

**COMMUNITY PARTICIPATION OF WHEELCHAIR USERS
AFTER SPINAL CORD INJURY**

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Bachelor of Science in Physiotherapy (B. Sc. PT)

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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

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AFTER SPINAL CORD INJURY**

Submitted by **Maksuda Akter** for partial fulfillment of the requirements for the degree of Bachelor of Science in Physiotherapy (B. Sc. 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 be bound to take written consent of my supervisor and Head of the Physiotherapy Department of Bangladesh Health Professions institute (BHPI).

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Contents

	Page No.
Acknowledgement	i
Abbreviations	ii
List of Figures	iii
Abstract	iv
CHAPTER- I INTRODUCTION	1-7
1.1 Background	1-3
1.2 Rationale	4
1.3 Research question	5
1.4 Objective	5
1.4.1 General objective	5
1.4.2 Specific objective	5
1.5 List of variables	6
1.6 Operational definition	7
CHAPTER-II: LITERATURE REVIEW	8-13
CHAPTER-III: METHODOLOGY	14-18
3.1 Study design	14
3.2 Study site	14
3.3 study area	14
3.4 Study population and sample	14
3.5 Sampling technique	15
3.6 Inclusion criteria	15
3.7 Exclusion criteria	15
3.8 Sample size	16
3.9 Data collection method	16
3.10 Duration of data collection	16
3.11 Procedure of data collection	16

	Page No.
3.12 Data analysis procedure	17
3.13 Ethical consideration	18
CHAPTER – IV: RESULTS	19-30
CHAPTER – V: DISCUSSION	31-37
CHAPTER – VI: CONCLUSION AND RECOMMENDATION	38-39
REFERENCES	40-45
APPENDIX	46-61
Verbal consent in Bangla	46
Verbal consent in English	47
Questionnaire in Bangla	48-52
Questionnaire in English	53-59
Permission letter	60-61

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Acronyms

SCI- Spinal Cord Injury

WC- Wheelchair

SWLS- Satisfaction With Life Scale

WHO - World Health Organization

ASIA - American Spinal Cord Injury Association

ADL - Activities of Daily Living

BHPI - Bangladesh Health Professions Institute

SPSS - Statistical Package of Social Science

USA - United States of America

CRP - Center for the Rehabilitation of the Paralysed

IRB- Institutional Review Board

BMRC- Bangladesh Medical Research Council

List of Figures

	Page No.
Figure 1: Age range of SCI wheelchair users	19
Figure 2: Sex distribution of SCI wheelchair user	20
Figure-3: Residential area distribution of SCI wheelchair users	21
Figure-4: Educational status of SCI wheelchair users	22
Figure-5: Occupational Status among the participants	23
Figure-6: Monthly income among the Participants	24
Figure-7: Marital Status among the Participants	25
Figure-8: Child Issue among the Participants	26
Figure-9: Initial Diagnosis among the participants	27
Figure-10: Skeletal level among the participants	28
Figure-11: Neurological level among the participants	29

Abstract

Purpose: To find out the community participation of wheelchair users after spinal cord injury. *Objectives:* To gather the socio-demography information of wheelchair users SCI people, to know out about physical activities of wheelchair users SCI people, to discover the social activities of wheelchair users SCI people, to establish community attitude toward wheelchair users SCI people, to explore the transportation and community accessibility of wheelchair users SCI people, to bring out perception about wheelchair using among the participants. *Methodology:* This study was mixed type of study which included qualitative & quantitative research approach. The study design was cross sectional. Total 10 samples were selected by simple random sampling from Savar and dhamrai upazila at Dhaka. Data was collected by mixed (open & close ended) questionnaire. Sociodemographic statistics were presented by SPSS software version 16.0, data focusing on pie chart and bar chart and theme analysis by Content analysis procedure. *Result:* After Spinal cord injury 80% wheelchair users age was (18- 37) years. 60% wheelchair users SCI people were paraplegic and common neurological level was complete A (70%). Most commonly affected skeletal level was thoracic level (40%) among the participants . Most of the (80%) wheelchair users were male among the SCI people and 80% people were educated with different level and 80% were involved with different type of work. Physical activities are so poor among the wheelchair user SCI people such as bathing, clothing, eating , toileting, gardening, housekeeping etc. Social involving activities were quite good among the wheelchair users SCI people. Most of them were got better support from family and community people. Community accessibilities were very poor. They were not satisfied about the transportation. Most of them were not concerned about health condition. Perception about wheelchair using were slightly satisfied among the wheelchair user SCI people. *Conclusion:* All over the findings of this research is community participation of wheelchair users people was not so good.

1.1 Background

Wheelchair users are one of the most visible members of the disability community, experiencing among the highest levels of activity restriction and functional limitations and the lowest levels of employment (Hedrick et al., 2006). People with spinal cord injury (SCI) depended on manual wheelchairs for mobility in the community (Hosseini et al., 2012). For persons with SCI, wheelchairs are an important factor in community reintegration (Oyster et al., 2011).

Spinal cord injury (SCI) generally is a devastating disorder that has consequences that include impairment in physical, psychological, and social functioning (Gurcay et al., 2010). It is an important public health problem and one of the most costly occupational health problems and one of the disability oriented injury is spinal cord lesion that mostly occurs in young male of low social status (Islam et al., 2011). In Asia the incidence rates of SCI is ranged from 12.06 to 61.6 per million, the average age is 26.8 to 56.6 years old and men are more vulnerable than women also in traumatic spinal cord injury main causes are motor vehicle collisions (MVCs) and falls (Ning et al., 2012). The incidence of people with SCI in U.S.A has been estimated as 12,500 new cases each year, given the current population size of 313 million. Approximately 40 cases per million of population became disabled due to spinal cord injury in the U.S.A (NSCISC, 2014). Approximately 60% of cases occur in people between 16-40 years of age, corresponding to the developmental period associated with carrier development (Ashekin, 2013). The frequency of SCI is lower for those below 20 years and above 50 years of age (Razzak et al., 2011). Spinal cord injury (SCI) is one of the major physically disabling medical conditions that can cause multiple impairments in participation with community reintegration (Ramakrishnan et al., 2011). Neurological impairment and long-term disability in persons with SCI results in inadequate social participation, including impaired fulfillment of social roles and maintenance of friendships and relationships and achieving a sufficient level of mobility is essential for people with SCI to maintain participation in social activities (Tsai et al., 2014).

Bangladesh is one of the most highly populated countries in the world and is situated in the South Asian subcontinent. The total population of this country is about 130million and there are about 830 people per square kilometre. More than 80% of the population live in villages and about 60% of the total labour force is involved in agriculture (Jahan, 2012). In CRP, Bangladesh, 25-29 years aged peoples are most commonly affected among them males are more 83% than female and 92% came from rural area and 8% came from urban area also majority of the patients are paraplegia 56%, Cervical lesion present in 44% cases, thoracic lesion 27% and lumber lesion 29% (Islam et al., 2011). The persons with spinal cord injury (SCI) face major challenges on their occupational role, preferred lifestyle, expression of sexuality and in many other areas, As a result of SCI, Long term physical problems may reduce the person's involvement in work, school, social and community activities(Momin, 2005). Persons with SCI experience poor health related quality of life than the general public (Ottomanelli & Lind, 2009). Spinal cord injury (SCI) leads to an enormous change in an individual's lifestyle, In respect to these changes they are likely to have profound effects on an individuals social and interpersonal relationship within their community (Chappel & Wriz, 2003). Most of the patients cannot participate in the community after Spinal cord injury (Chan et al., 2007). Participation is defined as the extent of a person's involvement in life situations in relation to impairments, activities, health conditions, and contextual factors (WHO, 2001).

SCI people generally had negative experiences of attempting to keep or find employment and organizations are not considered work environment for accessibility for wheelchair users but in Bangladesh specialized spinal cord lesion centres and general hospitals provide services for people with SCL, although the level of medical care, rehabilitation (Momin, 2005). Most of the patients are unable to walk. For this, most commonly, the alternative mode of mobility is a wheelchair. Wheelchair propulsion is more efficient than walking for people with extensive paralysis. SCI people can move any place by wheelchair (Groot et al., 2011). But in Bangladesh SCI people cannot move very easily due to lack of accessibility. A wheelchair is principally used for short distance mobility in the SCI population (Tsai et al., 2014).

In specialized rehabilitation centre Physical and social rehabilitation process is provided through the involvement of physiotherapists, occupational therapists and social workers ,health education and activities for daily living training are provided by ex-users who are mainly wheelchair users (Momin, 2005). Who were previously employed and looked for some jobs related to their previous skills but they had difficulty in getting a job in which they had previously worked (Momin, 2004).

SCI people losing friends after injury can produce greater social isolation, than isolation from lack of access to other environmental resources for that Emotional distress and mental health problems also had a relatively high impact on the level of everyday physical activity (Vissers et al., 2008). From one study we found that the most common activities were visiting and going out with family members or friends (71%),attending social gatherings and events (37%), engaging in physical activity (36%), volunteer work (16%), and going to the movies or theater (Carpenter et al., 2007).

1.2 Rationale

The Wheelchair is the most commonly used mobility device for people with spinal cord injuries in Bangladesh. Wheelchairs are used to enhance function, to improve independence, and to enable a person to successfully live at home and in the community. SCI patients need a long-term rehabilitation program. In Bangladesh, Physiotherapy is a new and very challenging health care profession and the Centre for the Rehabilitation of the Paralyzed (CRP) is the only place where the SCI patients are rehabilitated by an holistic approach. Proper training and education about wheelchair use and participation in the community is a very important part of the rehabilitation program.

CRP Physiotherapy professionals are the leaders in this training program . For this reason physiotherapy professionals need to know how SCI people use wheelchairs in the community. This research will explore the issue of how SCI people participate in the community with wheelchairs, and the problems they have. This knowledge will help to raise awareness among the Professionals so that they can modify their training procedure. Wheelchair skill enhanced the community participation and participation in social and physical activities was found to be facilitated by environmental factors (Hosseini et al., 2012). So proper wheelchair training is very important during rehabilitation period. Therefore, the ultimate rehabilitation goal for people with SCI is to maximize the extent of their participation and re-integration into the community. By this research we also know about their community accessibility, Transportation, Health access, Community relationship. These information make awareness to the Government, community people and also rehabilitative organization. They take proper measure for reducing these problems. One study reported that Community participation lowered due to lack of accessibility and proper transportation issue (Carpenter et al., 2007).

This study will be helpful for the professions and professionals of physiotherapy & other professionals. It will also be helpful for SCI people to gain a better life style. Providing effective rehabilitation programs will also strengthen the physiotherapy profession.

1.3 Research question

What are the community participation of wheelchair users after spinal cord injury?

1.4 Study objectives

1.4.1 General objective

To find out the community participation of wheelchair users after spinal cord injury.

1.4.2 Specific objectives

To gather the demographic information about spinal cord injury people.

To know about physical activities of wheelchair users SCI people.

