PREDISPOSING FACTORS RESPONSIBLE FOR HINDRANCE INTO WORKPLACE AFTER SPINAL CORD INJURY

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Department of Physiotherapy CRP, Savar, Dhaka-1343 Bangladesh August, 2018 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

PREDISPOSING FACTORS RESPONSIBLE FOR HINDRANCE INTO WORKPLACE AFTER SPINAL CORD INJURY

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DECLERATION

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 decline that for any publication, presentation or dissemination of information of the study. I would bound to take written consent from the department of Physiotherapy of Bangladesh Health Professionals Institute (BHPI).

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CONTENTS

		Page no
Ack	nowledgement	I
Acro	onyms	II
List	of table	III
List of figure		IV
Abstract		V
CHA	APTER- I: INTRODUCTION	1-10
1.1	Background Information	1-3
1.2	Rationale	4-5
1.3	Research question	6
1.4	Aim of study	7
1.5	Objectives	7
1.5.1	1 General objective	7
1.5.2	2 Specific objectives	7
1.6	Operational definition	8-9
1.7	List of variables	10
CHA	APTER- II: LITERATURE REVIEW	11-23
CHA	APTER- III: METHODOLOGY	24-27
3.1	Study design	24
3.2	Study site	24
3.3	Study area	24
3.4	Sample Size	24
3.5	Study population	25
3.6	Sampling technique	25
3.6.1	1 Inclusion criteria	25
3.6.2	2 Exclusion criteria	25

3.7	Method of data collection	25
3.8	Data collection tools	26
3.8.1	Questionnaire	26
3.9	Duration of data collection	26
3.10	Data management and Analysis plan	26
3.11	Ethical consideration	26
3.12Rigor		27
CHAPTER- IV: RESULTS CHAPTER- V: DISCUSSION		28-39
		40-41
СНА	42-43	
REF	FERENCES	44-49
APP	ENDIX	50-62
Perm	ission Letter	50-51
Verb	al consent statement (English)	52
Verb	al consent statement (Bangla)	53
Ques	tionnaire (English)	54-57
Ques	tionnaire (Bangla)	58-62

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Acronyms

ADL Activity of Daily Living.

BHPI Bangladesh Health Professions Institute.BMRC Bangladesh Medical Research Council.

CRP Centre for the Rehabilitation of Paralysed.

ICF International Classification of Functioning.

QOL Quality of Life.

SCI Spinal Cord Injury.SCL Spinal Cord Lesion.

USA United States of America.
WHO World Health Organization

List of Tables

	Page no
Table 1: Demography of the participant.	31
Table 2: Medical status of the patient.	32
Table 3: Participant's Attitudes toward Employment information	33
Table 4: Participant's Psychosocial Related information.	38

List of Figure

	Page no
Figure 1: Number of participants with age range.	28
Figure 2: Number of Gender of the Participants.	29
Figure 3: Economic status of the patient	30

Abstract

Purpose: Spinal cord injury is a devastating and debilitating condition for an individual. It is a life threatening as well as hampered the Quality of Life (QoL) of an individual. With no means of hope one cannot think about their future life with employment, job satisfaction etc. Objectives: This study was aimed to find out the predisposing factors responsible for hindrance into workplace after Spinal Cord Injury. Methodology: This is a cross sectional quantitative study design. The data is being collected by convenient sampling technique. A total 54 subject was introduced in between 21th July April to 21th August 2018. The data was collected from those subjects who are completed/fill up inclusion criteria (Age limit was 18 to 60 years, who are completed rehabilitation at least 1 year, presently involve with the job, agree to participate in study). Result: In my study demographic profile shows most of the participants age group was in 2nd to 4th decade of life and most of them are male (93%) their income shows 50% (1000-5000). Most of them are married 46 (85.2%) and living in rural area 29 (53.7%), service holder shows their 37 (68.6%) main occupation and most of them are illiterate 26 (48.1%). In this study structured questionnaire attitudes toward employment reveals that 18 (34%) have agree towards employment and 18 (34%) have usually psychosocial related problem.

Conclusion:Spinal cord injury sometimes devastating and a course for an individual.Developing countries like Bangladesh, where health support system including the rehabilitation system is not within the reach of ordinary people. It should be an urge for stakeholders to think about the employment system of this vulnerable group of people.

CHAPTER -I INTRODUCTION

1.1 Background

Spinal cord injury is damage to the spinal cord that causes to changes in its functions below the neurological level of the lesion either temporary or permanent. There are two types of injury related with a spinal cord injury, these are known as a complete spinal cord injury and an incomplete spinal cord injury (Crewe et al., 2009). Due to loss of motor and sensory function below the level of injury, people with a spinal cord injury have more risk for developing decrease activity of daily living (Van den Berg-Emons et al., 2004). Poor activity of daily living may refers negative impact on physical fitness, social participation and quality of life and a poor activity of daily living may increase or developing the risk of secondary health problem and causes of morbidity and mortality in the SCI population (Warburton et al., 2006).

Rehabilitation program helps spinal cord injury patients to improve more active in their daily life style. It is important to determine the factors and to facilitators of physical activity after their discharge (Vissers et al., 2008). After spinal cord injury a person's ability to move on and develop and coping with their strategies. Support from family members, friends, staff to reach in this process (Lofvenmarka et al., 2015). Spinal cord injury is a devastating condition for a person's physical, mental, family, and social life (Recio et al., 2012).

Spinal cord injury (SCI) is a traumatic event that disturbances to normal sensory, motor system and its effects on patient's physical, psychological, and social well-being (Singh et al., 2014).Long-term disability or death is the cause of Spinal cord injury (SCI). Leading to permanent paralysis by modern man, it is one of the most catastrophic lesions. The Spinal cord injury patients, the victims who are usually young and in their most productive stage of life multiple medical, social and vocational complications affect to them. Spinal cord injury causes burden and suffering not only of the victim but also to their families, to the health care system and to the community (Maharaj, 1996).

In Japan from January 1990 to December 1992 a survey of traumatic spinal cord injuries was carried out by a statistical method of the nationwide epidemiological

1

study showed that the incidence was 40.2 per million in the annual report of spinal cord injury. More caudal SCI was 3:1 is the ratio of cervical cord injuries (Shingu et al., 1994). The prevalence of SCI at 650–900 per million American epidemiological data approximately showed that (Ginis et al., 2005). Expected data showed that the rates of adolescents with disabilities range from 108 per 100,000 in Myanmar to 6,726 per 100,000 in Canada (Groce, 1999). In Australia a study showed that most devastating medical conditions are Spinal cord injury (SCI) or damage. In all facets of human functioning and existence it causes life changing consequences.

