communication of the participants.



**Figure:** Cross tabulation between living area and communication barriers

#### 4.46 Cross tabulation between living area and transportation barriers

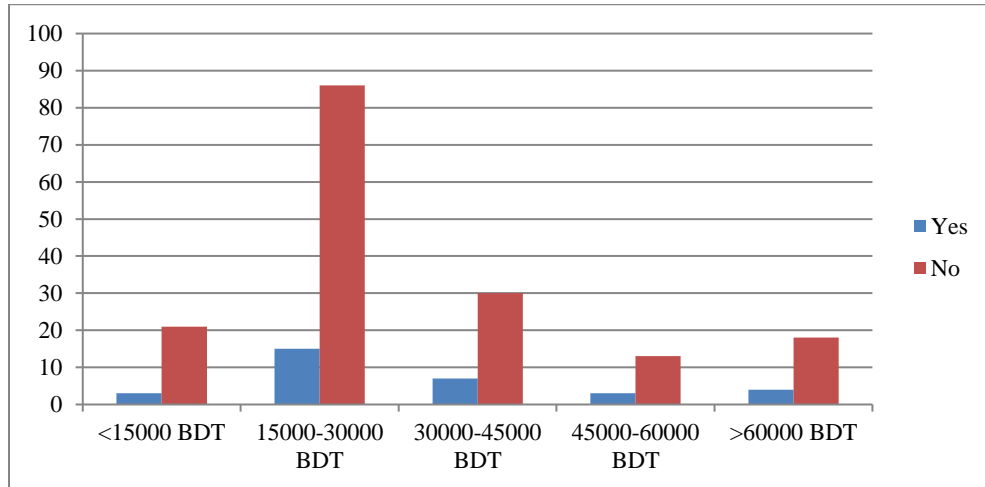
The observed Chi-square value was 12.739 and P-Value was 0.002. The result means Null- hypothesis was rejected and alternative hypothesis was accepted. So, there was an association between Living and face communication of the participants.



**Figure:** Cross tabulation between living area and transportation barriers

#### 4.47 Cross tabulation between monthly income and attitudinal barriers

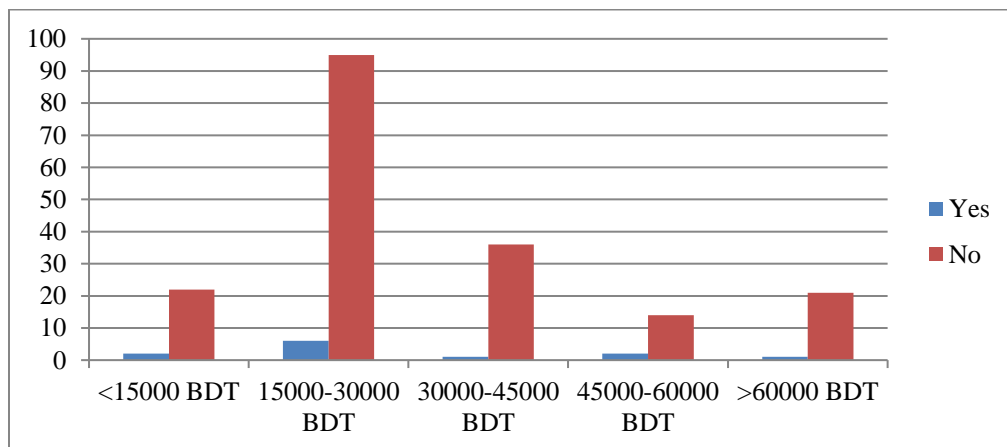
The observed Chi-square value was 0.720 and P-Value was 0.949. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between income and face attitudinal barrier of the participants.



**Figure:** Cross tabulation between monthly income and attitudinal barriers

#### 4.48 Cross tabulation between monthly income and accommodation barriers

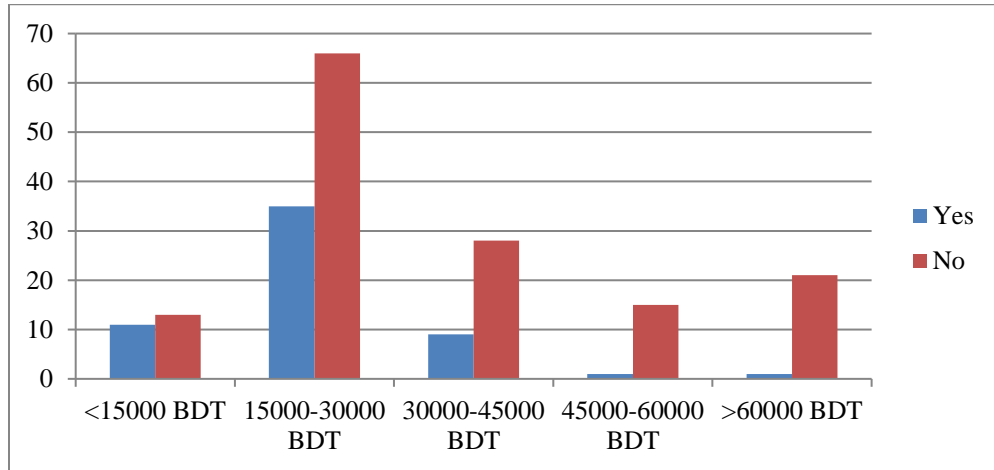
The observed Chi-square value was 2.227 and P-Value was 0.694. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between income and face accommodation barriers of the participants.