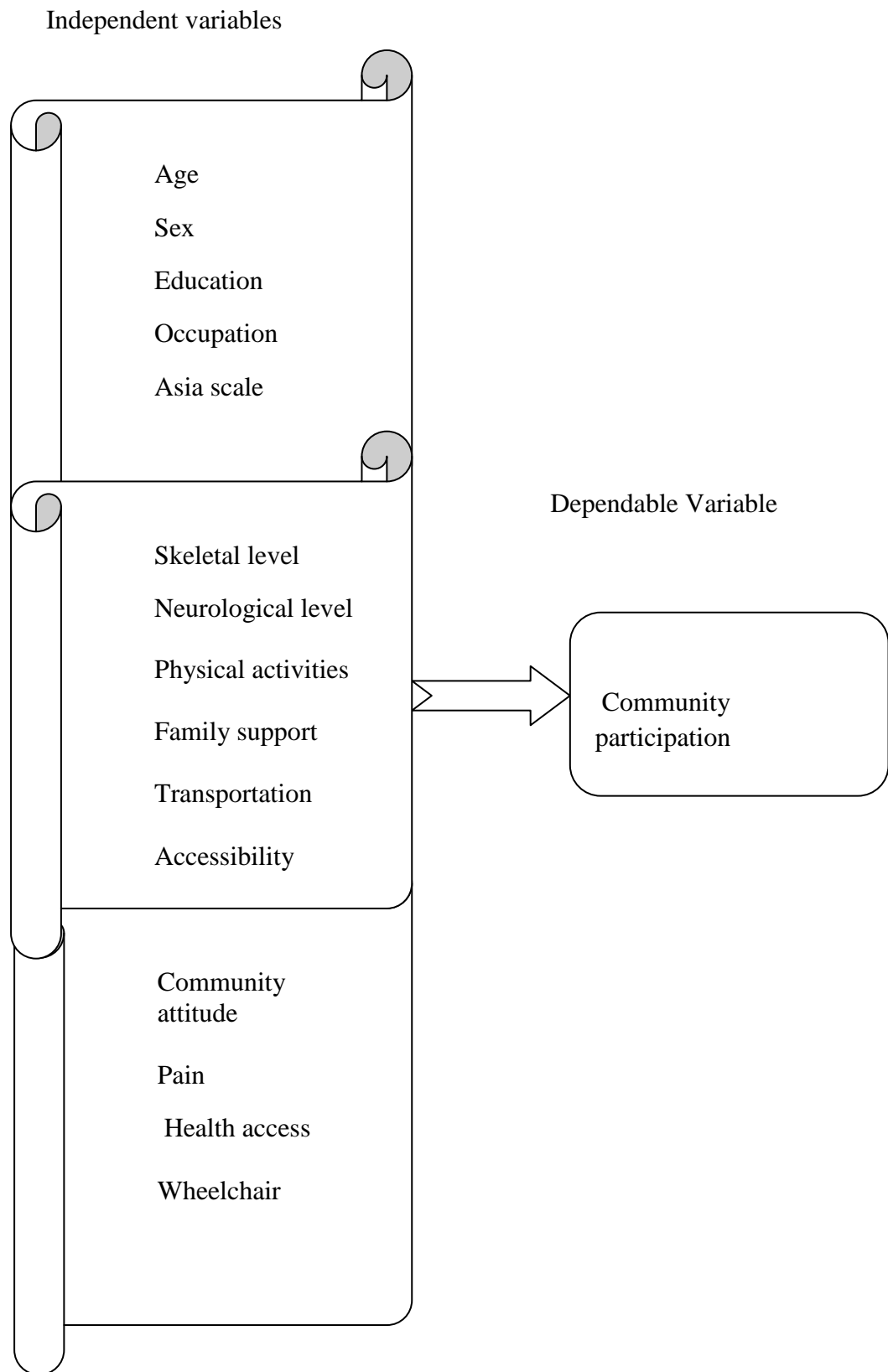
To discover the social activities of wheelchair users SCI people.

To establish community attitude toward wheelchair users SCI people

To explore the transportation and community accessibility of wheelchair users SCI people.

To bring out perception about wheelchair using among the participants.

1.5 List of variables



1.6 Operational definition

Spinal cord injury

When the spinal cord is damaged following trauma or disease then it is called a spinal cord injury. This can result in either temporary or permanent change in its normal motor, sensory or autonomic functions.

Wheelchair

A wheelchair is a special chair which includes wheels and is designed to be a replacement for walking for the disabled.

Paraplegia

Paraplegia is a term in which both lower limb are affected. When injury occurs in thoracic , lumber and sacral region then it causes paraplegia.

Tetraplegia

Tetraplegia is a term in which four limbs are affected. When injury occurs in cervical region then it causes tetraplegia.

Participation

Participation is a limitation or restriction in kind or degree of the overall outcome of that person's involvement in some area of human life.

Community participation

Community participation is the individual's ability to participate in and maintain customary social relationships. The factors included in this sub-scale include household composition, romantic involvement, the number of relatives, business associates, and friends with whom regular written or oral contact is maintained and the frequency of initiating conversations with strangers.

The spinal cord is the part of the central nervous system (CNS) in the superior two third of the vertebral canal and It is roughly cylindrical to oval in cross section with a central canal (Drake et al., 2005). It is protected by the vertebra and their associated muscles, ligaments, spinal meninges and the cerebrospinal fluid (CSF) and the spinal cord begins as a continuation of the medulla oblongata; the caudal part of the brainstem (Moore & Dalley, 2006). The spinal cord is 42-45cm long and extends from the foramen magnum to the level of the L1 or L2 vertebra (Drake et al., 2005). When the cord is damaged, feeling and movement in the body below the level of the injury are lost or reduced (Jahan, 2012).

The spinal cord is a pathway to carry impulse from brain to the body and from body to the brain (Rahman et al., 2012).The SCI is the ‘highway’ through which motor and sensory information travels between the brain and body via nerves which pass up and down through the spinal cord along definite pathways, When the path is broken, the message cannot get through and this occurs when there is an injury to, or disease of the spinal cord. Recent research suggests that primary nerve injury occurs due to acute injury to the spinal cord that causes secondary damage by producing inflammation, ischemia, and toxicity (Kong et al., 2013).

Spinal Cord Injuries are most often traumatic, caused by lateral bending, dislocation ,rotation, axial loading, and hyper flexion or hyperextension of the cord or cauda equina and motor vehicle accidents are the most common cause of SCIs, while other causes include falls, work-related accidents, sports injuries, and penetrations such as stab or gunshot wounds, SCIs can also be of a non-traumatic origin, as in the case of cancer, infection, intervertebral disc disease, vertebral injury and spinal cord vascular disease (Van Den Berg et al., 2010). The life altering experience is spinal cord injury that affects not only the patients with SCI but also their spouses, parents, siblings and children and the significant cause of mortality and morbidity (Ali & Tawfiq, 2013).

Spinal cord injury results in a high level of individual disability, which is reflected in radical changes in lifestyle (Kawanishi & Greguol, 2013). In developing country like Bangladesh, life expectancy of spinal cord injury patients was much lower than developed country (Razzak et al., 2011).

Nwankwo & Uche (2013) found that in SCI, The 31–45 years age group is the most frequently affected and male is more affected than female (4.3:1), 53% injury occurred in cervical spine, 22% thoracic spine and 25% lumber spine injury. In United States the annual incidence of traumatic SCI is 40 cases per million or 1200 new cases each year . In Australia, male is more affected than female in non-traumatic SCI and the ratio is 197:169 and the prevalence of paraplegia is more about 269 per million than tetraplegia (98 per million) (New et al., 2013). The worldwide incidence of SCI is 10.4 and 83 per million per year and the mean age is 33 years old, male and female ratio is 3.8:1 and one- third of the patients are tetraplegic all over the world (Wyndaele & Wyndaele, 2006). And 2.5 million people live with SCI around the world . Injuries and illness affecting the spinal cord are an important health problem in Bangladesh (Ashekin, 2013). In Bangladesh 4.6% people of are disabled due to Spinal cord injries (Hoque et al., 2012). The most common age group for spinal cord injuries ranges from 25-29 years in Bangladesh, and 83% of them are male. This is due to males being exposed to higher risks because of their occupation or type of work and Women all over the globe are less exposed to the type of work that carry risks of this particular type of injury, such as a fall from a tree, a fall from a height or falling while having a load on the head or neck (Islam et al., 2011).

In Bangladesh, there are two specialized hospitals for the management of spinal cord injuries (SCI), They are the National Institute of Traumatology Orthopedics and Rehabilitation (NITOR) and the Center for the Rehabilitation of the Paralysed (Disability in Bangladesh, 2004). The Centre for the Rehabilitation of the Paralysed is the only non- government organization in Dhaka, involved in the rehabilitation and management of patients with spinal cord injury for the last 30 years (Islam et al., 2011).

There is no curative treatment to overcome the difficulties faced by persons with SCI. Therefore rehabilitation programs is the valid goal for treatment for persons with SCI. Important goals of rehabilitation are maximizing the independence in daily living activities and providing optimal reintegration in the society (Kong et al., 2013). Spinal cord injuries are classified as Tetraplegia, Paraplegia, Complete and Incomplete, Tetraplegia refers to impairment or loss of motor and /or sensory functions in the cervical segments of the spinal cord due to damage or neural elements within the spinal canal , Injury to the spinal cord in the cervical region is associated with loss of muscle strength in all four extremities and paraplegia refers to impairment or loss of motor and /or sensory functions in the thoracic, lumbar or sacral segments of the spinal cord, secondary to damage of neural elements within the spinal column (Kirshblum et al., 2011). In a complete lesion, there is total absence of sensory and or motor function in the lowest sacral segment (S4-S5), Complete injuries often damage the nerve root in the foramen and in incomplete lesion there is a partial preservation of sensory and/or motor function below the neurological level and in the lowest sacral segment (Ning et al., 2012).

The American Spinal Injury Association (ASIA) Standard Neurological Classification of Spinal Cord Injury, is a standard method of assessing the neurological status of a person who has sustained a spinal cord injury.

A- Complete. No sensory or motor function is preserved in the sacral segments S4-S5.

B- Incomplete. Sensory, but not motor function, is preserved below the neurological level and includes the sacral segments S4-S5.

C- Incomplete. Motor function is preserved below the neurological level, and more than half of key muscles below the neurological level have a muscle grade less than 3.

D- Incomplete. Motor function is preserved below the neurological level, and at least half of the key muscles below the neurological level have a muscle grade greater than or equal to 3.

E- Normal. Sensory and motor function is normal (Grundy & Swain, 2002).

Spinal cord injury occurs major changes in the motor and sensory function which is very common (Coutinho et al., 2013). Clinical features of spinal cord injury include Pain in the neck or back, often radiating because of nerve root irritation, Sensory disturbance, Weakness or flaccid paralysis below this level (Jahan, 2012). Due to SCI, pain is the most serious and disabling complaints and pain can occur due to immobility, positioning, muscle imbalance or abnormal muscle tone, negative mood states, depression, anxiety, sleeplessness and poor sleep quality may occur due to pain which may interfere in the participation (Chase et al., 2013).

Community participation according to Steins et al extends beyond the person, it promotes his/her fullest inclusion and participation within the physical and psychosocial environment. For persons with spinal cord injury (SCI), reintegration is a key issue in the entire rehabilitation process because in most instances SCI happens to persons who were healthy and actively integrated into social life (Sekaran et al., 2010). In the United States of America and many developed countries public policy has greatly improved the level of community participation of these patients by minimizing barriers including geographical, architectural and cultural, also in a developing country such as India, community reintegration was considered as an essential part of Community Based Rehabilitation (Sekarana et al., 2010).