The acute phase ranges from 10 to 25/million inhabitants per year which data is recently published in Europe on the incidence of SCI in survivors. Showing consistent rates between 22 and 25/100 000 inhabitants, in the Nordic countries, two register-based studies have been published (Dahlberg et al., 2005). The retrospective study of Japan showed that the annual incidence of spinal column injuries ranges from 19-88/100,000. 15-50 per million per year is the incidence of spinal cord injury. 480-813 per million is the prevalence of SCI. In Pakistan exact incidence of these injuries in this region is not known though there are few reports on demographics of spinal injuries (Qureshi et al., 2010).

Patients who have been suffering from spinal cord injury often face life threatening complications so they need appropriate management and specialized rehabilitation. The patients of SCI are going into the different hospital for the treatment but they do not have enough facilities for their treatment. In Bangladesh there is only one non-government organization is Centre for the Rehabilitation of the Paralyzed, which has conducting a rehabilitation program for the last 32 years through which the patients can improve their life style (Islam et al., 2011). Some international statistics calculated that the prevalence rate of disability in the UN is 5% and WHO estimates that this figure is 10%. In Bangladesh, the number of disable people range from a minimum of 7 million to a maximum of 14 million, based on the country population (Alam et al., 2005).

Spinal cord injury (SCI) is being a major of disability throughout Asia as well as in Bangladesh (Islam et al., 2011), and is a catastrophic injury allied with significant functional loss in relation with the severity of injury (Silver et al., 2012). The amount of the disability associated with an SCI is unique to each injury, level and

completeness of the injury. American epidemiological data estimate the prevalence of SCI at 650-900 per million with a male –female ratio of 4:1 (Ginis et al., 2005). People with Spinal injury (SCI) is not as common as many other injuries, but it's a devastating condition of physical and psychological consequences. Very few people experience full neurogenic recovery after spinal cord injury (Chen et al., 2013).

Spinal cord injury is a devastating, life threatening effects and this can last a lifetime of person with spinal cord injury. The amount of disability associated with SCI is unique to each injury and is a function of the level and completeness of the injury (Ginis et al., 2005). In recent study, the spinal cord injury has been estimated as 6 cases per million in Bangladesh (Momin, 2005).

1.2 Rationale

The purpose of this study was to know the predisposing factors about workplace after spinal cord injury patient's in Bangladesh. In Bangladesh maximum village people were suffering from spinal cord injury. In order to develop health care and social services it is important to know the epidemiology of spinal cord injury (Dahlberg et al., 2005). Because of their high personal, both knowledge of incidence and prevalence of spinal cord injury (SCI) is important, both bio-psychological impact and of their high socio-economic consequences, it is also important to short-term as well as long-term. Now a day Spinal cord Injury is most commonly occurring disabling condition in all developing and developed countries in the world and it will increase day by day due to lack of awareness. Injuries that are affecting the spinal cord and complicated by physical damage are an important health problem in Bangladesh as they carry a high rate of morbidity and mortality. Demography of spinal cord injury is important to know as Bangladesh is a developing country and trying to develop health care system. The extent of life disruption experienced after traumatic SCI cannot be explained by injury severity or demographic factors alone. Patients with spinal cord injury may face range of problems in their community like as environmental, physical, psychological, perceptions and attitudes. Environmental & physical factors are commonly seen in our country after spinal cord injury and it is increasing day by day. In recent past some studies have deal with spinal cord injury patients in our countries, but the exact responsible factors of people with spinal cord injury patients in community has not been studied in Bangladesh. This study formulates to fill the gap of knowledge & ideas in this area. The purposes of the study are to find out accessibility responsible factors of people with spinal cord injury patients in community.

This study also helps to explore the patient's physical, emotional/psychological, perceptions, attitudes and environmental factors. This study also helps to discover the lacking area of a career, especially after doing any activities in community. By doing this research, the problem may be drawn out & gives proper education about accessibility barriers of people with spinal cord injury patients. This study is helpful in making physiotherapist to aware about the accessibility predisposing factors of people with SCI patients. Physiotherapy plays a vital role in the management of SCI patients, so it is helpful for physiotherapist in working in this area for delivering

service. As a result patients become more benefited. Thus the study might create a future prospect of physiotherapy profession in Bangladesh (Whiteneck et al., 2004).

So, my personal interest to work in this area and to aware the people and professionals about the accessibility o responsible factors of people with SCI people in community. It helps to increase the role and importance of physiotherapy in every sector of Bangladesh and improve quality of life.

1.3 Research Question

What are the predisposing factors responsible for hindrance into workplaceafter spinal cord injury?

1.4 Aim of the study

To find out the predisposing factors responsible for hindrance into workplaceafter spinal cord injury.

1.5 Study objectives

1.5.1 General objective

To identify the predisposing factors responsible for hindrance into workplace after spinal cord injury.

1.5.2 Specific objectives

- To identify the area in social participation of spinal cord injury patients in the community.
- To find out the impact of SCI in performing their life role activities.
- To find out environmental factors of SCI patients in job sectors.
- To determine the effect of SCI in individual economic status.

1.6 Operational definition

Spinal cord Injury

A spinal cord injury (SCI) is damage to the spinal cord that causes temporary or permanent changes in its function. Symptoms may include loss of muscle function, sensation, or autonomic function in the parts of the body served by the spinal cord below the level of the injury. Injury can occur at any level of the spinal cord and can be complete or incomplete injury, with a total or partial loss of sensation and muscle function.

Factors

An obstacles faced by participants in their own community as well as their everyday tasks.

Community

A specific geographical area or village or a group of organizations or populations living and interacting with one another in a particular environment.

Social participation

Social participation can be understood as "a person's involvement in activities that provide interaction with others in society or the community.

Paralysis

Injury or disease to the nervous system can affect the ability to move a particular part of the body. This reduced motor ability is called paralysis.

Neurological level

Up to the level where both sensory and motor function is remains intact.

Paraplegia

The term paraplegia means impairment of motor and/ or sensory function in the thoracic, lumber and sacral segments of the spinal cord which is secondary to the damage of neural elements within the spinal canal. Paralysis occurs of lower portion of the body and of both legs.