**Figure:** Cross tabulation between monthly income and accommodation barriers

#### 4.49 Cross tabulation between monthly income and expensive treatment barriers

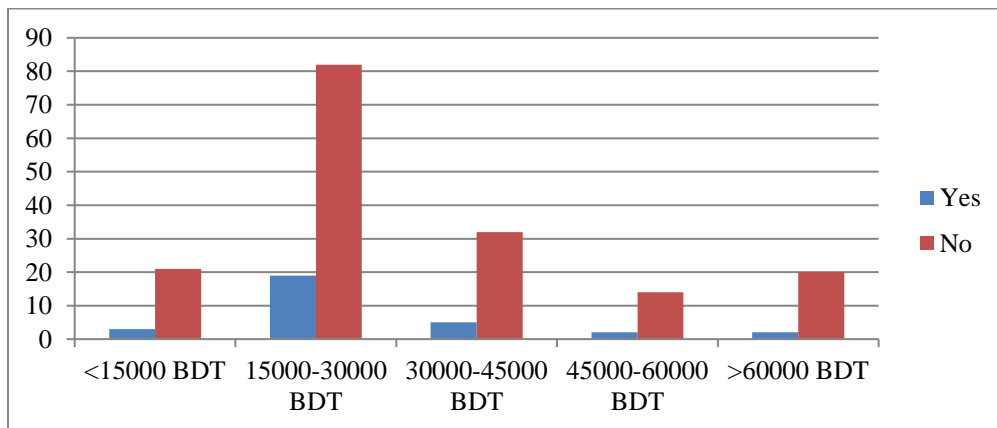
The observed Chi-square value was 15.814 and P-Value was 0.003. The result means alternative hypothesis was accepted and null hypothesis was rejected. So, there was an association between income and treatment expensive barriers of the participants.



**Figure:** Cross tabulation between monthly income and expensive treatment barriers

#### 4.50 Cross tabulation between monthly income and transportation barriers

The observed Chi-square value was 1.922 and P-Value was 0.750. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between income and face transportation barriers of the participants.



**Figure:** Cross tabulation between monthly income and transportation barriers

#### 4.51 Cross tabulation between occupation and attitudinal barriers

The observed Chi-square value was 11.942 and P-Value was 0.154. The result means Null- hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between occupation and attitudinal barriers of the participants.

**Table:** Cross tabulation between occupation and attitudinal barriers

<b>Occupation</b>	<b>Yes</b>	<b>No</b>	<b>Chi-square</b>	<b>P value</b>
Farmer	2	14	11.942	0.154
Rickshaw puller	1	1		
Garment worker	0	7		
Driver	0	5		
Businessmen	3	23		
Teacher	2	10		
Student	2	33		
Unemployed	3	5		
Others	19	70		

**Alpha value (P value) = [\* = <0.05, \*\* = <0.01, \*\*\* = <0.001]**

#### 4.52 Cross tabulation between occupation and communication barriers

The observed Chi-square value was 8.456 and P-Value was 0.390. The result means Null-hypothesis was accepted and alternative hypothesis was rejected. So, there was no association between occupation and communication barriers of the participants.

**Table:** Cross tabulation between occupation and communication barriers

Occupation	Yes	No	Chi-square	P value
Farmer	0	16	8.456	0.390
Rickshaw puller	0	2		
Garment worker	0	7		
Driver	0	5		
Businessmen	0	26		
Teacher	0	12		
Student	0	35		
Unemployed	1	7		
Others	2	87		

**Alpha value (P value) = [\* = <0.05, \*\* = <0.01, \*\*\* = <0.001]**

#### 4.53 Cross tabulation between occupation and expensive treatment barriers

The observed Chi-square value was 19.324 and P-Value was 0.013. The result means Alternative- hypothesis was accepted and Null hypothesis was rejected. So, there was an association between occupation and treatment expensive barriers of the participants.

**Table:** Cross tabulation between occupation and expensive treatment barriers

Occupation	Yes	No	Chi-square	P value
Farmer	6	10	19.324	*0.013
Rickshaw puller	1	1		
Garment worker	2	5		
Driver	2	3		
Businessmen	4	22		
Teacher	0	12		
Student	4	31		
Unemployed	4	4		
Others	34	55		

**Alpha value (P value) = [\* = <0.05, \*\* = <0.01, \*\*\* = <0.001]**



The health requirements of people are met through conducting health promotions, providing preventive care such as immunizations, treating diseases, and referring patients to specialized treatments if necessary (World Bank & WHO, 2011). Despite all of these accomplishments, there are still those individuals who have not benefited from the advancements that have been made. The terms health and disability are often interchangeable, with the former being linked to a broad variety of main health issues (Krahn, 2011).

According to Bickenbach, (2011) it is becoming easier to obtain the medical care that is required for the prevention and treatment of impairments. This includes services such as eye care for people who have vision problems, auditory services for people who have hearing impairments, and physical rehabilitation services for people who have mobility impairments, amongst others. The notion that persons with disabilities are individuals who also need access to general healthcare — healthcare that is not expressly tied to their handicap – is rather often neglected or disregarded, despite the fact that these services are quite important. As a consequence of this, the numbers of individuals with disabilities who do not get healthcare services are much higher than the numbers of persons without impairments, and this is especially the case in nations with low incomes (Wylie, et al.,2013).