In Bangladesh CRP are also continuing Community Based Rehabilitation (CBR) for SCI people, so that they can participate in the community properly (Ema, 2013).

One literature review identified that, in order to avoid a deterioration of his/ her health, a person with SCI should be able to participate in the community, At First the person with SCI should be involved in survival and health care activities, Secondly, the development of harmonious relationships is necessary, Thirdly, the person should maintain an appropriate participation in productive activities and personal relationships and productivity are important constituents of social participation for SCI individual's (Noreau & Fougereyrollas, 2000). Life expectancy of persons with SCI/D has improved dramatically from 20–33 years in 1987 to 55–65 years in 1995 (Hedric et al., 2006).

Mobility limitations are the leading cause of functional limitations among adults with an estimated prevalence of 40 per 1,000 persons aged 18 to 44 and 188 per 1,000 aged 85 years and older in the general population (Simpson et al., 2008). One research reported that wheelchair mobility in an older participants traveled at a slower speed than younger participants (Oyester et al., 2011). Assistive technology must improve the functional independence of persons with SCI people and affords them greater opportunity for societal participation and integration (Hedrick et al., 2006).

Independent mobility increases vocational and educational opportunities, reduces dependence on caregivers and family members, and promotes feelings of self-reliance and reductions in functional mobility are linked with reduced participation and loss of social connections (Finlayson & Van, 2003). According to National Council on Disability suggested that wheelchair use can improve opportunities for successful outcome (Hedrick et al., 2006). For community participation SCI people use mobility devices like wheelchairs (Chaves et al., 2004).

Wheelchairs have been used by people with disabilities to facilitate their return to as many pre injury activities as possible and People with SCI rely on their wheelchair, to engage in many of life's activities (Tsai et al., 2014). Wheelchairs are used to enhance function, to improve independence, and to enable a person to successfully live at home and in the community (Scherer & Cushman, 2001). On the other hand, a wheelchair may be perceived as negatively impacting a person's life. The wheelchair is most likely the most important mobility device of person's with SCI for community participation (Oyster et al., 2011).

In one study reported that Dutch persons with SCI are in general quite satisfied with their wheelchair and complete SCI person are slightly less satisfied compared with persons with an incomplete lesion (Groot et al., 2011). People with spinal cord injury (SCI) are oftenly depend on manual wheelchairs (WC) for mobility in the community, Mobility and safety in the community require proficiency in several WC skills (Meyers et al., 2002). WC skills are important for safe mobility and participation in the community (Hosseini et al., 2012).

In one study satisfaction with assistive technology are measured by SWLS. In this study High positive correlations were found between the quality of life subset and SWLS (Scherer & Cushman, 2001). The most common uses for the WC of the older people were shopping, visiting the park and social visits, although only a small number of participants used the Wheelchair for socializing and this study reported that Moderate satisfaction was found with the wheelchair (Evans et al., 2007). In the study done by Chaves and colleagues (2004) wheelchair technology was the most commonly cited factor limiting participation, more so than physical impairment and physical environment. The most common a social activities were visiting and going out with family members or friends (71%), attending social gatherings and events (37%), engaging in physical activity (36%), volunteer work (16%), and going to the movies or theater (14%). Other valued activities included shopping (6%), raising children (6%), fishing (4%), traveling(4%) and need (35%) help or support from family members and friends (Carpenter et al., 2007).

The debilitating consequences of a spinal cord injury (SCI) often lead to impairments in the ability to engage in everyday activities and limit mobility functions and participation in the community (Chan et al., 2007). Community participation was a challenge for most using mobility devices person with SCI in Nepal and out of them less than half earned any income, and one-quarter of those who were using mobility devices had no employment/tasks in the home or community (Scovil et al., 2012). In one study reported that, participation in social and physical activities facilitated by environmental factors, however, participants also experienced activity limitations (Carpenter et al., 2007).

In one study using SWLS scale for measuring life satisfaction and the result is household income had a significant effect on life satisfaction but not happiness, with higher incomes reporting greater life satisfaction and a small proportion of the respondents in this study identified lack of income as a primary barrier to social participation(Carpenter et al., 2007).

3.1 Study design

This study was mixed type of study which included qualitative & quantitative research approach. The study design was cross sectional. Qualitative research approach were applied to explore the community participation of wheelchair users SCI people. It is an interpretive approach within the philosophy of phenomenology that enables the researcher to gain an understanding of individual patient's opinions, feelings, attitudes, beliefs and behaviour. Quantitative approach were also used in this research. A cross-sectional descriptive study was performed with structured questionnaires and interviews conducted with SCI wheelchair users. It is the simplest variety of descriptive or observational epidemiology, and as a surveys was a useful way to gather information on important health-related aspects of people's knowledge, attitudes, and practices. A survey was a research technique which involved collecting data from a large number of people, so that a general overview of the group.

3.2 Study site

Savar, Dhamrai, upazila were chosen for this study. These area were selected because of most of the wheelchair users were lived in these area and these area were more closer than others area.

3.3 Study area

The study was conducted on the spinal cord injury area.

3.4 Study population & sample

Wheelchair users people who had completed their rehabilitation program from CRP following SCI.

3.5 Sampling technique

The participants were selected from the population by the simple random sampling technique who meet the inclusion criteria. This simple random technique is the process where every single subject of the population has an equal chance of being selected as a sample. Firstly addresses collected for the sample from CRP before conducting the survey in the community. To ensure the randomness of selection it was done by lottery.

3.6 Inclusion criteria

- Age between 18-65 years. Most common working-age adults (18–64 years) in Bangladesh.
- Wheelchair user SCI people.
- Both male and female were included.
- Both paraplegic & tetraplegic patient were included.
- Patient must be completed rehabilitation program from CRP.

3.7 Exclusion Criteria

- Patient with mental problem were excluded.
- Age range below 18 years and above 65 years were excluded.
- Patient had any pathological condition were excluded.

3.8 Sample size

10 sample were collected according to the inclusion and exclusion criteria. 10 sample were selected because of this study was mixed study (Qualitative & Quantitative) and also had time limitation.

3.9 Method of data collection

The base of any study was data collection. This study had followed all rules of data collection including method of data collection, duration and procedure of data collection. Questions were asked in face to face interview and some information were recorded from participants. It was useful because this technique ensure that the researcher was obtain all information required, while at the same time gives the participants freedom to respond and illustrate concepts.

Questionnaire

For data collections used mixed structured questionnaire in where close and open ended question were used.

For data collection, Bengali questionnaire was used so that the carers understood the questionnaire in the easiest way. None of them are not receive treatment for their health condition.

3.10 Duration of data collection

Data were collected carefully and confidentiality and maintained all ethical consideration. Each participant provided particular time to collect data. Each questionnaire took approximately 30-35 minutes to complete.

3.11 Procedure of data collection

Data were collected from the SCI people at their home. The questionnaire from were complicated or filled by the participants and their attendant some information were recorded from participants.

3.12 Data analysis procedure

For data analysis used the graph technique for analyzing data, calculated as percentages, and presented this using bar and pie charts by SPSS (Statistical Package of Social Science) software version 16.0. SPSS is a comprehensive and flexible statistical analysis and data management solution. SPSS can take data from almost any type of file and use them to generate tabulated reports, charts, and plots of distributions and trends, descriptive statistics, and conduct complex statistical analyses. Socio demographic data were analyzed in Microsoft office Excel 2010 using a SPSS 16 version software program and for finding theme using content analysis of data. Content analysis theory was used for founding theme. For founding themes by this content analysis need to accumulated the similar perception of all the participants and the others perception had described differently. Satisfaction with wheelchair measured by Satisfaction with life scale. Each item on the Satisfaction With Life Scale (SWLS) uses a 7-point scale with responses ranging from strongly disagree to strongly agree. The score range was 5 to 35, with a higher score indicating a greater satisfaction with life.

3.13 Ethical consideration

This protocol presentation was submitted to the Institutional Review Board (IRB) of Bangladesh Health Professions Institute (BHPI) and took approval from the ethical committee of Physiotherapy department to do the study. Then permission was taken from the Social welfare unit for collected address of the SCI people for data collection from the community by ensuring the safety of participants. This study was follow the Bangladesh medical research council (BMRC) guide line & WHO research guide line. Researcher was maintain the confidentiality of the collected data from the individuals. All the participants and the authority were informed about the purpose of the study. Researcher ensures the confidentiality of participants and share the information only with research supervisor. All the information was explained clearly about the study and verbally informed to the participants. The interview notes and recording words was not be shared or discussed with others. The role of the participants in this study was explained first to the participants. A written consent form was received from every participants including signature. So the participant assured that they could understand about the consent form and their participation was on voluntary basis. The participants were informed clearly that their information would be kept confidential and assured the participants that the study would not be harmful for them. It was explained that there might not a direct benefit from the study for the participants but in the future cases like them might got benefit from it. The participants have the right to withdraw consent and discontinue participation at any time.

In this study cross sectional study design are used to conduct dissertation and all the data was analyzed by SPSS v.16 software. These results were based on different types of variables such as socio-demographic variables, injury related variables. Here descriptive data were collected and presented by pie chart, bar chart and tables by using Microsoft excel office 2007. In this study theme was find out by content analysis.

4.1 Age group

The study was conducted with 10 participants. Among the participants mean age was 30.90 years and SD was 10.713. Maximum age was 53 and minimum age was 18. Most of the participants were 18-27 years and 28-37 years range. (80%) of wheelchair users SCI people were (18-37) years in the community. (Figure-1)

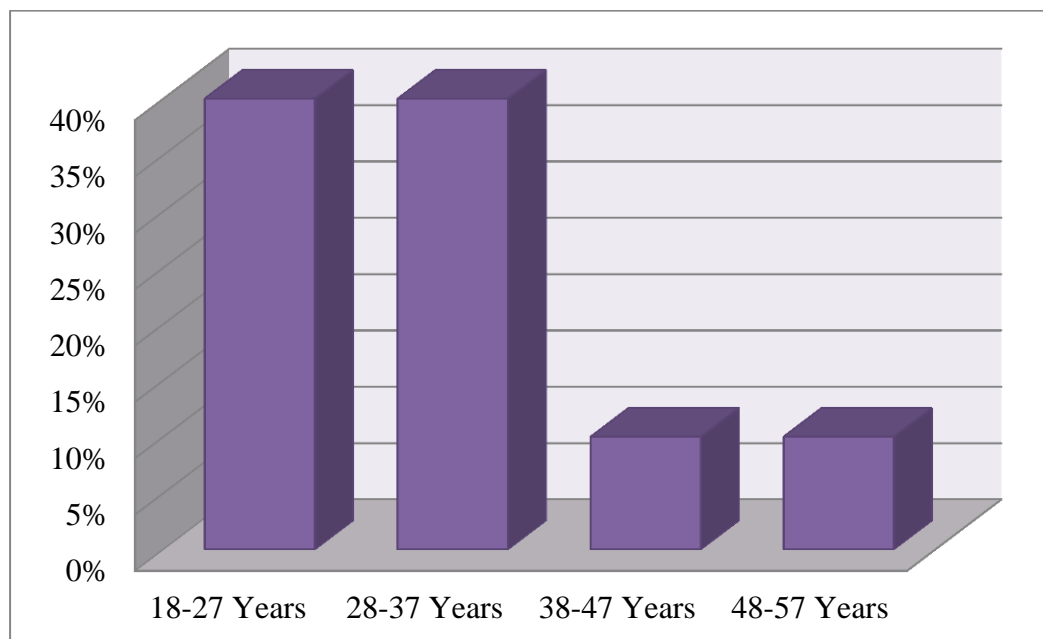


Figure-1: Age range of wheelchair users SCI participants

4.2 Sex

Among the participants Male are 80% and Female are 20%. (Figure-2)