Tetraplegia

Injury of the spinal cord in the cervical region, with associated loss of muscle strength in all 4 extremities is called tetraplegia. Paralysis of both legs and both arms, it is also called quadriplegia.

Complete lesion

Absence of sensory and motor functions in the lowest sacral segments is called complete lesion.

Incomplete lesion

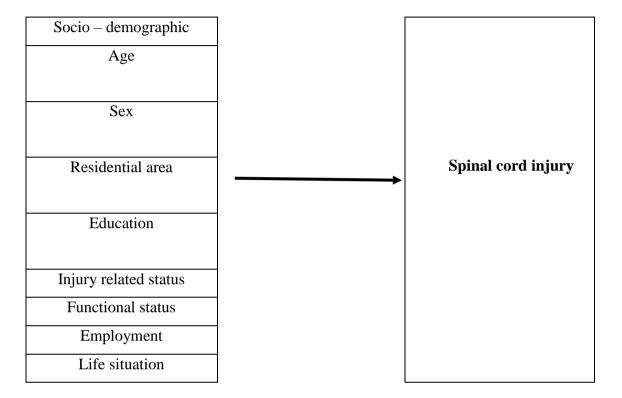
An incomplete lesion is the term used to describe partial damage to the spinal cord. With an incomplete lesion, some sensory and/or motor function remains at the lowest sacral segments. Including the lowest sacral segments preservation of sensory or motor function below the level of injury is called incomplete lesion.

1.7 List of variables

Conceptual framework

Independent variables

Dependent variables



The spinal cord injury causes serious injuries and permanent impairments due to incomplete documentation and transfers to tertiary institutions and creates a life threatening situation (Phalkey et al., 2011). On the neurological examination by the completeness of the injury the severity of spinal cord trauma is clinically determined. In prognosis associated with recovery the classification of injury which completely assists to the clinician. Those with incomplete injuries have a less favorable recovery potential than patients with complete injuries persisting after the initial acute injury phase. Common two definitions of complete spinal cord injury (SCI) are used in more common (Waters et al., 1991). The cause of spinal cord injury may traumatic or nontraumatic. Auto crash, including jeep, truck and bus, fall: including jumping and being pushed accidentally (not as an act of violence), gunshot wound motorcycle crash: 2wheeled, diving, medical/surgical complications: impairment of spinal cord function resulting from adverse effects of medical, surgical or diagnostic procedures and treatment, bicycle, tricycles, Pedestrian, including falling/jumping into the path of a vehicle, auto racing, glider kite, slide, swimming, bungee jumping, scuba diving, lightning, kicked by an animal, machinery accidents, tractor, bulldozer, go-cart, steamroller, train, road grader, forklift, sledding, snow tubing, tobogganing, playing ice hockey, snowboarding. Personal contact, including being hit with a blunt object, falls as a result of being pushed. Football and other penetrating wounds: stabbing, impalement, boat and parachuting, para-sailing, etc gymnastic activities other than trampoline baseball/softball, water skiing, basketball/volleyball, high jump, bomb, grenade, dynamite and gasoline. These are traumatic cause. The non-traumatic cause is spinal tumor, TB spine, transverse myelitis, physical assault, physical weakness etc (Chen et al., 2013).

The leading causes of spinal cord injuries are the auto and motorcycle accidents. In USA a study showed that more than 40 percent spinal cord injuries occur in each year. According to the National Institute of Neurological Disorders and Stroke 1.5 percent of spinal cord injuries resulting from violent encounters, gunshot and knife wounds. Caused by fall is most common among the old age about 65. One-quarter of spinal cord injuries occurs by falls. About 8 percent of spinal cord injuries occur by the athletic activities, such as impact sports and diving in shallow water. About 1 out of

every 4 spinal cord injuries occurs by using of alcohol. Spinal cord injuries also caused by cancer, arthritis, osteoporosis and inflammation of the spinal cord may cause (Coppla& Marlin, 2013). Spinal tumors which cause rare cancers reduce the quality and quantity of life and present an enormous challenge to patients and their physicians. The low incidence of these tumors that might defines the disease more clearly and identifies effective therapies. Consequently, progress in the treatment of rare tumors often proceeds slowly and typically which need for better treatments. Spinal cord tumors can affect the morbidity and mortality in children and adults (Claus et al., 2010).

Tentorial spinal cord compression injuries are easily produced using forceps; however the primary trauma varies as a function of compression rate and duration. The amount of major trauma also is expected to vary function. The spinal cord that is compressed and the size of compression across the ventral-most part of the spinal cord (Popovich et al., 2012).

A five scale subdivision was used: A = complete motor and sensory function disorder; B = motor complete and sensory incomplete function disorder; C = motor and sensory incomplete function disorder; D = useful motor function with or without auxiliary means; E = no motor or sensory function disorder which is the modified by Frankel and known as Frankel score (Capaul et al., 1994). The epidemiological study in Japan showed that no survivors with complete tetraplegia, mostly paraplegics (89%), a significant pediatric population (17%), predominant female victims (ratio of 1:1.3) (Rathore et al., 2007). In South African society the Frankel classification was used to assess neurological recovery. Defined the recovery was as improvement from Frankel group A, B or C to Frankel group D or E during the period of rehabilitation (Hart & Williams, 1994). National Database is overall cumulative survival rate of the entire population is 10 years. The statistical the database of the patients, probability of dying was determined declining somewhat thereafter to be greatest during the first postinjury year (Stover & Fine., 1987).

Spinal cord injury is two types such as complete and incomplete, a person loses all ability to feel and voluntarily move below the neurological level of the injury which

occurs in a complete injury, on the other hand there is some functioning below the level of the injury which occurs in an incomplete injury (WebMD, 2011). Complete loss of function below the level of the injury when complete spinal cord injuries occur, while incomplete spinal cord injuries are those that result in some sensation and feeling below the point of injury. The way in which the spinal cord has been damaged it dependent upon the level and degree of function in incomplete injuries is highly individual (Brain and Spinal Cord.org, 2012).

A person with traumatic or non-traumatic SCI the potential changes are similar regarding their ability to feel, move, control their bladder and bowel and other possible problems. Traumatic SCI are at higher risk than those with non-traumatic SCI. Non-traumatic SCI patients have a better recovery in affected areas and stay for shorter periods in hospital compared with those with a traumatic SCI who have worse prognosis and long durations. A specialized team of health care professionals it is best to have periodic reviews for anyone with SCI. Prevent and treat SCI complications help to achieve the best possible outcomes for health and well-being (Ziniya, 2013).