In this study, there were a total of two hundred people that took part. There were 200 people who took part in the study, and the average age of those participants was 40.68 years old, with a standard deviation of -15.07 years. The median age was 40.00, the mode was 22, the highest age was 82, and the lowest age was 17.

Iezzoni, et al., 2006 found that the age-adjusted odds ratio in 2011 was 1.00; the 95 percent confidence interval (CI) ratio was 1.00, and the p value was.003. In 2009, slightly more than 29 percent of individuals between the ages of 25 and 34 were uninsured, compared to 17.8 percent of those between the ages of 45 and 54 and 13.9 percent of individuals between the ages of 55 and 64. One third of those who do not have health

insurance are young individuals who consider themselves to be invincible and hence do not feel the need to get it since they do not believe they would ever need medical treatment.

Lishner, et al., 1996 estimate that examine the correlations between certain demographic factors, various markers of disability, and insurance status, and reported access issues, having any access barrier, utilizing these characteristics as the predictor variables in order to do so. Increasing age and female sex were favorably related with reporting any access restriction, but Hispanic ethnicity was adversely associated with reporting barriers.

In this study 136 of the participants were male, and 64 of the participants were female out of a total of 200 participants. The ratio of male participants was 68 percent, while the number of female participants was 32 percent.

Studies of patient preferences have repeatedly revealed this as well, with gender-concordant providers being arguably the most essential accommodation for Muslim women (Meldrum, et al., 2016). Studies conducted in both developed and developing settings have come to the conclusion that a lack of access to a female provider is associated with delayed care-seeking and refusal of care. On the other hand, studies have found that greater access to female providers may lead to concordance with screening guidelines (Tanke, et al., 2012).

In this study 71% of the total participants, or 142 people, were married, 24%, or 49 people, were single, 1.5%, or 3 people, were divorced, and 3%, or 6 people, were widowed. And Out of 200 participants, 32.5 percent (n=65) participants came from rural region, 22.5 percent (n=45) participants came from semi urban area and 45 percent (n=90) participants came from urban area.

According to Kirschner, et al., (2007) there were fewer demographic differences between people with and without disabilities who were uninsured, but people with disabilities were significantly older and more likely to be female, non-Hispanic, and have very low family incomes. Persons without disabilities were significantly more likely to be Caucasian. When compared to insured individuals without disabilities, insured persons with disabilities were more likely to be older, female, black, non-Hispanic, had less than

a high school education, have lower incomes, and have less education than covered persons without disabilities (  $p < .001$  for all comparisons) (Iezzoni, et al., 2006).

In this study 1 percent ( $n=2$ ) of the participants worked as rickshaw pullers, 3.5 percent ( $n=7$ ) of the participants were garment workers, 2.5 percent ( $n=5$ ) of the participants were drivers, 13 percent ( $n=26$ ) of the participants were businessmen, 6 percent ( $n=12$ ) of the participants were teachers, 17.5 percent ( $n=35$ ) of the participants were students, 4 percent ( $n=8$ ) of the participants were unemployed, and others made up 44.5 percent ( $n=89$ ).

Schuler, 2015 estimate that defining words is critical to promoting better awareness and understanding of the issue of low-income families and children having little or no access to health care. People with lower incomes are more likely to suffer from mental illness, which may lead to more serious health problems. Schuler conducted a cross-sectional, quantitative investigation in 2015 to see whether a poorer standard of living and a low income go hand in hand. A link between the two was found, although money alone is not a reliable indicator of poor quality of life. Instead, having a poor income correlates to a reduced self-perception, which consequently reduces one's quality of life (Savage, et al., 2016).

The researcher found that, the majority of the 200 participants ( $n=64$ ) lived in households with six or more people, which accounts for 36 percent of the total. As a result, 58 participants had four family members (26.5 percent), 48 participants had five family members (24 percent), 19 participants had three family members (9.5 percent), and 2 participants had two family members.

Socioeconomic position and family structure combine to make the care that low-income folks need particularly special. Despite having health insurance, many families are unable to get the treatment they need because of the stress of the family dynamic (Fairbrother, et al., 2005). Financial difficulties, employment uncertainty, and an inability to cope with stress all contribute to stressful situations. A key reason why low-income families don't obtain preventive and primary care is because of these pressures is the logistical parts of receiving health care (such as transportation to the institution). As a result of the

difficulties in affording insurance and paying co-pays, low-income families tend to prioritize the health of their children above the health of their own, which sends the message to their children that their parents' health is less important. As a result, low-income parents tend to have worse health than their wealthier counterparts, which in turn raises their degree of anxiety (Wen, et al., 2015).

The researcher found in this study, 24 participants, or 12 percent of the total, had a monthly income of less than 15,000 BDT; 101 participants, or 50.5%, and 191 participants, which is 95.5 percent of the total, have received physiotherapy service; 3 participants, which is 1.5 percent of the total, have received occupational service; 1 participant, which is 1 percent of the total, has received speech and language therapy service; and the remaining 5 participants, which is 2.5 percent, have received other services.