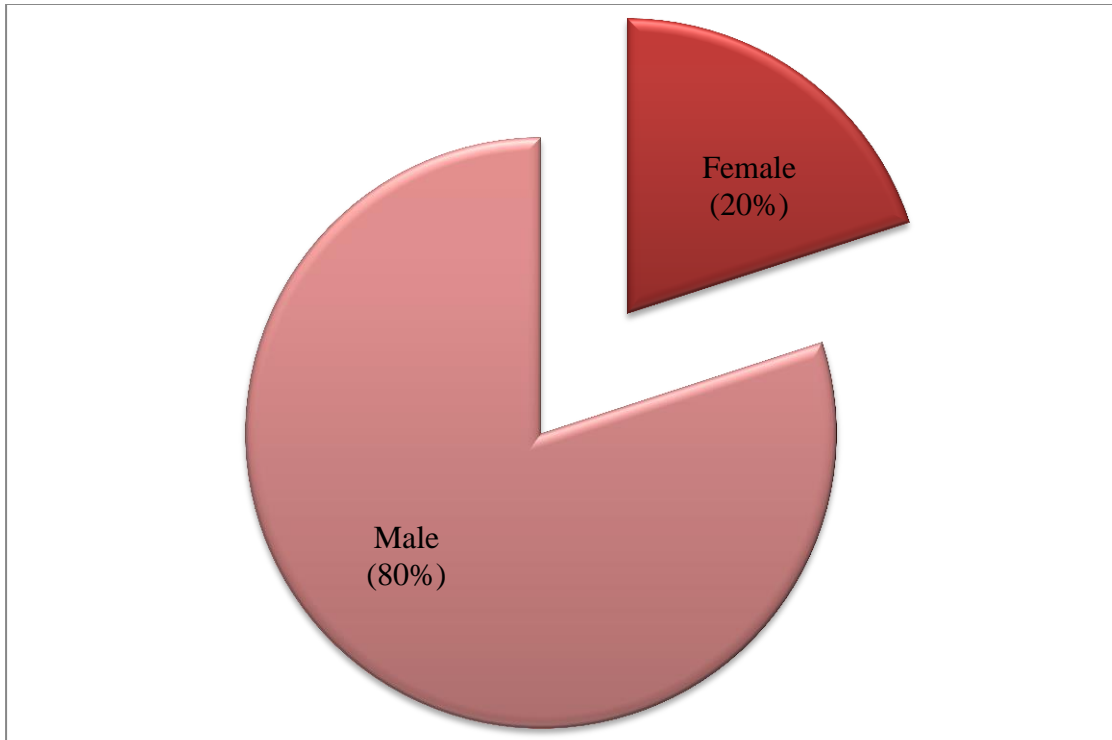


Figure-2: Sex distribution of SCI wheelchair users participants

4.3 Residential area

SCI Participants were living equally in urban and rural area. Both were 50%. But according to data rural participants were suffered more in all sector of the community. (Figure-3)

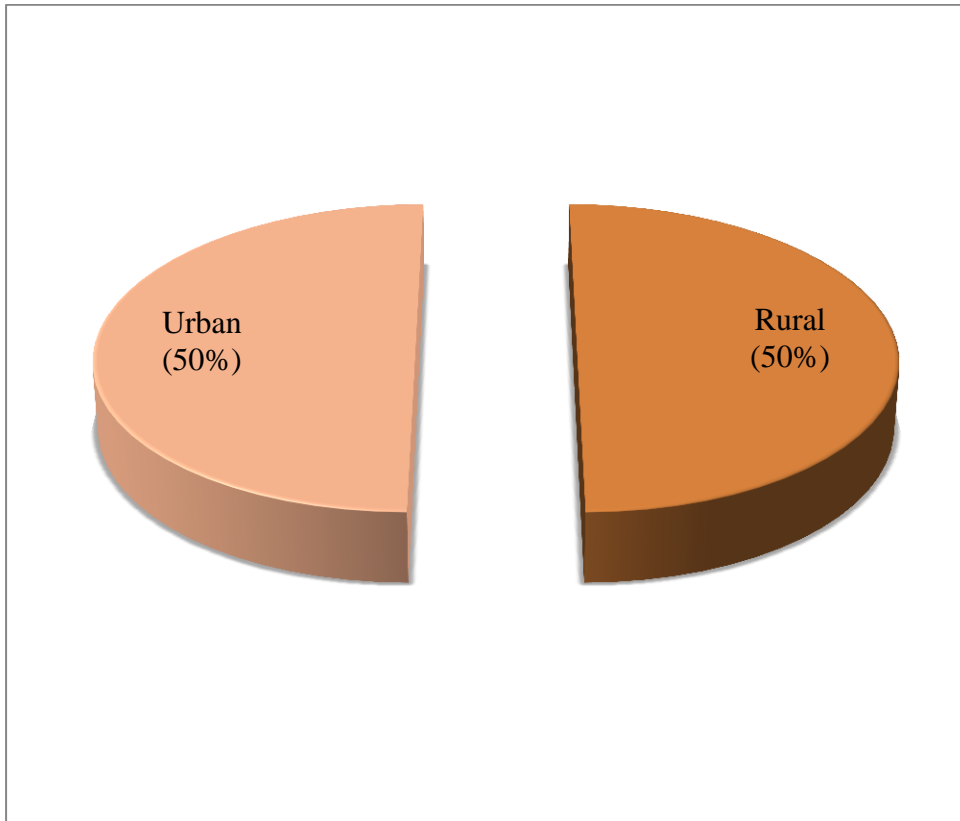


Figure-3: Residential area distribution of SCI wheelchair users

4.4 Educational status

Among the participants 80% were educated. Out of 100% respondent 30% were complete primary school level and another 30% complete higher secondary school level. 10% were up to sign level, they could not read and write. 20% complete secondary school level. Resting 10% complete junior school level. (Figure -4)

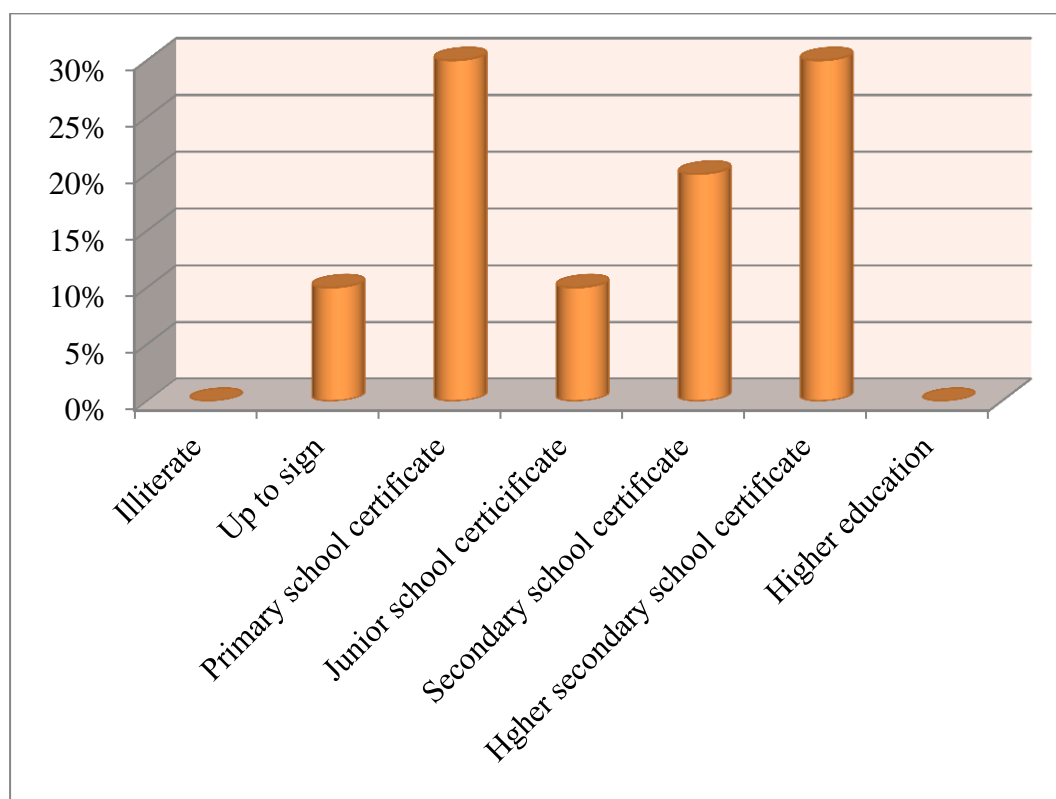


Figure-4: Educational status of SCI wheelchair users

4.5 Occupation

Out of all the participants 80% were involved with different type of work . Among the participants 40% had shop. Out of 40% 30 had electronic instruments shop and 10% had grocery shop. Out of another 30% were businessman .10% were student and 10% were unemployed. Among the others 10% work for disabled people. (Figure-5)

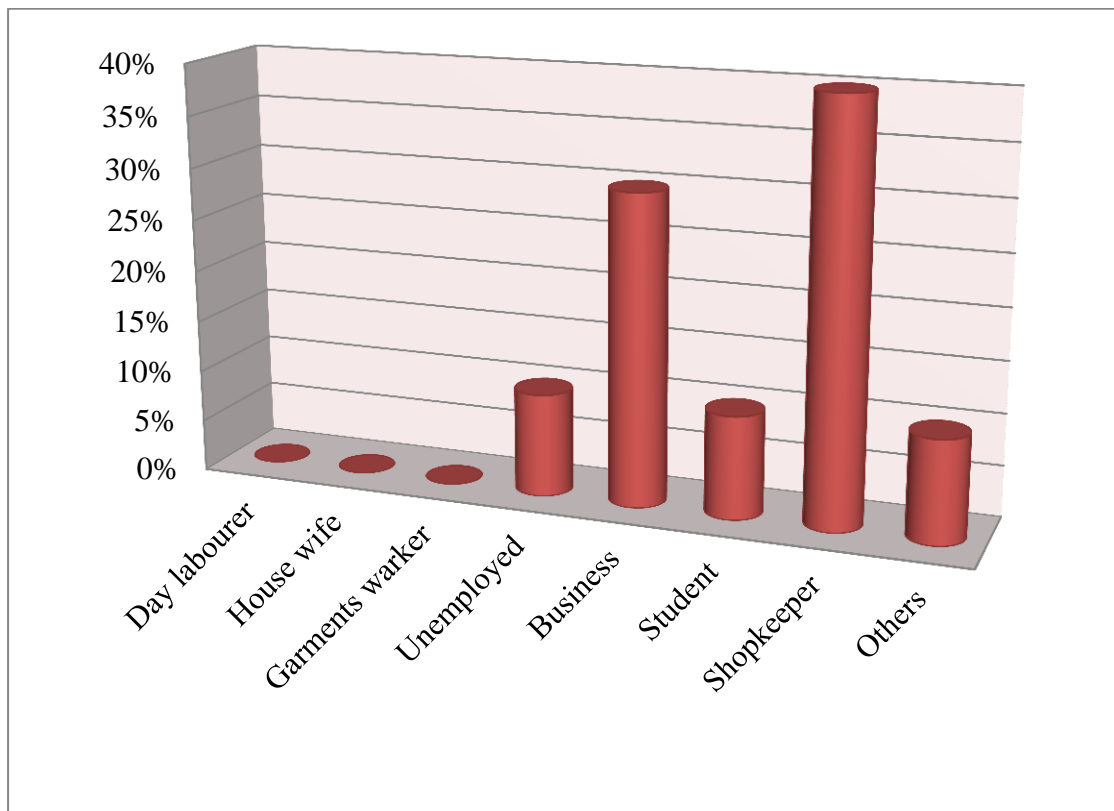


Figure-5: Occupational status among the participants

4.6 Monthly income of the participants

Among the participants 40% respondent income level were within 5 thousand, 30% had above 10 thousand and 20% had 5-10 thousand,10% had no income. (Figure-6)