Loss of function is the symptom of spinal cord injury. Impaired functioning occurs by spinal cord injury. Severe headache, backache, tingling or loss of sensation in the hand, fingers, feet, or toes, feeling of pain or pressure in the neck, partial or complete loss of control over any part of the body, impaired breathing after injury, urinary or bowel incontinence, or retention, difficulty with balance and walking, unusual lumps on the head or spine (Medtronic, 2013). 80% of spinal cord injuries occurred in men, 16 to 30—more than half of spinal cord injuries occur in young adults, they are the high risk of Spinal cord injury. Diving into shallow water or playing sports without proper safety gear or precautions, they are in risky. Arthritis, osteoporosis or any other joint disorder are also caused of Spinal cord injury (Medtronic, 2013).

The literature of an excellent review of and comprehensive study of SCI describes the changes over the past 20 years in survival and causes of death where using data from the US Spinal Cord Injury Model Systems. A population based sample of SCI survivors in Great Britain to examine long-term survival which is the aims of that study, explore trends in cause of death identify and risk factors contributing to deaths. 50 years of spinal cord injury experience, the investigation which is covering, and the

longest follow-up SCI survival study to date. Any results of SCI mortality data were compared with from the United States (Frankel et al., 1998).

Without radiographic abnormality the epidemiology of spinal cord injury is less frequently reported in adults as compared with children. Epidemiological characteristics, such as injury origin, injury level or severity, neurological scale and MRI feature were acquired. As the young adult population increases, it is very important to set up an individualized evaluation system based on a nationally scaled epidemiological database (Guo et al., 2012). Long-term impact on physical and mental health with paralysis is common causes of spinal cord injury. Secondary complications may focus sometime and the complications are the main cause of life changing effect (Colangelo, 2014). The prolong period of spinal cord injury (SCI) on the health care system imposes a need for greater efficiency in the use of resources and the management of care. Access Care of Training project is part of a broader vision to create a methodological framework to evaluate clinical practices, and in particular to develop a certification process for SCI Programs (Porter, 2010).

Acute hospital care is needed after immediately following a SCI where all medical and surgical treatment is completed. After complete acute care, they should be considered for rehabilitation. Rehabilitation care is the most effective for traumatic or non-traumatic events. A research showed that specialist spinal rehabilitation unit has great outcomes for people with a SCI. Specialist rehabilitation unit are better than a general rehabilitation unit (Ziniya, 2013).

Breathing and the heart is beating is the first step of management of a suspected spinal cord injury patient. A loss of control of normal breathing is the cause in spinal cord injury when injury occurs in upper neck. Use of a ventilator or breathing tube may require placement. Immobilization is the treatment spinal cord injury after complete previous treatment. A cervical collar or on a backboard prevent the spine from moving in emergency condition. Further damage may occur if the patient moves vigorously after spinal cord injury (Medicine net.com, 2009).

Patient care is centered on a multi-disciplinary team consist by the Model Regional Spinal Cord Injury Center's approach where several medical specialists headed by the attending physiatrist, and personnel from the disciplines of rehabilitation nursing, physical therapy, occupational therapy, psychology and social service. A statistics has been analyzed a set of data which captures medical, demographic, social and psychological information (Fine et al., 1980). During the rehabilitation program in South African Society the commonest complications were pressure sores, developed in a further 23 patients which were present in 47 cases at the time of arrival in the rehabilitation unit. In 43 cases (7%), severe spasticity occurred, in 18 cases (3%) urological complications and debilitating pain in 12 (2%). 7.4% was the overall mortality rate. Analysis of the causes of death as autopsies were not performed routinely could not be included in this study (Hart & Williams, 1994).

Patients of pressure sore who had stage III/IV pressure ulcers underwent surgical reconstruction play an important role in the management of pressure ulcer in patients with spinal cord lesions. At a time surgery are necessary for Stage III to IV pressure ulcers. In rehabilitation program reconstructive procedures are effective. Prevent weight bearing otherwise wound or pressure ulcer may increase(Srivastava et al., 2009). The proper wound management immediately after the injury, health education programs to create awareness among the public and establishing an ICU facility in the hospital would definitely decrease the morbidity and the mortality (Marulappa et al., 2012).

In South Asia Bangladesh is a poor but developing country (Arafat, 2016). Spinal cord injury poses great impact on economy of both personal & national (Quadir et al., 2017).

The psychological effects of spinal cord injury patient create burden for family members and the society (Grivna et al.., 2015). Spinal cord and its health-related complications are a major problem because it is the disease's prevalence and mortality and economic problems (World Bank World report on disability reviews evidence about 15% of the world's population lives with some form of disability and 2-4% experience functional difficulties (Krahn, 2011).

In the United States 259,000 people in the United States were living with an SCI in 2008 and 70% of them were using a wheelchair because of spinal cord injury and their primary means of mobility (McClure et al., 2001). Prevalence of spinal cord

injury- In Bangladesh records of all admitted patients with spinal injuries from January 2011 to June 2016 were collected from the medical records of the CRP hospital, Male are 1897 (86.82 %) & female are 287 (13.14%). From this studies in the USA most common cause of SCI were automobile crashes (31.5%) and falls (25.3%), gunshot wounds (10.4%), motorcycle crashes (6.8%), diving incidents (4.7%) and medical or surgical complains (4.3%), which collectively accounted for83.1% of total SCI since 2005(Chen et al., 2013). In the North America seems to be associate with a higher percentage of violence-related SCI (18%) and Australia (2%) (Chen et al., 2013).

According to (Lee at el., 2014) non traumatic Spinal cord injury patients A global-incident rate (2007) is estimated at 23 TSCI cases per million (179312 cases per annum). Regional data are available from North America (40 per million), Western Europe (16 per million) and Australia (15 per million). Extrapolated regional data are available for Asia-Central (25 per million), Asia-South (21 per million), Caribbean (19 per million), Latin America, Andean (19 per million), Latin America, Central (24 per million), Latin America-Southern (25 per million), Sub-Saharan Africa Central (29 per million), Sub-Saharan Africa-East (21 per million). In Bangladesh life expectation of persons with SCI uncovered that, (40.30%) was found to be the most common cause in this study falling from height, either from trees, construction works, electric poles or roofs and carrying a heavy load object on 13 the head was second most common cause (16.0%). SCI have various non-traumatic and traumatic cause with varying neurological damage (Razzak et al., 2017). Traumatic spinal cord injury (TSCI) is a catastrophic event that can be sudden. In human and social positions it is unexpected and devastating and expensive (Lee at el., 2014).