## **Barriers on the Demand side**

### **Lack of Information on the Availability of Services**

People with disabilities may not be aware that they are eligible for healthcare services in mainstream health centers, according to current study (Ormsby et al, 2012) .Gudlavalleti et al (2014) found that despite the fact that persons with disabilities have a greater need for healthcare, there are substantial differences between people with and without impairments when it comes to their understanding of where to go for treatment. There is a dearth of information available in accessible forms for persons with disabilities, and as a result, many of them are unaware that they may get HIV testing and treatment (Tun et al, 2016). Only 18% of Cambodians with disabilities, compared to more than half of the general population, understood how to cure cataracts, according to a Knowledge, Attitudes and Practice (KAP) study conducted there (Ormsby et al, 2012).

### **Additional Expenses to Access Healthcare**

People with a variety of impairments often cited the high expense of going to and obtaining healthcare as a major barrier to treatment (Ahumuza et al, 2014). A lack of work opportunities, as well as a lack of subsidies and insurance programs that may help

with healthcare expenditures, can put people with disabilities at risk of poverty (CBM, 2016). People with disabilities, on the other hand, have greater healthcare demands and, as a result, higher expenditures. In addition, the exorbitant expense of (public) transportation prevents many persons with impairments from visiting a medical institution (Mavuso & Maharaj, 2015).

### **Limited Mobility**

Of the 16 publications examined, at least eight cite transportation and other mobility concerns as a deterrent to seeking health treatment (Eide et al, 2015). Lack of support from family members is a major source of mobility-related constraints on the demand side of the equation. People with visual and physical limitations, in particular, are at risk since it is difficult for them to go to a health center on their own (Ganle et al, 2016). Due to their femininity and the fact that they are pregnant, women seeking prenatal or maternity treatment are particularly susceptible in this circumstance. Taxi drivers and other passengers on public transportation in Uganda are said to have made fun of or rejected people with impairments. Because health centers are often located at great distances from the homes of persons with disabilities, and public transportation might also be inaccessible at times, it is necessary to identify and account for alternate means of transportation in transportation budgets. It may also be the case that the roads and walkways are in bad condition, that there are no ramps present, that the terrain is hilly, or that it is flooded, all of which make it difficult for individuals with disabilities to negotiate the journey on foot (Ahumuza et al, 2014).

### **Stigmatisation and Marginalisation**

Access to healthcare is hampered by the stigma and marginalization that many people face. Discrimination, shyness, and lack of self-confidence among persons with disabilities are often rooted in unfavorable family and community views (UPHLS, 2015). Families with disabled loved ones prefer to conceal them in their homes out of shame, which is a kind of marginalization. Negative attitudes in the family may also be shown in the lack of practical assistance provided to a family member with a disability. Disabled

persons are generally seen as asexual creatures, and this is especially true when it comes to sexual and reproductive health (Ledger, 2016).

### **Barriers on the Supply side/ Healthcare Service Provision**

Healthcare workers and service providers' unfavorable views have been thoroughly documented, with all studies but one indicating negative attitudes as a barrier to treatment (Mprah, 2013) As a result of a lack of information about the requirements of persons with disabilities, healthcare practitioners seem to be indifferent (Kritzinger et al, 2014).

It's difficult for health center employees and patients with impairments to communicate effectively. Individuals with speech and hearing impairments (Gaihre et al, 2016) are more likely to experience this, and it is believed that people with cognitive or psychosocial disabilities would experience it in a similar way. Deaf ladies have lost their kids because they couldn't comprehend the directions of midwives, according to the same sources. Other ladies have had problems with physicians who don't know how to read their medical records. As a result of their erroneous assumptions about what their patients mean, physicians often prescribe the incorrect medication (Baart, et al, 2017)

11 of the 16 publications in Burke et al. (2017) estimate that inaccessible healthcare facilities and equipment in health centers tend to be some of the major hurdles to accessing healthcare. For those with disabilities, this is especially true. The absence of ramps, toilets or latrines, walkways, or functioning elevators are only a few of the many difficulties encountered by people with disabilities while trying to access health care facilities.

**Limitations of the study:**

To make successful research it may be time consuming. As I get short period of time to complete the research, I have to take small sample size that is 200. If large number of sample size was taken, the result would be more reliable and appropriate and also give a clear perception about barriers of patients attending at CRP. Only 200 samples do not represent the large number of patients attending at CRP. As it was the first research of the researcher so there might be some mistakes that should be overlooked by the supervisor and the honorable teachers.

**6.1 Conclusion**

This study explored the barriers of receiving rehabilitation services for the patients attending at CRP. The study demonstrated some common problems they faced. Schedule barrier and treatment expense at CRP are the major barriers. Patients and career may face many problems during receiving treatment at CRP. In CRP, treatment cost they told it is costly but it is limited. Other barriers like attitudinal barrier, physical barrier, communication barrier, accommodation barrier and transportation barrier may prevent them from taking treatment from CRP in some of the cases. Treatment can be good but other side hampers patient's condition. As they got some improvement by taking treatment in CRP, they are more hopeful to get improvement so that the patient can lead a better life.