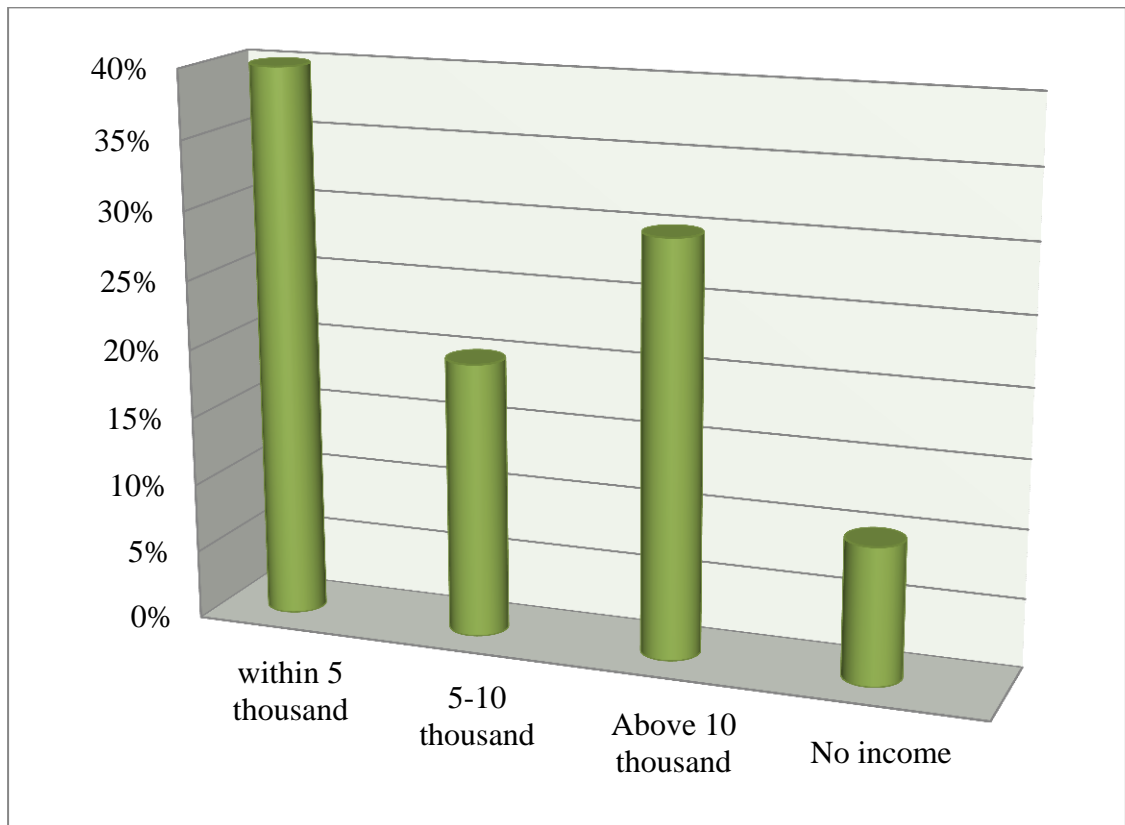


Figure-6: Monthly income among the participants

4.7 Marital status

Most of the participants were unmarried. Out of 100%, 80% respondent were unmarried and 20% were married. (Figure-7)

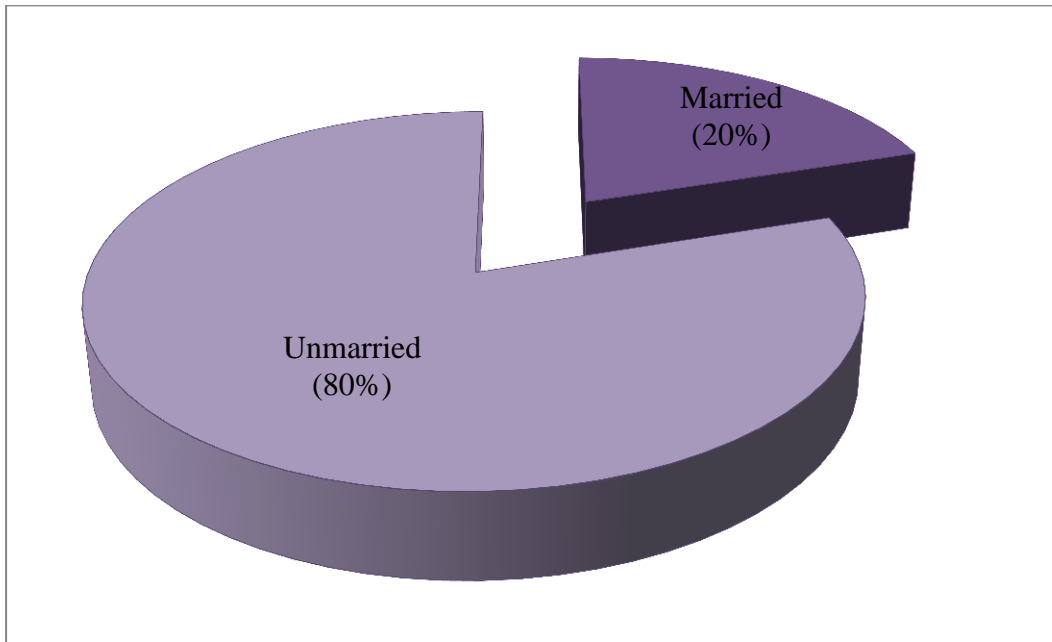


Figure-7: Marital status among the participant

4.8 Child Issue

Out of 100% respondent 80% of the participants had no child. 10% had two child, 20% had more than two child. (Figure-8)

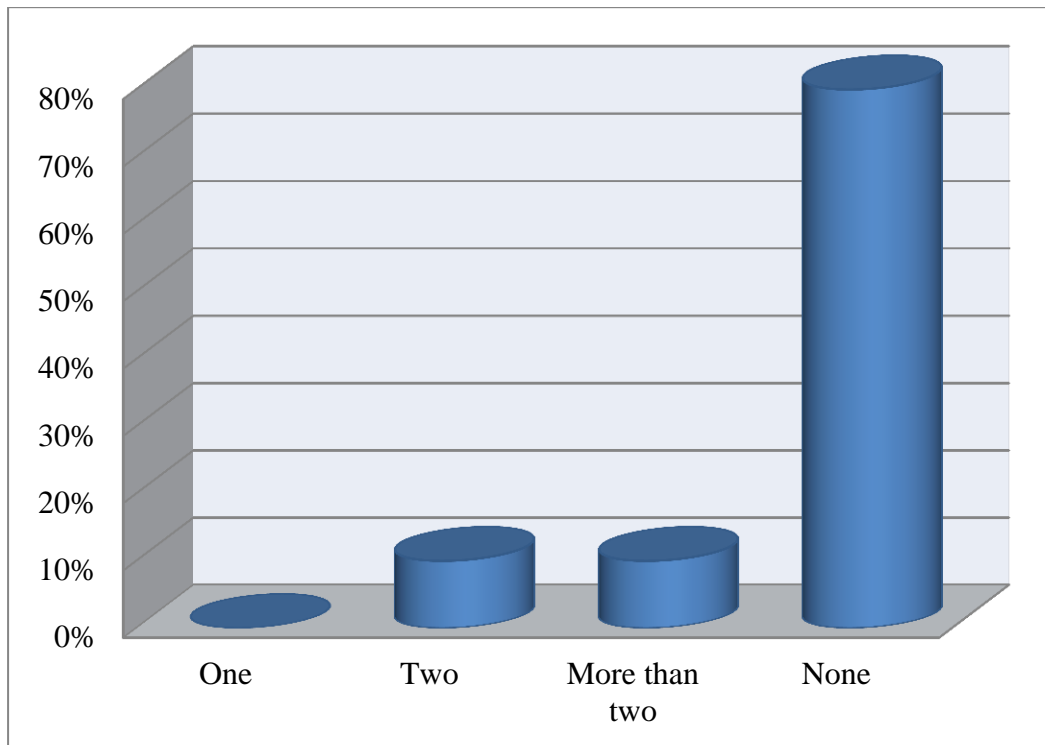


Figure-8: Child Issue among the participants

4.9 Initial Diagnosis

Most of the participants (60%) were paraplegic. In this study 50% participants were traumatic paraplegia, 40% were traumatic tetraplegia, 10% were non traumatic paraplegia, 10% were non traumatic tetraplegia. (Figure-9)

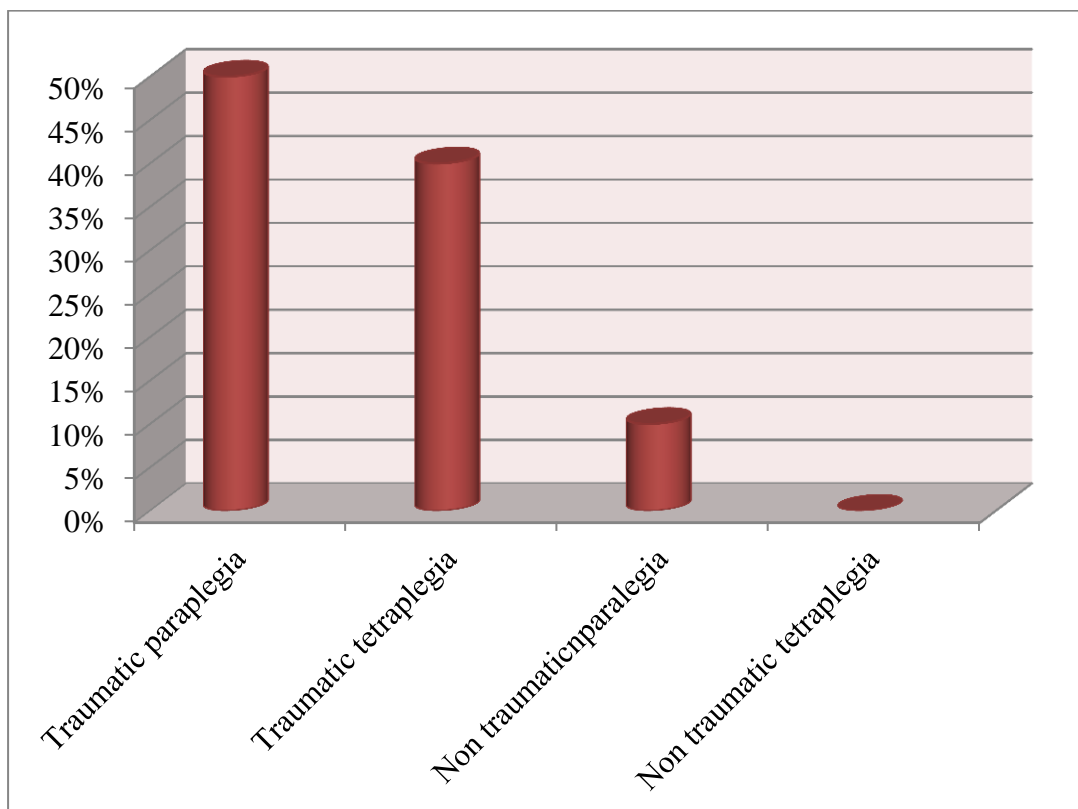


Figure-9: Initial diagnosis among the participants

4.10 Skeletal level

Most of the (40%) participants were affected in Thoracic level, 30% were cervical level, 20% were lumber level. (Figure-10)