The concept of barriers used three main components proposed by lack of assistance or support of personal care, proper management of home assistance and inability of performing active of daily livings (Silver et al., 2012). The most common causes of SCI were automobile crashes (31.1%) and falls (25.3%). More SCIs occurred during the weekends and warmer months, which seemed to parallel the increase of motorcycle and diving related injury. The present findings suggest that prevention strategies should be tailored to the targeted population and major causes to have a meaningful impact on reducing the incidence of SCI (Chen et al., 2013).

In this research the author showed that most of young and active people are affected by spinal cord injury due to low income in society and most of the causes are falls from height road traffic accident etc. Victims are suffering because of pre hospital care and lack of occupational safety. In Bangladesh here should be the strong preventive way to decrease the spinal cord injuries. Another way to public awareness of SCI to established rehabilitation program and better SCI management (Razzak et al., 2017). Secondary complication and pain were associated of low life satisfaction for Spinal cord injury patient after one year discharge from their rehabilitation program. Reducing the life satisfaction was powerful for the domain of sexual life, self-care, and occupational conditions (van Koppenhagen et al., 2008).

In this study (Reinhardt et al., 2016) Most perceived barriers were climatic conditions and inaccessibility of public and private infrastructure. Older participants, who are more likely to have access to more problems with the consequences of chronic injuries and participants with complete violence Women report that they faced attitudinal barriers from the society. About one-third of participants with complete tetraplegia report related obstacles with personal care. A higher level of physical independence was associated with fewer perceived barriers.

According to (Pentland et al.,2002). The purpose of this research was to help women with long-term spinal cord injuries (SCIs) feel that they are experiencing age, how they are coping and what they need to ensure that they their continued social and economic participation in society. Community participation was a challenge for most mobility devices. Less than half earned any income, and those who used mobility devices they had no employment role at home or in community (Scovil et al., 2012). Limiting resources of the community is an important barrier to the participation of the community and Medical and social services that are necessary for people with disabilities to live in the community (Charlifue and Gerhart, 2004). Independent Living Services (Ils) designed to reduce the barriers to physical freedom, mobility, career, social integration and economic self- sufficiency ().but these services was not ideal or develop for disable people. Maintaining community participation is a separate, but equally important, consideration for people with SCI's as they grow older (Scelza et al., 2007).

After the spinal cord injury (SCI) community integration is influences by one Various types of physical, environmental and personal matters, in the last decade the average life expectancy of spinal cord injury persons has been increased because of important in medical care. Now most of the person with SCI expects to live events that lead to serious physical disability and secondary Medical problems and seriously impacts life satisfaction of person involved (van koppenhagen et al., 2008).

Social support is an important factor for spinal cord injury patients for their better health and functioning. Functioning and quality of life of persons living with spinal cord injury associated with develop and facilitate social support or social skills. Social support was related to physical and mental health, pain, coping & adjustment and life satisfaction. Social skills were related to solving problem, verbal communication and self-monitoring (Muller et al., 2012).

According to (Reinhardt et al., 2016) Public access- participant's reported that they had problem in public access 43% said that maid my life little harder, 38% said that no influence. Social attitude 19% said that made my life little harder, Attitudes-9% said that made my life little harder, attitudes of friends-10% reported that made my life little harder, attitudes of colleagues 82% reported that 11% said that made my life little harder, 4% missing. Short distance transportation-27% said that made my life little harder long distance transportation 25% said that made my life little harder, personal care assistance-10 % reported that made my life little harder. Spinal cord injuries and its health related complications have a major impact on overall disease and death and also constitute economic constraints. It was aimed to target demographic distribution, diagnosis, and complications in patients with spinal cord injury. Spinal cord injury because of the serious consequences of the damage, it creates a great deal of physical, emotional as well as financial disability (Quadir et al., 2017).

Now discuss about the social participation of female patient after Spinal Cord Injury (SCI): In this study the author find out top five environmental barriers, these are rising higher than the natural environment, transport, home support, and health care & government policies. To work between families and communities of people with disabilities and what they want or want to do. These include social, behavioral and

policy barriers such as physical and architectural barriers (Whiteneck et al., 2004). The term "disability" describes the results of interactions between a health condition and context (environmental, personal) in which a person with a condition finds himself / herself, can play a critical role in influencing the cultural functions properly, this interaction pattern (Schneidert et al., 2003).

Community integration has been described as the ultimate goal in the rehabilitation of individuals following injury or disability. Examples of pain and community reintermigration had shown that due to the study of long-term SCI people who had pain it interference on mobility, social integration, economic self- sufficiency (Donnelly &Eng, 2005) and it is also recognized by the world health organization (WHO) as critical outcome following disability (Kennedy et al., 2006).

Community participation seems as requiring or resuming age, gender, culture appropriate roles or status including independence in decision making and productive behaviors carried out as a part of a part of multi-varied relationships with family friends and other in natural community setting (Muller et al., 2012). Social participation promotes his or her fullest inclusion and participate within the physical and psychological environment with extends beyond the person with spinal cord injury (SCI), reintegration is the key issue in the entire rehabilitation process because in most intense SCI happens to persons who were healthy and actively integrate social life (Sekaran et al., 2010).

Psychological issues affect the results after SCI Premorbid issues such as alcohol and other substances abuse, depression, mental disorders or behavioral or learning disorder will affect rehabilitation and long-term consequences. The effects of psychological factors such as relationships, peer group recognition and effectiveness of family resources and impact on secondary condition, for the people with SCI physical environment has traditionally been viewed as an important but modifiable barriers because of their mobility impairments (Scelza et al., 2007). Impairment and development rates are decreasing and partisans for growing illness are improving Implant rehabilitation and health policies (Perenboom et al., 2003).

Physical, psychological and social consequences are both intense and reintegration is the key issue in terms of conditions and the likelihood of the re-organization of the community in which SCI patients. Some physical results are a lifestyle and deteriorating health risk dose this complexity is a long-term challenge (Kennedy et al., 2006).