**6.2 Recommendation**

As the study conduct through finding barriers of patients during receiving treatment in CRP, some barriers are found as patient's requirements such as schedule barriers, attitudinal barrier, accommodation barriers which patients suffer fairly to look for a seat inside of CRP, physical barrier According to patient's statement, most of them marked treatment as quality full. And also, transportation cost barrier. Moreover, there may be many other barriers that may not have been worked on in this study. Hopefully in the future someone will deal with others barriers. Although patients are facing some barriers rather almost, they are happy with their therapist's behavior and application procedure treatment. The patients give their opinion about barriers they face.



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**Appendix-A**

**Consent form**

I am Md. Shakirun Islam, 4th year student of B.Sc. in Physiotherapy in Bangladesh Health Profession Institute. I am conducting research and the title is “Barriers of Receiving Rehabilitation Services for the Patients Attending at CRP” which is included in my course. For that I'm asking you to answer some questions, which will not take time more than 10-15 minutes. It also ensures that the information you provide will be kept confidential. Participation here depends on your own will. If you want, you can skip your name from the list of participants at any time. In addition, if you have any questions as a participant in this study or if there is any problem, you can contact with me or my supervisor Md. Shofiquel Islam, Associate Professor & Head, Department of Physiotherapy, BHPI.

Do you have any questions before starting the research?

Can I start this interview with your permission?

Yes.....

No.....

Participant's signature and date .....

Witness's signature and date.....

## Appendix-B

### সম্মতিপত্র

(অংশগ্রহনকারীকে পড়ে শোনাতে হবে)

আস্‌সালামুআলাইকুম,

আমার নাম মো: শাকিরুন ইসলাম, আমি এই গবেষণা প্রকল্পটি বাংলাদেশ হেলথ প্রফেশন ইনস্টিটিউট (বি এইচ পি আই ) এ পরিচালনা করছি যা আমার ৪র্থ বর্ষ বি. এসসি ইন ফিজিওথেরাপী কোর্সের অধিভুক্ত। আমার গবেষণার শিরোনাম “ সি আর পি তে উপস্থিত রোগীদের পুনর্বাসন পরিসেবা প্রাপ্তির বাধা সমূহ” এই পরীক্ষামূলক গবেষণার মাধ্যমে আমি সি আর পি তে রোগীদের পুনর্বাসন পরিসেবা প্রাপ্তির বাধাগুলো নিয়ে পরিমাপ নিরূপণের একটি পরীক্ষা করব। এতে আনুমানিক ২০-৩০ মিনিট সময় নিবো। আমি আপনাকে অবগত করছি যে,এটা আমার অধ্যয়নের অংশ এবং যা অন্যকোন উদ্দেশ্যে ব্যবহার হবে না।গবেষক সরাসরি এই ম্নায়ুজ্ঞান অধ্যয়নের সাথে অন্তর্ভুক্ত নয়।তাই এই গবেষণায় আপনার অংশগ্রহণ বর্তমান ও ভবিষ্যৎ চিকিৎসায় কোন প্রকার প্রভাব ফেলবেনা। আপনি যে সব তথ্য প্রদান করবেন তার গোপনীয়তা বজায় থাকবে এবং আপনার প্রতিবেদনের ঘটনা প্রবাহে এটা নিশ্চিত করা হবে যে এই তথ্যের উৎস অপ্রকাশিত থাকবে।

এই অধ্যয়নে আপনার অংশগ্রহন স্বেচ্ছাপ্রণোদিত এবং আপনি যে কোন সময় এই অধ্যয়ন থেকে কোন নেতিবাচক ফলাফল ছাড়াই নিজেকে প্রত্যাহার করতে পারবেন। এছাড়াও কোন নির্দিষ্ট প্রশ্ন অপছন্দ হলে উত্তর না দেয়ার এবং সাক্ষাৎকারের সময় কোন উত্তর না দিতে চাওয়ার অধিকারও আপনার আছে।

এই অধ্যয়নে অংশগ্রহনকারী হিসেবে যদি আপনার কোন প্রশ্ন থাকে তাহলে আপনি আমাকে অথবা এবং মোঃ সফিকুল ইসলাম, সহযোগী অধ্যাপক এবং ফিজিওথেরাপি বিভাগের প্রধান, সিআরপি, সাভার, ঢাকা-১৩৪৩-তে যোগাযোগ করতে পারেন।

সাক্ষাৎকার শুরু করার আগে আপনার কি কোন প্রশ্ন আছে?

আমি আপনার অনুমতি নিয়ে এই সাক্ষাৎকার শুরু করতে যাচ্ছি।

হ্যাঁ...  না

১। অংশগ্রহনকারীর স্বাক্ষর .....

২।সাক্ষাৎগ্রহনকারীর স্বাক্ষর .....

৩। গবেষক এর স্বাক্ষর .....