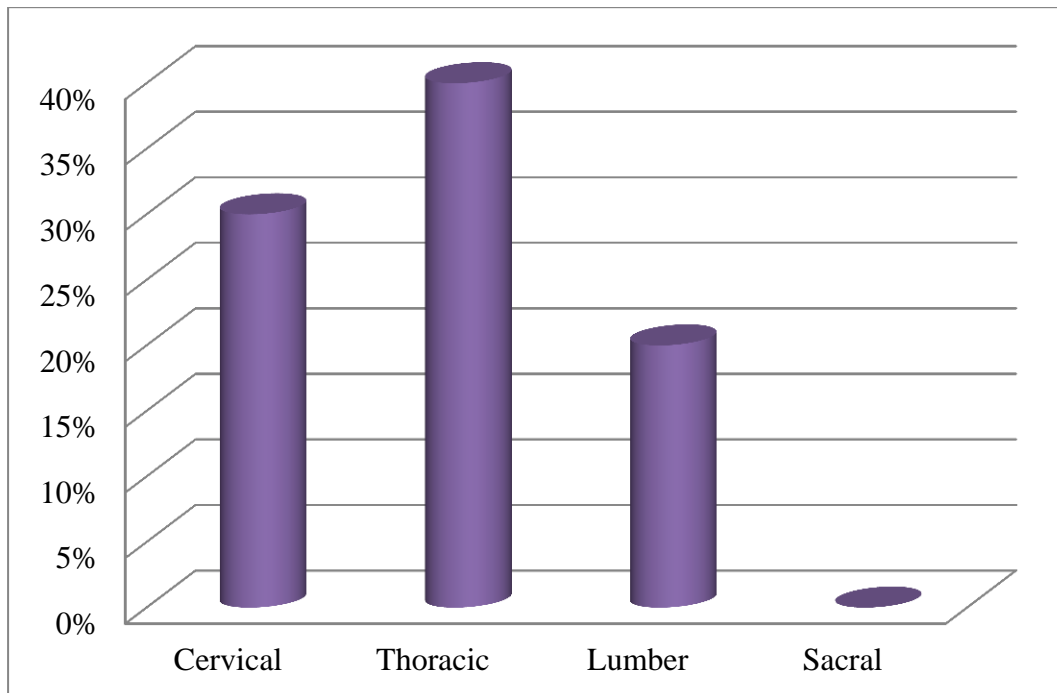


Figure-10: Skeletal level among the participants

4.11 Neurological level

Among all the participants 70% were complete A, 20% were Incomplete B and 10% were Incomplete C. (Figure-11)

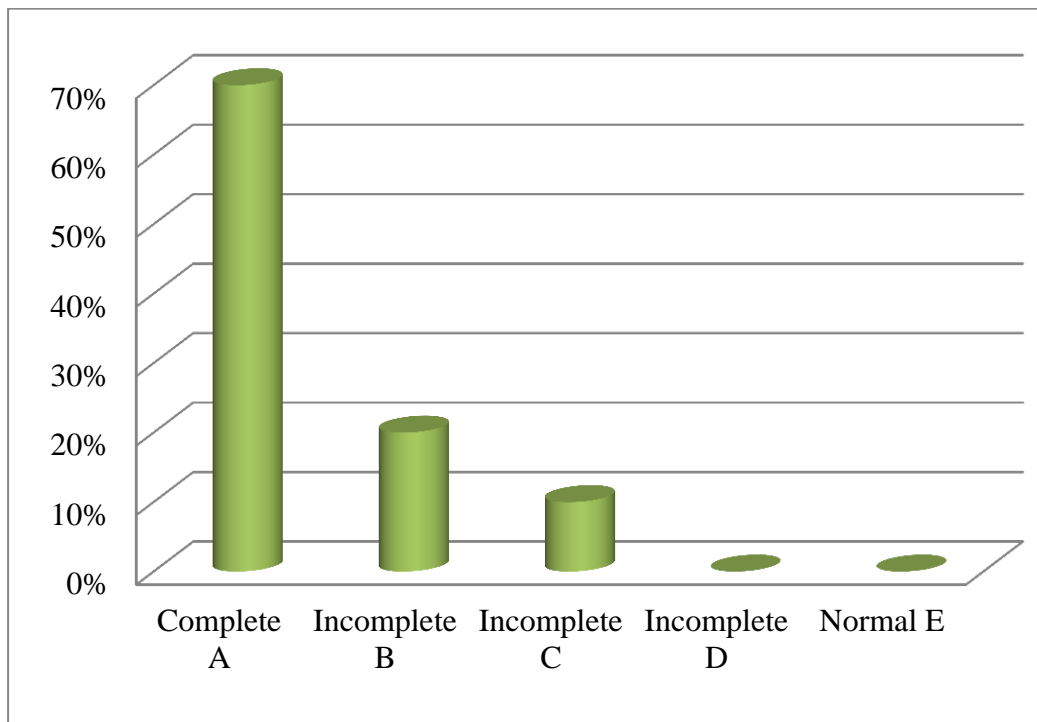


Figure-11: Neurological level among the participants

In this study following themes were generated on the basis of data analysis

1. Physical activities were so poor among the wheelchair user SCI people such as bathing, clothing, eating, toileting, gardening, housekeeping etc.
2. Social involving activities were quite good among the wheelchair users SCI people.
3. Most of them were got better support from family and community people.
4. Community accessibilities were very poor.
5. They were not satisfied about the transportation.
6. Most of them were not concerned about health condition.
7. Perception about wheelchair using were slightly satisfied among the wheelchair user SCI people.

Spinal cord injury, especially when it is neurologically complete, is a devastating condition both for the patient and for his/her relatives, because of the degree of disability and cost associated with it.

Discussion about socio-demographic information

After Spinal cord injury 80% wheelchair users age ranged were (18- 37) years. In another country, like United States, age ranged were (18–90) among the wheelchair users SCI people (Tsai et al., 2014). 60% wheelchair users SCI people were paraplegic and common neurological level was complete A (70%). Most commonly affected skeletal level was thoracic level (40%) among the participants). In CRP, Bangladesh, 25-29 years aged peoples are most commonly affected among them males are more 83% than female and the majority of the patients are paraplegia 56%, Cervical lesion present in 44% cases, thoracic lesion 27% and lumbar lesion 29% (Islam et al., 2011). Most of the (80%) wheelchair users were male among the SCI people and 80% people were educated with different level and 80% were involved with different type of work. One study showed re-employment rates of 95% for persons with SCI who had 16 or greater years of education (Ottomanelli & Lind, 2009). In specialized rehabilitation centre Physical and social rehabilitation process is provided through the involvement of physiotherapists, occupational therapists and social workers, health education and activities for daily living training are provided by ex-users who are mainly wheelchair users (Momin, 2005).

Discussion according to the themes are provided below-

5.1 Physical activities were so poor among the wheelchair user SCI people such as bathing, clothing, eating, toileting, gardening, housekeeping, Playing etc.

This theme relates to the daily living activities and household activities. According to the data, out of all participants maximum stated that, they are performing their daily activities with support from their family members because of their paralysis, muscular weakness. Among the participants minimum were performed daily activities an household work independently. Among the maximum participants, most of them get more support from their mother and mother brings the water for bathing, tube for toileting and give food for eating. Mother also clean the tube. Minimum respondent get support from their wife they need minimum support for performing daily living activities. Resting minimum participants get support from others of the family. Among this minimum respondent, few of them need moderate support one need minimum for performing daily activities. Among the respondent moderate respondent playing game like carum, ludu, voluble. Most of the people are not doing any another physical activities without daily living activities. Most of the SCI people were not performing physical activities independently due to physical limitations, such as paralysis, poor balance, unable to get out of wheelchair, unable to walk or stand, inadequate strength or endurance (Carpenter et al., 2007).

5.2 Social involving activities were quite good among the wheelchair users SCI people

According to the data among all of the respondent maximum respondent were quietly involve in social activities . They were going to market, social fair, family program, relatives and neighbours house, playing game. This maximum respondent not the going to so far place because of poor transportation system and rough road. Reductions in functional mobility are linked with reduced participation and loss of social connections (Finlayson & Van, 2003).

Among the maximum respondent most of the participants were involved various social activities. Out of this maximum, one of the respondent going to college, market, travelling many places, meet with friends and neighbour and playing game like carum, ludu, cheese. The most common activities were visiting and going out with family members or friends (71%), attending social gatherings and (37%) events (Carpenter et al., 2007). Few respondent are going to office, visit many places, work for disabled people, communicate with many people. Another few of the respondent were going to bazaar for business purpose, gossiping with friends, going to nearly relative neighbour and house, communicate with relatives by phone mostly. Resting moderate respondent were not quietly involved in social activities. Among them few respondent were involved some social activities (attend in social fair, playing carum, gossiping with friends) due to business of their occupational activity. But out of moderate respondent most of them were not attend any type of social activities due to rough road poor transportation and lack of accessibility in community. Among them few respondent stated that house was so high from the road and there was no ram, for this they couldn't going to any place and not communicate with people. Another few respondent stated that feeling shy to communicate with society with wheelchair and unable to hold urination.

5.3 Most of them were got better support from family and community people.

On the basis of data, among all of the respondent maximum get more support from the family and community people. One study reported that get moderate help and support from family members and friends (Carpenter et al., 2007). Their family members were helped more and most commonly their mother support them some were getting support from their wife and other family members. Community people were well behaved with them and support them. Out of maximum respondent, most of them were very happy with their community people. On average, respondents were satisfied with the support they receive from others (Evans et al., 2007). Among the maximum respondent minimum were stated that neighbors were came to gossip with them and buy something from their shop. They got help college also from the teachers and friend. Teachers made ram for them and take class in 1st floor. Few respondent stated that they are going to bazaar, traveling any place with their friends. Friends and neighbors are playing game with them.

Out of all respondent few were stated that their family members support them but community people were not so much helpful. Their neighbors were not showing positive attitude with them. They feel lonely in their life. Most of the people had no one to share joys and sorrows. Modarate respondent had some one to share joys and sorrows and get help for decisions making.