The author also showed that, In a study the author showed that injured for at least 20 years, 42% reported constipation, 35% reported gastrointestinal pain and 27% complained of bowel accidents, Urinary tract infections (UTIs) have been found to be another major problem. The main elements of social participation: home and family's role and activities, other productive roles (work, school and volunteer), social networks, activities, mobility and economic self-sufficiency (Kennedy et al., 2006). The female has described that difficulty to find out bathrooms. It is a major problem is a major problem and the barriers to participation in social activities. so some women are choosing to stay at home some women are avoid to such a major problem they faced when participating any social activity (Nevedal et al., 2015). Participants of physical health problems were not identified as a major problem among this group, and were minimized by most of them. However, mental health problems are commonly and significantly influenced by community participation, especially after returning home (Barclay et al., 2016).

Now Discuss about the attend social gathering or ceremony of female after Spinal Cord Injury (SCI)-Patients with trauma (SCI) affect all aspects of the patient's life, including physical, behavioral, psychological and social activities. Social aspects can affect participation. Almost all participants described the situation that faced difficulty to buildings, estates and parks have not been designed with the needs of people with disabilities in mind. This was a consistent finding no matter where participants lived. The ability to access appropriate transportation and infrastructure is very important for people and may be able to find and be able to (Barclay et al., 2016). After spinal cord injury the patient suffering and faced particular challenges regarding of socioeconomic level. Family members play an important role in rehabilitation. It is very important for patients to get a clear description of the patients' expertise and care for the patient's health and care (Lofvenmark et al., 2016).

SCI affects mobility, so people must always be careful for accessibility. The Americans with Disabilities Act (ADA) and previous laws have helped in increasing the number of wheelchairs accessible public places. Many places are only partially incompatible, and such as home structures are not often accessible. Each new experience involves uncertainty. The person with SCI has more sources of safety for the body, due to being affected by voluntary function control. A tension of an intestine or colostrum accidents or even spasticity may be unwanted attention and uncomfortable. Some people stay home instead of such risk. SCI is a visible obstacle, so the person is subjected to insignificant barriers to people who are uncomfortable or biased against unhealthy people. People assume that a person's disability is ineffectively affecting other senses, skills or personality traits, or the total person's disability. For example, many people shout to people who are blind or who do not expect to talk about intellectualism for wheelchairs. This kind of centralized focus on the person's skill instead of his disability prevention (Riley et al., 2008).

Now discuss about the activity of daily living of female patient after spinal Cord injury and their difficulty to do this daily working- Domains surrounds all activities from self-life - through actions and spiritual activities However, dressing, shower and toilets, mobility, communication and domestic expertise can be considered as daily routine activities and can be closely linked to the activities (Noreau et al., 2002).

This qualitative study has shown that high SCI people can develop mental health in their lives and may be suitable for survival. Quality of life is found to be dependent: the right to live in society, the ability to control their own lives and care, the ability to participate in meaningful and motivated occupations, and close relationships with family and friends. The participants of the study were refocused their priorities and enabled, being valuable and capable in a sense transformed into high SCI experience from apparently helplessness and sterilization (Hammell, 2004). Social activities of female patient after spinal cord injury -One of the reasons known to contribute to a "good life" after the inadequate disability is by connecting with others, often achieved through activities outside the home. More than SCI's, most studies have shown that the emphasis on accidents has been less emphasis on participation and limitations of the activity (Barclay et al., 2015). Spinal cord injuries (SCI) have both significant consequences at a separate and social level.

Advancement of the medical system, the expectation of life for SCI's people has increased. (Krause et al., 2008). Despite this progress, people living with SCI in Australia and at the international level have significant concerns for long-term health and well-being. Following an SCI, meaningful life outside of home and the ability to participate in activities can change and reduce (Whiteneck et al., 2004) Participation in work, leisure and sports activities is often accompanied (Tasiemski et al., 2000) by frequent home-based occupations such as showing on television, listening to radio (Barclayet al., 2011) and reading socially in isolation and a major factor contributing to leading a 'good life' following an acquired disability is establishing and maintaining close relationships (Dunn & Brody, 2008).

Many meaningful connections are taken out of the house through activities such as involvement in sports groups, retirement activities, going to local shops, working or studying. Society and community participation is now recognized as an important outcome for the people with SCI (WHO, 2001). Most of the spinal cord injury patients are not educated, they had poor job or business and they had in low income. They mostly from India. High ratio of spinal cord lesion (SCL) in Bangladesh, due to traumatic causes, was resistant. SCL, a disability-based on low social status, educational level occupation and income. Physical and earning capability are the problem at individual, family and social level of people with disability (Ialam et al., 2011).

Life-related life the SCI population. In addition, as a subset of participation, it is described as related to the social partnership activity, which provides social interaction within the society and outside of the house. Recently, the effect of ICF on the treatment and treatment of individuals with SCI from different perspectives improved the treatment and management of secondary conditions. This type of conventional knowledge (i.e., the second health centers are preventable or controllable) is mainly collected by the physicians' perspective. And these accounts have ignored the client's views that affect secondary health conditions directly to their social partnerships and daily life after discharge (Piatt et al., 2015).

Unemployment is a prevalent and serious problem for individuals with SCI, which is the most disturbing in light of evidence that vocational results are both quality of life and longevity (Ottomanelli&lind, 2009). Unemployment is a common and serious problem for SCI patients, It is particularly in the light of evidence that vocational results affect the quality and longevity of life The author also said Low employment rates after rehabilitation is due to concern since return to gainful employment may be the most recognized primary marker of successful rehabilitation outcome after disability (Ottomanelli&lind., 2009). It has been recommended that the Rehabilitation Team will not focus on achieving efficiency for senior SBI to enable them to get out of bed in the morning, but they have to help them find their own reasons for doing so. Every person of meaningful and relevant rehabilitation should help in regaining control of his life, creating opportunities for opportunities and opportunities, encouraging special people to engage and help people find meaningful things to 'work', as both the ends of life are met And money (Hammell, 2004). The Social support in community is defined as an attitude of encouragement to flourish. Social support may be provided by family and friends, employers and teachers, neighbors and colleagues, and community members. Equality is the degree of government policies and regulations and Institutions ensure equal opportunities for people with disabilities. Included this category is discriminatory, financial provisions (Whiteneck et al, 2004). After injury female patient faced many problem or trouble in their daily living according to (Chaves et al 2004) environmental changes play an important role in improved quality the life of the disabled person (QOL). Accommodation issues dealt with barriers faced by wheelchair users due to: Their home and community designs and layouts, School / workplace design and layout, weather of the environment (climate, temperature), lack of personal tools and adaptive devices, lack of information access, education problem and lack of training availability people with disability, lack of Health care services (Devi et al., 2013).