## Appendix-C

### Barriers of receiving rehabilitation services for the patients attending at CRP

#### Part 1: Socio-demographic profile

Interview schedule		
	<b>Name of Participants</b>	
<b>1.1</b>	<b>Date of Interview:</b>	
<b>1.2</b>	<b>Address:</b>	
<b>1.3</b>	<b>Mobile number:</b>	
<b>1.4</b>	<b>Consent Taken:</b>	<b>Yes / No</b>

QN	Questions	Response/Answer	Code
<b>1.5</b>	Age	Please Write	
<b>1.6</b>	Sex	Male Female	01 02
<b>1.7</b>	Marital status	Married Unmarried Divorced Widow	01 02 03 04
<b>1.8</b>	Residential area	Rural Semi-urban Urban	01 02 03
<b>1.9</b>	Education	Non-education Primary Secondary Higher Secondary Graduate postgraduate	01 02 03 04 05 06

<b>1.10</b>	Occupation	Farmer Rickshaw puller Garment worker Driver Businessmen Teacher Student Unemployed Others (specify).....	01 02 03 04 05 06 07 08 09 10
<b>1.11</b>	Family member	Write in number	
<b>1.12</b>	Earning member	Write in number	
<b>1.13</b>	Monthly income	Write in BDT	
<b>1.14</b>	Diagnosis		
<b>1.15</b>	What kind of rehabilitation services are you receiving from CRP?	Physiotherapy Occupational therapy Speech & language therapy Others	01 02 03 04

## Part II: Attitudinal Barriers

<b>2.1</b>	Do you face any attitudinal barriers when you come to take treatment at CRP?	Yes No	01 02
<b>2.2</b>	If yes, what type of attitudinal barriers are you facing?	Negligence Prejudice Discrimination Others	01 02 03 04
<b>2.3</b>	Are these attitudinal barriers can prevent you from taking treatment in CRP?	Yes No	01 02

### Part III: Communication Barriers

QN	Questions	Response/Answer	Code
3.1	Do you face any communication barriers while taking rehabilitation services at CRP?	Yes No	01 02
3.2	If yes, what types of communication barriers do you face?	Lower educational qualifications Quick forgetting  Use of regional languages Unable to read Unable to write Unable to understand Others	01 02  03 04 05 06 07
3.3	Are these communication barriers preventing you from taking treatment at CRP?	Yes No	01 02

### Part IV: Physical Barriers

QN	Questions	Response/Answer	Code
4.1	Do you face any physical barriers while taking rehabilitation services at CRP?	Yes No	01 02
4.2	If yes, what types of physical barriers do you face?	Steps and curbs that block me from entering a building  Steps without ramps or elevators  Lack of automatic or push-button doors  Low light or weak color contrast  Narrow sidewalks, doors or isles  Table without knee	01  02  03  04  05

		and toe clearance	06
		No accessible line or waiting area or service counter, lack of accessible parking and washroom	07
		Others (Please Specify)	08
<b>4.3</b>	Are these communication barriers preventing you from taking treatment at CRP?	Yes No	01 02

### **Part V: Policy Barriers**

<b>QN</b>	<b>Questions</b>	<b>Response/Answer</b>	<b>Code</b>
<b>5.1</b>	Do you face any schedule barriers in CRP during receiving treatment?	Yes No	01 02
<b>5.2</b>	If yes, are these schedule barriers preventing you from taking treatment at CRP?	Yes No	01 02
<b>5.3</b>	Do you face any barriers of accommodation facilities in CRP?	Yes No	01 02
<b>5.4</b>	What types of accommodation barriers do you face?	Lack of seat number at hospital settings  Costly accommodation  Lack of facilities for disable people  Others (please specify)	01  02  03  04
<b>5.5</b>	Do you think that treatment of CRP is expensive?	Yes No	01 02

<b>5.6</b>	If yes, is this costly treatment preventing you from taking treatment?	Yes No	01 02
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## **Part VI: Transportation Barriers**

<b>QN</b>	<b>Questions</b>	<b>Response/Answer</b>	<b>Code</b>
<b>6.1</b>	Do you face any transportation barriers while come to receive treatment at CRP?	Yes No	01 02
<b>6.2</b>	What types of transportation barrier do you face?	Expensive Bad road Too far	01 02 03
<b>6.3</b>	How much transport cost you need to come in CRP from home? (In BDT)		
<b>6.4</b>	Do you think transportation cost is preventing you from receiving treatment?	Yes No	01 02

## Appendix-D

CRP-এ উপস্থিত রোগীদের পুনর্বাসন পরিসেবা প্রাপ্তির বাধা

### পার্ট-১ : সামাজিক-জনসংখ্যা সংক্রান্ত তথ্য:

সাক্ষাৎকারের সময়সূচী		
	অংশগ্রহণকারীদের নাম	
১.১	সাক্ষাৎকারের তারিখ:	
১.২	ঠিকানা:	
১.৩	মোবাইল নম্বর:	
১.৪	সম্মতি গ্রহণ:	হ্যাঁ / না

QN	প্রশ্ন	প্রতিক্রিয়া /উত্তর	কোড
১.৫	বয়স		
১.৬	লিঙ্গ	পুরুষ মহিলা	০১ ০২
১.৭	বৈবাহিক অবস্থা	বিবাহিত অবিবাহিত বিচ্ছেদ বিধবা	০১ ০২ ০৩ ০৪
১.৮	আবাসিক এলাকা	গ্রাম উপ-শহর শহর	০১ ০২ ০৩
১.৯	শিক্ষাগত যোগ্যতা	অশিক্ষিত প্রাথমিক মাধ্যমিক উচ্চ মাধ্যমিক স্নাতক স্নাতকোত্তর	০১ ০২ ০৩ ০৪ ০৫ ০৬