5.4 Community accessibilities were very poor

Among the participants all were stated that accessibility in the community is very poor. They could not enter market, college, bank, hospital, washroom without support from others because there is no ramp, accessibility issues particularly related to parks, beaches, stairs, absence of ramps, accessible washrooms, and parking was poor (Carpenter et al., 2007). Their relatives and neighbors house door was small in size so they could not enter the room, for this most of them are not going to neighbors and relatives house.

5.5 They were not satisfied about the transportation.

All of the participants stated that lack of good transportation system. No buses were accessible for wheelchair users SCI people. Most of people were used auto and cng for their needs. But road is very rough so Auto or Cng are risky for SCI people. Few were going to bazaar by vantroli. Urban road is more rough than Rural road. One study find out this theme that was transportation issues, such as no accessible buses, no vehicle (Carpenter et al., 2007).

5.6 Most of them were not concerned about health condition.

Among the participants maximum were not go to hospital or rehabilitation centre to receive health service due to Transportation and accessibility problem. The road was rough and hospital distance was so far from house. Moderate respondent were received health service from hospital or rehabilitation centre.

5.7 Perception about wheelchair using were slightly satisfied among the wheelchair user SCI people.

Among the participants wheelchair using satisfaction were measured by WSLs. Among the respondent maximum were slightly satisfied with their wheelchair in life. Few respondent were neutral position and another few respondent were slightly dissatisfied about their wheelchair. Maximum respondent reported that they feel pain and fatigue when propell wheelchair for long time. Among them minimum have no problem. But maximum people reported that of their wheelchairs had technical error frequently and this hampered their community participation. In one study reported that Dutch persons with SCI are in general quite satisfied with their wheelchair and complete SCI person are slightly less satisfied compared with persons with an incomplete lesion (Groot et al., 2011).

Limitations

Regarding this study, there were some limitations or barrier to consider the result of the study as below:

The first limitation of this study was sample size. It was taken only 10 samples, because of it was so difficult to go the wheelchair users SCI people in the community, their residence was so far from my resident.

Another major limitation was time. The period was very limited to conduct the research project on this topic. As the study period short so the adequate number of sample could not arrange for the study.

Female sample percentage were very poor in this research, so that researcher could not compared of male and female about community participation.

6.1 Conclusion

The debilitating consequences of a SCI often lead to impairments in the ability to engage in everyday activities and limit mobility function and participation in the community. It was a challenge for most using mobility devices person with SCI. They face many problems to participate in community with wheelchair. Though they had many problems, but most of the people were trying to participate moderately with community but they did not do it properly. So their participation was not so good. If every place had ramp for enhanced accessibility, toilet setting for them and well transportation system then their participation rate increased in a higher level. From this study researcher got so many experiences about community participation and life style of wheelchair users SCI people and also find out their problem to participate in the community. From this study we know that needs to arrange awareness program among the therapist about wheelchair training to enhance community participation. Also need to awareness program among the community people to enhance accessibility and well transportation system for the wheelchair users SCI people. So, this study is helpful for the wheelchair users SCI people.

6.2 Recommendation

If this study can be done in many district levels of the community to find out participation in community with wheelchair, it will be a better study.

In case of further research it is recommended to take more samples with adequate time to solve the recent problems areas for better result and perspectives and also take equal male and female sample for comparing the community participation among them.

Needs to arrange awareness program among the therapist about wheelchair training for better participation and the community people to enhance accessibility and well transportation system for the wheelchair users SCI people.

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APPENDIX

সম্মতিপত্র

আসসালামুআলাইকুম/নমস্কার, আমি মাকসুদা আক্তার, ৪র্থবর্ষ ঢাকা বিশ্ববিদ্যালয়ের মেডিসিন অনুষদের অধীনে বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বিএইচপিআই) এর বি.এস.সি. ফিজিওথেরাপি বিভাগ এর একজন শিক্ষার্থী/অধ্যায়নের অংশ হিসেবে আমাকে একটি গবেষণা সম্পাদন করতে হবে এবং এটা আমার প্রাতিষ্ঠানিক কাজের একটা অংশানিমোক্ত তথ্যাদি পাঠ করার পর অংশগ্রহণকারীদের গবেষণায় অংশগ্রহনের জন্য অনুরোধ করা হলো:

আমার গবেষণার শিরোনাম " মেরুরজুতে আঘাত প্রাপ্ত হইলচেয়ার ব্যবহারকারী ব্যক্তিদের সামাজিক অংশগ্রহণ"। এই গবেষণার মাধ্যমে আমি মেরুরজুতে আঘাত প্রাপ্ত ব্যক্তির হইলচেয়ার ব্যবহার কিভাবে সমাজে অংশগ্রহণ করে সেই সম্পর্কে বিভিন্ন তথ্য খুঁজে বের করার চেষ্টা করবো। যদি আমার গবেষণাটি সফলভাবে সম্পূর্ণ করতে পারি তবে মেরুরজুতে আঘাত প্রাপ্ত ব্যক্তিদের হইলচেয়ার ব্যবহারের মাধ্যমে সামাজিক অংশগ্রহনের চিত্রটি উন্মোচিত হবে এবং এটি হবে একটি পরীক্ষামূলক প্রমাণ।

আমার গবেষণা প্রকল্প বাস্তবায়ন করার জন্য, মেরুরজুতে আঘাত প্রাপ্ত ব্যক্তিদের কাছ থেকে তথ্য সংগ্রহ করা প্রয়োজন। আমার গবেষণায় অংশগ্রহণে আপনার কোন ক্ষতি বা বিপদ হবেনা। আপনি যে কোনো সময় নিজেকে এ গবেষণা থেকে প্রত্যাহার করতে পারেন। এই গবেষণার প্রাপ্ত তথ্য সম্পূর্ণভাবে গোপনীয় থাকবে এবং অংশগ্রহণকারীর ব্যক্তিগত তথ্য আপনার অনুমতি ব্যতিরেকে অন্যকোথাও প্রকাশ করা হবেনা।

এই গবেষণা সম্পর্কে যদি আপনার কোনো জিজ্ঞাসা থাকে তবে আপনি অনুগ্রহপূর্বক যোগাযোগ করতে পারেন আমার অথবা মোঃ ওবায়দুল হক, সহযোগী অধ্যাপক ও বিভাগীয় প্রধান, ফিজিওথেরাপি বিভাগ, বিএইচপিআই, সিআরপি, সাভার, ঢাকা- ১৩৪৩।

শুরু করার আগে আপনার কোন প্রশ্ন আছে কি?

আমি কি শুরু করতে পারি ?

হ্যা

না

অংশগ্রহণকারী(স্বাক্ষরওতারিখ)

গবেষক (স্বাক্ষরওতারিখ)

Verbal Consent Form

Assalamualaikum\ Namashker,

I am Maksuda Akter, the 4th year B.Sc. (Hon's) in Physiotherapy student of Bangladesh Health Professions Institute (BHPI) under Medicine faculty of University of Dhaka. To obtain my Bachelor degree, I shall have to conduct a research and it is a part of my study. The participants are requested to participate in the study after reading the following.

My research title is “**Community participation of wheelchair users after spinal cord injury**”. Through this study I will find the participation of wheelchair users in the community after spinal cord injury(SCI). If I can complete the study successfully, the participation in the community of wheelchair users after SCI injury may be explored. To implement my research project, I need to collect data from Savar & Dhamrai upazila. Therefore, you could be one of my valuable subjects for the study.

I am committed that the study will not pose any harm or risk to you. You have the absolute right to withdraw or discontinue at any time without any hesitation or risk. I will keep all the information confidential which I obtained from you and personal identification of the participant would not be published anywhere.

If you have any query about the study, you may contact with me and/or Md. Obaidul Haque, Associate Professor & Head of the Physiotherapy department, Bangladesh Health Professions Institute (BHPI), Savar, Dhaka. Do you have any questions before I start?

So, may I have your consent to proceed with the interview? Yes....., No.....

Signature of the participant & Date.....

Signature of the researcher & Date.....

“মেরুরজুতে আঘাতপ্রাপ্ত হুইলচেয়ার ব্যবহারকারী ব্যক্তিদের সামাজিক অংশগ্রহণ

প্রশ্নাবলি / প্রশ্নমালা

সাক্ষাৎকার

পর্ব-১ঃ রোগীর পরিচয়

(রোগী অথবা রোগীর সহকারী তথ্য প্রদান করবেন)

রোগীর নামঃ	সাক্ষাৎকারের তারিখঃ
১.১ ঠিকানাঃ গ্রামঃ পোঃ থানাঃ জেলাঃ	ফোন নম্বরঃ
১.২ অনুমতি নেয়া হলঃ হ্যাঁ / না	

পর্ব-২ঃ রোগীর আর্থ-সামাজিক অবস্থার তথ্যাবলী

(রোগী অথবা রোগীর সহকারী তথ্য প্রদান করবেন)

প্রশ্নগুলোর উত্তর দেয়ার জন্য দয়া করে ফাঁকা ঘরে টিক চিহ্ন ব্যবহার করুন। যে তথ্যটি আপনার সাথে মিলবে সেই ঘরে টিক দিন।

২.১. বয়স :.....বছর

২.২. লিঙ্গ : মহিলা
 পুরুষ

২.৩. বৈবাহিক অবস্থা : বিবাহিত
 অবিবাহিত

২.৪. আপনার শিক্ষাগত যোগ্যতা কি?

- নিরক্ষর
- স্বাক্ষর
- প্রাথমিক সমাপনি
- জুনিয়র স্কুল সার্টিফিকেট
- মাধ্যমিক স্কুল সার্টিফিকেট
- উচ্চ মাধ্যমিক স্কুল সার্টিফিকেট
- উচ্চতর শিক্ষা

২.৫. আপনার পেশা কি?

গৃহিনী

ছাত্র / ছাত্রী

শিক্ষক

গার্মেন্টস শ্রমিক

বেকার

দিন মজুর

দোকানদার

অন্যান্য.....

২.৬. আপনার পরিবারের সন্তান কত জন?

এক জন

দুই জন

দুই এর অধিক

নেই

২.৭. আপনার মাসিক আয় কত? (টাকা)

২.৮. আবাসিক এলাকা : গ্রাম

শহর

পর্ব-৩ঃ ফিজিওথেরাপী সম্পর্কিত তথ্যাবলী

(রোগী অথবা রোগীর সহকারী / নথিপত্র থেকে তথ্য নেয়া হবে)

৩.১. মেরুর জুর কোন অংশে আঘাত পেয়েছেন?

ত্রিবাদেশিয়

বক্ষদেশিয়

কটিদেশিয়

শরনিদেশিয়

৩.২. প্রারম্ভিক স্নায়ুতন্ত্রের অবস্থা (এশিয়া স্কেল অনুযায়ী)

সম্পূর্ণ A

অসম্পূর্ণ B

অসম্পূর্ণ C

অসম্পূর্ণ D

স্বাভাবিক E

৩.৩. রোগ নির্ণয় (ভর্তির সময়)

- ট্রমাটিক টেট্রাপ্লেজিয়া
 নন ট্রমাটিক টেট্রাপ্লেজিয়া
 ট্রমাটিক প্যারাপ্লেজিয়া
 নন ট্রমাটিক প্যারাপ্লেজিয়া

পর্ব-৪ঃ সামাজিক অংশগ্রহণ সম্পর্কিত তথ্যাবলী
(রোগী অথবা রোগীর সহকারী / নথিপত্র থেকে তথ্য নেয়া হবে)

৪.১ আপনি কি ধরনের পরিবারে বাস করেন ?