CHAPTER -III METHODOLOGY

3.1 Study design

This is a cross sectional quantitative study design. This design involves identifying group of people and then collecting the information that requires when they use the particular service. All the measurements on each person were made at one point in time. The data were collected all at the same time or within a short time frame. A cross-sectional design provides a snapshot of the variables included in the study, at one particular point in time (Fraenkel et al., 1993). The data were collected from the community through a standard questionnaire.

3.2 Study site

The SCI registered unit of physiotherapy department of at the Centre for the Rehabilitation of the Paralyzed (CRP) in Bangladesh which is the largest spinal cord injury rehabilitation center for the patient with spinal cord injury in Bangladesh was selected. At first the standard questionnaire was developed and then collected data from community all spinal cord injury patientswho had completed their rehabilitation from CRP and had returned community.

3.3 Study area

The study was conducted at the Community of Dhaka division in Bangladesh.

3.4 Sample size

The target population was the patient with Spinal Cord Injury who was admitted at CRP spinal cord sampling procedure for cross sectional study done by following equation-

$$n = \{(1-\alpha/2)/d\}^2 \times pq$$

Here,

$$Z(1-\alpha/2) = 1.96$$

p = 0.592

q=1-p

d = 0.05

The investigator aimed to focus his study by 371 samples following the calculation above initially. But as the study was done as a part of fourth professional academic research project and there were some limitations, so number of sample was selected 54 maintaining the inclusion and exclusion criteria and within the scarcity of time injury unit, Savar, Dhaka. The target population was about 109.

3.5 Study population

Spinal cord injury patients who had completed their rehabilitation from CRP and returned to the community.

3.6 Sampling technique

Purposive sampling technique was used for sample selection.

3.6.1 Inclusion criteria

- ➤ Having undergone a complete rehabilitation program.
- > Being at least 1 year post-injury.
- ➤ Between the ages of 18 and 60 years.
- > Services for SCI patients from CRP.

3.6.2 Exclusion criteria

- > Spinal cord injury patient with progressive disease.
- ➤ Below the ages of 18 and above 60 years.
- > Unwillingness.
- ➤ Who are not being at least 1 year post injury?

3.7 Method of data collection

Open ended questionnaire was designed to conduct the interview (semi-structured, face to face). With the semi structure question participants get the freedom to explain their feelings, experienced and opinions in their own words, from which depth information for the study were obtained. Face to face interviews helped the researcher to determine participants understanding of the question by observed their facial expressions. During data collection interviewer took the file from CBR department and collected information on name, age, sex, location of the patient's home, mobile number and put this information on the information checklist. Further information was collected after going to the community. Firstly interviewer was ensured a quite environment in participant's house to avoid distraction and environmental noise. The interviewer explained about the aim of the study. Then a consent from is provided to

the participant. It was helped to maintain the goo report so that the researcher got the actual information from the participants. The assessor collected all the data herself through interview and observation. Interview was conducted in Bengali so that participants can easily understand the question. Interview continued until 'Saturation Point' was reached, that is no major new insights were being revealed & there was repetition of the same issues with different respondents.

3.8 Data collection tools

In this study I have to use the Laptop, Phone Recorder, Questionnaire form, Pen, Paper, File, and Pencil.

3.8.1Questionnaire

For data collection a life situation questionnaire is used. The questionnaire is formed based literature, determinants of the study title and also pilot study.

3. 9 Duration of data collection

Data were collected from 21th July April to 21th August 2018. Each participants provided particular time to collect data. Each questionnaire took approximately 25-30 minutes to complete.

3.10 Data management and analysis plan

The data that was collected is descriptive data. The graph technique was used 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.

3.11 Ethical consideration

The permission was initially taken from the supervisor of the research project and from the course coordinator before conducting the study. The necessary information has been approved by the ethical committee of CRP and was permitted to do this research. A research proposal was submitted to the Public Health Department for approval and the proposal was approved by the faculty members. Beginning the data collection, permission was obtained from the concerned authorities ensuring the

safety of the participants. Data collection was started and completed within the allocate time frame. All information was kept in secure. World Health Organization (WHO) and Bangladesh Medical and Research Council (BMRC) rules were followed to conduct the study. The research was approved by Institutional Review Board (IRB). During the course of the study, the samples who were interested in the study had given consent forms and the purpose of the research and the consent form were explained to them verbally. The study did not interfere with their jobs.

For this study a consent form was given and the purpose of the research and consent forms was explained to the subject verbally. Participants were fully voluntary and they have the right to withdraw at any time before participating in this study and then ask to sign in the consent form. It was mentioned that the subjects had the rights to withdraw themselves from the research at any time. Participants were also ensured that their confidentiality will be maintained Social number were used in the notes, transcripts throughout the study. It also ensure that the entire notes, transcripts and all the necessary information were kept with security to maintain confidentiality. Information might be published in any presentations or writing but they will not be identified and these would not cause any harm to them. It also ensured that the. They would not be embarrassed by the study. It was also ensured that every participant has the right to discuss about her problem with senior authority as relate to this research project.

3.12 Rigor

Research always tried to maintain trust-worthiness and honesty in this study. The study was conducted in a clear and systematic way to reducing the sources of error and bias. No leading questions were asked or no important question is avoided. During the data analysis the researcher not submits her own perspectives. The participant's information was coded accurately and checked by the research supervisor to eliminate any possible error. During conduct the study every section of the study is checked and re-checked by the research supervisor. All the raw data was collected from appropriate sources and maintained referencing system.

CHAPTER –IV RESULTS

4.1 Participant's Socio Demographic information

Purpose of this study was to explore the predisposing factors responsible for hindrance into workplace after spinal cord injury. Data were numerically coded and analysis the data by using an SPSS 20.0 version software program and the result calculated as percentages and presented by using in table, pi-chart and bar-chart.In this study 54 participants of people with Spinal Cord Injury were selected. Out of the participants the mean age of the participants was 37 (±7.608) years. The range is 18-60 with minimum age 18 years and maximum 60 years.

4.1.1 Aging group

Among total 54 participants 66.7% were in the age between 21-40 years, 31.5% were in the age between 41-60 years and 1.9% were in the age between 1-20 years [Figure-1].