১.১০	পেশা	কৃষক রিকশা চালক পোশাক শ্রমিক ড্রাইভার ব্যবসায়ী শিক্ষক ছাত্র / ছাত্রী বেকার অন্যান্য	০১ ০২ ০৩ ০৪ ০৫ ০৬ ০৭ ০৮ ০৯
১.১১	পরিবারের সদস্য সংখ্যা		
১.১২	উপার্জনকারী সদস্য		
১.১৩	মাসিক আয়		
১.১৪	ডায়াগনসিস		
১.১৫	কি ধরনের পুনর্বাসন সেবা গ্রহণ করছেন সি আর পি থেকে?	ফিজিওথেরাপি অকুপেশনাল থেরাপি স্পীচ এন্ড ল্যাংগুয়েজ থেরাপি অন্যান্য	০১ ০২ ০৩ ০৪

## পার্ট ২: মনোভাবগত বাধা

২.১	আপনি যখন সিআরপি-তে চিকিৎসা নিতে আসেন তখন কি আপনি কোন মনোভাবগত বাধার সম্মুখীন হন?	হ্যাঁ না	০১ ০২
২.২	যদি উত্তর হ্যাঁ হয়, তবে আপনি কোন ধরনের মনোভাবগত বাধার সম্মুখীন হয়েছেন?	অবজ্ঞা/অবহেলা কুসংস্কার বৈষম্য অন্যান্য	০১ ০২ ০৩ ০৪

২.৩	এই মনোভাবগত বাধাগুলি কি আপনাকে সিআরপিতে চিকিৎসা করা থেকে বিরত রাখতে পারে?	হ্যাঁ না	

### পার্ট ৩ : যোগাযোগের বাধা

QN	প্রশ্ন	প্রতিক্রিয়া /উত্তর	কোড
৩.১	সি আর পি-তে পুনর্বাসন পরিসেবা নেওয়ার সময় আপনি কি কোনো যোগাযোগ বাধার সম্মুখীন হয়েছেন?	হ্যাঁ না	০১ ০২
৩.২	যদি উত্তর হ্যাঁ হয়, তবে আপনি কি ধরনের যোগাযোগের বাধার সম্মুখীন হছেন?	নিম্ন শিক্ষাগত যোগ্যতা দ্রুত ভুলে যাওয়া আঞ্চলিক ভাষার ব্যবহার পড়তে না পারা লেখতে না পারা বুঝতে না পারা অন্যান্য	০১ ০২ ০৩ ০৪ ০৫ ০৬



			০৭
২.৩	এই যোগাযোগের বাধাগুলি কি আপনাকে সিআরপি-তে চিকিৎসা নিতে বাধা দিচ্ছে?	হ্যাঁ না	০১ ০২

### পার্ট ৪ : শারীরিক বাধা

QN	প্রশ্ন	প্রতিক্রিয়া /উত্তর	কোড
৪.১	সিআরপিতে পুনর্বাসন পরিষেবা নেওয়ার সময় আপনি কি কোনও শারীরিক বাধার সম্মুখীন হচ্ছেন?	হ্যাঁ না	০১ ০২
৪.২	যদি উত্তর হ্যাঁ হয়, তবে আপনি কি ধরনের শারীরিক বাধার সম্মুখীন হচ্ছেন?	সিঁড়ির ধাপ এবং প্রতিবন্ধক, যা বিল্ডিংয়ে প্রবেশ করতে বাধা দেয়।  র‍্যাম্প বা লিফট ছাড়াই ধাপ  স্বয়ংক্রিয় বা পুশ- বোতাম দরজার অভাব  কম আলো বা দুর্বল	০১     ০২   ০৩  ০৪

		<p>রঙের বৈসাদৃশ্য</p> <p>০৫</p> <p>সরু ফুটপাথ, দরজা বা আইল হাঁটু এবং পায়ের আঙ্গুলের ছাড়পত্র ছাড়া টেবিল</p> <p>০৬</p> <p>কোনও অ্যাক্সেসযোগ্য লাইন এলাকা, অপেক্ষার জায়গা বা পরিষেবা কাউন্টার নেই প্রবেশযোগ্য পার্কিং বা ওয়াশরুমের অভাব</p> <p>০৭</p> <p>অন্যান্য (নির্ধারণ করুন)</p> <p>০৮</p>	
4.3	এই শারীরিক প্রতিবন্ধকতা কি আপনাকে সিআরপি-তে চিকিৎসা নিতে বাধা দিচ্ছে?	হ্যাঁ না	০১ ০২

পার্ট ৫: নীতিগত বাধা

QN	প্রশ্ন	প্রতিক্রিয়া /উত্তর	কোড
৫.১	চিকিৎসা গ্রহণের সময় আপনি কি সিআরপি-তে কোনো সময়সূচী বাধার সম্মুখীন হন?	হ্যাঁ না	০১ ০২
৫.২	যদি উত্তর হ্যাঁ হয়,তবে এই সময়সূচী সমস্যা কি আপনাকে সি আর পি -তে চিকিৎসা নিতে বাধা দিচ্ছে?	হ্যাঁ না	০১ ০২
৫.৩	আপনি কি সিআরপিতে বাসস্থান সুবিধার কোন বাধার সম্মুখীন হচ্ছেন?	হ্যাঁ না	০১ ০২
৫.৪	আপনি কি ধরনের বাসস্থান বাধার সম্মুখীন হন?	হাসপাতালের সেটিংসে আসন সংখ্যার অভাব  ব্যয়বহুল বাসস্থান  বিশেষ চাহিদা সম্পন্ন মানুষদের জন্য সুযোগ সুবিধার অভাব  অন্যান্য (নির্ধারণ করুন)	০১    ০২   ০৩