- ছোট
 বড়

৪.২ আপনি আপনার হুইলচেয়ারটি কী ভাবে চালান ?

- নিজেই
 কারো সাহায্য নিয়ে

৪.৩ আপনি আপনার দৈনন্দিন কাজ গুলো কী ভাবে করেন ?

৪.৪ আপনি আপনার বাড়িতে কী ধরনের কাজ করেন?

৪.৫ প্রধানত কে আপনাকে বেশী সাহায্য করেন ?

৪.৬ আপনার আত্মীয়-স্বজন কী আপনাকে তাদের বাড়িতে যাওয়ার দাওয়াত দেয় ?

- হ্যাঁ
 না

৪.৭ আপনি কী হুইলচেয়ার ব্যবহার করে আপনার আত্মীয়দের বাসায় যান , যদি যান কীভাবে যান ?

৪.৮ আপনি যখন কোন সামাজিক অনুষ্ঠানে যোগদান করেন তখন সমাজের মানুষ কী ধরনের আচরণ করে ?

৪.৯ আপনি কী হুইল চেয়ার ব্যবহার করে খেলা-ধুলায় অংশ গ্রহণ করেন , যদি করেন কী ধরনের খেলায় অংশ গ্রহণ করেন ?

৪.১০ আপনি কীভাবে আপনার অবসর সময় কাটান ?

8.11 সমাজে এমন কেউ কী আছে যার সাথে আপনি আপনার আনন্দ উপভোগ করেন ?

8.12 এমন কেউ কী আছে যে আপনার কোন সমস্যা সমাধানের ক্ষেত্রে বা কোন সিদ্ধান্ত নিতে আপনাকে সাহায্য করে ?

8.13 আপনি কী আপনার বন্ধুদের সাথে স্বাক্ষাত করেন , যদি করেন কোথায় যান এবং কীভাবে সময় কাটান ?

8.14 দুর্ঘটনাটি ঘটার পর কী আপনি আপনার আগের কর্মক্ষেত্রে ফিরে যেতে পেরেছেন ?

হ্যাঁ

না

8.15 আপনি কী হুইল চেয়ার ব্যবহার করার জন্য আপনার বাড়ীতে কোন পরিবর্তন করেছেন ? যদি করেন কী ধরনের পরিবর্তন করেছেন ?

8.16 আপনাকে কী আপনার কর্মক্ষেত্রে অথবা শিক্ষা প্রতিষ্ঠানে কোন ধরনের অসুবিধায় পড়তে হয়, যদি হয় কী ধরনের অসুবিধা হয়?

8.17 আপনি কী খেলা-ধূলা , পড়া শোনা এবং কর্মক্ষেত্রে আশেপাশের মানুষের কাছ থেকে কোন ধরনের সাহায্য পান ? যদি পান কী ধরনের সাহায্য পান ?

8.18 আপনি কর্মক্ষেত্রে , কেনাকাটা করতে বা অন্য কোথায়ও যাতায়াতের জন্য প্রধানত কোন ধরনের পরিবহন ব্যবহার করেন ?

8.19 আপনার এই পরিবহন ব্যবস্থা নিয়ে আপনি কেমন সন্তোষ্ট ?

সন্তোষ্ট

অল্প সন্তোষ্ট

সন্তোষ্ট না

8.20 আপনি কী হুইল চেয়ার ব্যবহার করে হাসপাতাল , প্রতিবেশীর বাসায় , বাজার , ব্যাংকে যান ? যদি যান এ সব স্থানে প্রবেশ করতে আপনাকে কী ধরনের সমস্যায় পড়তে হয় ?

8.21 আপনার সমাজের বিভিন্ন স্থানে আপনার প্রবেশ গম্যতা বাড়ানোর জন্য কোন দিকটি পরিবর্তন করা প্রয়োজন বলে আপনি মনে করেন ?

৪.২২ আপনি কী নিয়মিত স্বাস্থ্যসেবা পান ? যদি পান কীভাবে অথবা যদি না পান কেন ?

৪.২৩ আপনি কত বছর ধরে হুইল চেয়ার ব্যবহার করছেন ?

৪.২৪ আপনার হুইল চেয়ারটি কেমন ?

হালকা

ভারী

৪.২৫ হুইল চেয়ার চালানোর সময় আপনি কি ধরনের সমস্যা অনুভব করেন?

৪.২৬ আপনার জীবনে চলার জন্য হুইল চেয়ারটিকে সহায়ক হিসেবে পেয়ে কতটুকু সন্তুষ্ট?

..... আমি আমার জীবনের লক্ষ্যের খুব কাছাকাছি

..... আমার জীবনের অবস্থা অতি উত্তম

..... আমি আমার জীবন নিয়ে সন্তুষ্ট

..... যতটুকু সম্ভব আমি আমার জীবনের প্রয়োজনীয় জিনিসটি অর্জন করেছি

..... আমি যদি সারাজীবন বাঁচতাম তাহলে কিছুই পরিবর্তন করতাম না

উপরের লাইনগুলোর উত্তর দিতে দয়া করে নিচের তালিকা থেকে পছন্দ করুন। উপরের প্রত্যেক লাইনের ফাঁকা জায়গায় আপনার মতামত জানাতে হবে।

৭- প্রবলভাবে সম্মতি

৬- সম্মতি

৫- স্বল্প সম্মতি

৪- সম্মতি না আবার অসম্মতিও না

৩- স্বল্প অসম্মতি

২- অসম্মতি

১- প্রবলভাবে অসম্মতি

Interview Schedule

Part- I: Patient's Identification

(To be provided by patient or attendant)

1.1 patient name :

Date of Interview:

1.2 Address: Vill- PO-

Thana- Dist-

Contact no:

1.3 Consent Taken: Yes /No

Part- II: Patient's Socio-demographic Information

(To be collected from Record/Patient/Care giver)

Please give the tick mark in the box for each question's answer what you feel right for you

2.1 Age(Inyear):.....Yrs

2.2 Sex: Male

Female

2.3 Marital status:

Married

Unmarried

2.4 Educational level?

Illiterate

Literate

Primary School Certificate (PSC)

Junior School Certificate (JSC)

Secondary School Certificate (SSC)

Higher Secondary School Certificate (HSC)

Higher education

2.5 Occupation?

Day labour

House Wife

Garments Worker

Unemployed

Business

Student

Shopkeeper

Other (Specify): _____

2.6 How many child you have at home ?

No

One

Two

More

2.7 What is the average monthly income of your household?

_____ (Taka)

2.8 Residential Area

Rural

Urban

Part-III: Physiotherapy related Information

(To be collected from Record/ Care provider/Clinical examination)

3.2 Skeletal level of injury:

Cervical	<input type="text"/>
Thoracic	<input type="text"/>
Lumber	<input type="text"/>
Sacral	<input type="text"/>

3.3 Initial Neurological condition according to ASIA Scale:

Complete A	<input type="text"/>
Incomplete B	<input type="text"/>
Incomplete C	<input type="text"/>
Incomplete D	<input type="text"/>
Normal E	<input type="text"/>

3.5 Diagnosis (During admission):

Traumatic Tetraplegia	<input type="text"/>
Non Traumatic Tetraplegia	<input type="text"/>
Traumatic Paraplegia	<input type="text"/>
Non Traumatic Paraplegia	<input type="text"/>

Part IV: Social participation related questions
(To be provided by the patient/attendant)

1. What kind of family do you live?

Nuclear

Large

2. Can you propel your wheelchair independently or need any one's help?

3. How do you perform your daily living activities?

4. How do you perform your household affairs like cooking, gardening and housekeeping?

5. Who is the main person who provides you with support?

6. Are your neighbours and relatives inviting you to their home?

Yes

No

7. Do you go your relatives resident by using wheelchair, if you go how it is possible?

8. What are the attitudes that are showed when you participate in socio-cultural function?

9. Do you participate in sports by using wheelchair; if you do what kinds of sports do you participate?

10. How will you spent your leisure time?

11. Is anyone in the community with whom you share your joys and accomplishments?

12. Is there someone who helps you to make decisions or solve problems?

13. Do you meet with your friends, if yes, where you go and how you spent your time?

14. Are you go back to the previous job or study after the incidence of injury?

Yes

No

15. Are you modify your home for using wheelchair, if yes what types of modify you

have to done?

16. Have you face any trouble while you work in the field or in educational institute, if yes, what kinds of troubles you have to face?

17. Have you get any help from the society during your playing, study and working in the field, if yes , what are the types of help?

18. What is the main way you get around your community on a daily basis, that is, to get work, appointments, shopping, school ?

19. How satisfied are you with your main form of transportation?

20. Do you go to hospital, Neighbors residence, Market and Bank by using wheelchair, if yes, what kinds of problems you have to faces to enter this places ?

21. What one thing would you change to improve the accessibility of public spaces in your Community?

22. Are there social activities you would like to do, what you are currently unable to do?

23. Do you get your health facilities regularly, if yes, how or not why?

24. How many years have you been with wheelchair?

25. What about your wheelchair?

Heavy

Light

26. What kinds of problem do you feel while using wheelchair?

27. How satisfied are you with the support of wheelchair in your life?

___ In most ways my life is close to my ideal.

___ The conditions of my life are excellent.

___ I am satisfied with my life.

___ So far I have gotten the important things I want in life.

___ If I could live my life over, I would change almost nothing

Please fill up every line and use this option for completing the answer above question-

7 - Strongly agree

6 - Agree

5 - Slightly agree

4 - Neither agree nor disagree

3 - Slightly disagree

2 - Disagree

1 - Strongly disagree

Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S., (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49:71-75.

14th March, 2015

Head

Department of Physiotherapy

BHPI

CRP-Chapain, Savar, Dhaka-1343

Subject: Seeking permission for data collection to conduct my research project.

Sir,

With due respect and humble submission to state that I am Maksuda Akter, student of 4th year B.Sc. in Physiotherapy at Bangladesh Health Professions Institute (BHPI). The Ethical Committee has approved my research title on "Community participation of wheelchair users after spinal cord injury" under the supervision of Md. Obaidul Haque, Associate Professor & Head of the Physiotherapy department, BHPI. Conducting this research project is partial fulfillment of the requirement for the degree of B.Sc. in Physiotherapy. I want to collect research data for my research project at Savar and Dhamrai upazilla. So, I need permission for data collection. I would like to assure that anything of my study will not be harmful for the participants.

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

Yours faithfully

Maksuda Akter

15.03.15

Maksuda Akter

4th year B.Sc. in Physiotherapy

Session: 2009-2010

Bangladesh Health Professions Institute

(An academic Institution of CRP)

CRP- Chapain, Savar, Dhaka- 1343.

S/O
Please Issue a letter
15/03/15



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)
(The Academic Institute of CRP)

Ref:

Date :...21:03:2015.....

To
Maksuda Akter
4th year B.Sc in Physiotherapy
Session: 2009-2010.

Subject: Data Collection.

Dear Maksuda Akter,

In response to your request, you are permitted to collect data from persons with spinal cord injury who has been discharged after completion rehabilitation from CRP and living in their community.

Your research title is "Community participation of wheelchair user after spinal cord injury."

Md. Obaidul Haque
Associate Professor & Head
Dept. of Physiotherapy
BHPI.