			০৪
৫.৫	আপনি কি মনে করেন যে সিআরপি চিকিৎসা ব্যবহুল?	হ্যাঁ না	০১ ০২
৫.৬	যদি উত্তর হ্যাঁ হয়, তবে এই ব্যবহুল চিকিৎসা কি আপনাকে চিকিৎসা নিতে বাধা দিচ্ছে?	হ্যাঁ না	০১ ০২

#### পার্ট ৬ : পরিবহন বাধা

নং	প্রশ্ন	প্রতিক্রিয়া /উত্তর	কোড
৬.১	সিআরপিতে চিকিৎসা নিতে আসার সময় আপনি কি কোনো পরিবহন বাধার সম্মুখীন হয়েছেন?	হ্যাঁ না	০১ ০২
৬.২	আপনি কি ধরনের পরিবহন বাধার সম্মুখীন হন?	ব্যবহুল খারাপ রাস্তা অনেক দূরবর্তী	০১ ০২ ০৩
৬.৩	বাড়ি থেকে সিআরপিতে আসতে আপনার কত পরিবহন খরচ লেগেছে?		
৬.৪	আপনি কি মনে করেন পরিবহন খরচ আপনাকে চিকিৎসা নিতে বাধা দিচ্ছে?	হ্যাঁ না	০১ ০২

## Appendix-E

### IRB Permission Letter



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

Ref:

CRP/BHPI/IRB/03/2022/583

Date:

06/03/2022

MD. Shakirun Islam  
4<sup>th</sup> Year B.Sc. in Physiotherapy  
Session: 2016 – 2017  
BHPI, CRP, Savar, Dhaka- 1343, Bangladesh

Subject: Approval of the thesis proposal **"Barriers of Receiving Rehabilitation Services for the Patients Attending at CRP"** - by ethics committee.

Dear MD.Shakirun Islam,

Congratulations.

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned dissertation, with yourself, as the principal investigator and Md. Shofiqul Islam as thesis supervisor. The Following documents have been reviewed and approved:

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

The purpose of the study is to find out the barriers of receiving rehabilitation services for the patients attending at CRP. Since the study involves questionnaire that takes maximum 20- 30 minutes and have no likelihood of any harm to the participants, the members of the Ethics committee approved the study to be conducted in the presented form at the meeting held at 09:00 AM on October 12, 2021 at BHPI (30<sup>th</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  
Assistant Professor, Dept. of Rehabilitation Science  
Member Secretary, Institutional Review Board (IRB)  
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

## Appendix-F

### Permission letter

Date: 25-04-2022

The Head of Department

Department of Physiotherapy

Centre for the Rehabilitation of the Paralysed (CRP)

Chapain, Savar, Dhaka-1343.

Through: Head, Department of Physiotherapy, BHPI

Subject: Seeking permission for data collection of 4<sup>th</sup> year physiotherapy research project.

Respected Sir,

With due respect and humble submission to state that I am Md. Shakirun Islam, student of 4<sup>th</sup> Professional B.Sc. in Physiotherapy at Bangladesh Health Professions Institute (BHPI). The ethical committee has approved my research project entitled on "Barriers of receiving rehabilitation services for the patients attending at CRP" under the supervision of Md. Shofiqul Islam, Associate Professor & Head, department of physiotherapy, CRP, Savar, Dhaka-1343, Bangladesh. Conducting this research project is partial fulfillment of the requirement for the degree of B.Sc. in Physiotherapy. I want to collect data for my research project from the patients of spinal cord injury unit, department of Physiotherapy, CRP, Savar, Dhaka. So, I need permission for data collection from the spinal cord injury unit of Physiotherapy department of CRP, Savar, Dhaka. I would like to assure that anything of my study will not be harmful for the participants.

May I, therefore pray and hope that you would be kind enough to grant my application & give me permission for data collection and oblige thereby.

Yours obediently,

*Shakirun*

Md. Shakirun Islam

4<sup>th</sup> professional B.Sc. in Physiotherapy

Roll: 13, Session: 2016-17, ID No: 112160335

Bangladesh Health Professions Institute (BHPI)

(An academic Institute of CRP)

CRP, Chapain, Savar, Dhaka-1343.

*Recommended*

*Shofiq*

*25.04.22*

Md. Shofiqul Islam  
Associate Professor & Head  
Department of Physiotherapy  
Bangladesh Health Professions Institute (BHPI)  
CRP, Chapain, Savar, Dhaka-1343

*Approved*

*Shofiq*

MOHAMMAD ANWAR HOSSAIN  
25/04/22  
Consultant &  
Head of Physiotherapy Dept  
Associate Professor, BHPI  
CRP, Savar, Dhaka-1343