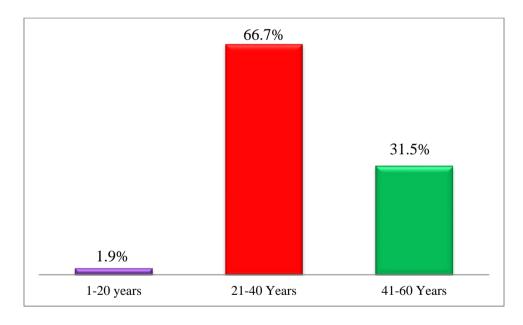


Figure -1: Age of the Participants (n=54)

4.1.2 Gender of the patient

Among all participants, there were male participants more than female participants. Male participants were 50 (93%) and female participants were 4 (7%) [Figure -2].

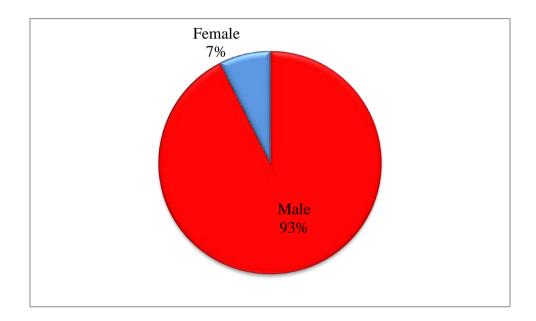


Figure -2: Gender of the Participants (n=54)

4.1.3 Economic status of the patient

Average family income of the participants was 1000-5000 taka (50%), 6000-10000 taka (35%), 11000-20000 taka (9%) and >20000 taka (6%) [Figure-3].

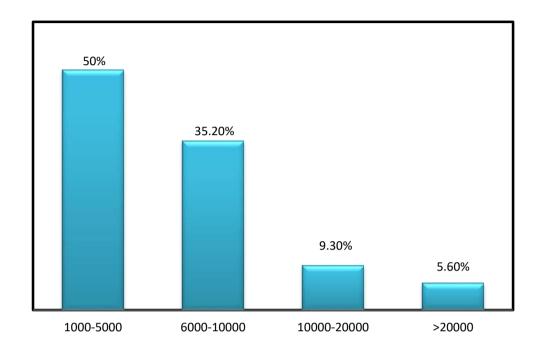


Figure-3: Income of the Participant (n=54)

Table: 1: Demography of the participant (N=54)

		Number (N)	Percent (%)
Marital Status			
	Married	46	85.2
	Unmarried	8	14.8
Living Area			
	Urban	25	46.3
	Rural	29	53.7
Occupation			
	Businessman	15	27.8
	Service holder	37	68.6
	Carpenter	1	1.9
	Driver	1	1.9
Education			
	Illiterate	26	48.1
	SSC	13	24.1
	HSC	12	22.2
	Masters	3	5.6

Out of 54 patients, most of the patients were married about 85% (n=46) and the rest of patients were unmarried around 15% (n=8). Majority of the patients were hailed from the rural community that was 54% (n=29) and rest of from the urban community about 46% (n=25). In the occupational category, it was observed that most of patients were belonged to about Service holder 69% (n=37). Rest of 31% (n=17) of others occupation (Businessman, Service holder, Carpenter, Driver). Among the 54 participants, 48% (n=26) participants were illiterate, 24% (n=13) participants were primary educated, 22% (n=12) participants were secondary educated and 7% (n=3) participants were higher secondary educated.

4.1.4 Medical status of the patient

Table: 2 Medical History of the Participant (n=54)

	Traits	Frequency (N)	Percent (%)
ASIA	Complete A	24	44.4
	Incomplete B	14	25.9
	Incomplete C	3	5.6
	Incomplete D	11	20.4
	Incomplete E	2	3.7
Type	Paraplegia	30	55.6
	Tetraplegia	24	44.4
Complications	Pain	34	63
	Burning Sensation	11	20.4
	Constipation	3	5.6
	Pressure Ulcer	5	9.3
	bowel & bladder	1	1.9
	problem		

Out of 54 patients, the impairment grading in ASIA scale Complete A were 24 (44.4%), ASIA scale Incomplete B were 14 (25.9%), ASIA scale Incomplete C were 3 (5.6%), ASIA scale Incomplete D were 11 (20.4%), and ASIA scale Incomplete E were 2 (3.7%). Among the 54 participants, paraplegia patients were 30 (55.6%) and complete tetraplegia were 24 (44.4%). Among the 54 participants, maximum participants 34 (63%) reported that pain is the main problem, most of the participants 11 (20.4%) reported that problem in burning sensation, 3 (5.6%) participants had problem in constipation, 5 (9.3%) participants had problem in pressure ulcer and 1 (1.9%) participants had problem in bowel & bladder problem.

4.2 Participant's Attitudes toward Employment information

Table: 3 Attitudes toward Employment of the Participant (n=54)

Traits	Strongly disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly agree n (%)
3.1. I have the proper education and/or training to work.	0	19 (35.2)	15 (27.8)	17 (31.5)	3 (5.6)
3.2. I have all the necessary resources to maintain a regular job (transportation, assistants, etc).	0	27 (50.0)	11 (20.4)	15 (27.8)	1 (1.9)
3.3. I cannot do the same types of jobs that I did before my injury.	2 (3.7)	11 (20.4)	1 (1.9)	27 (50.0)	13(24.1)
3.4. The types of jobs that I can do now just do not interest me.	3 (5.6)	10 (18.5)	9 (16.7)	27 (50)	5 (9.3)
3.5. I have children at home and that makes working difficult.	3 (5.6)	9 (16.7)	18 (33.3)	16 (29.6)	0
3.6. My health, stamina, or endurance is too poor to maintain a regular job.	2(3.7)	7(13.0)	23(42.6)	19(35.2)	3(5.6)
3.7. Most of my time and energy is used to take care of my SCI needs.	0	10(18.5)	16(29.6)	23(42.6)	5(9.3)
3.8. Most jobs that I am trained for are not accessible to people in wheelchairs.	5(9.3)	9(16.7)	17(31.5)	17(31.5)	48(88.9)
3.9. The types of jobs I can do now do not pay enough money to be worthwhile.	2(3.7)	5(9.3)	7(13.0)	27(50)	13(24.1)
3.10. Needing attendant help makes working difficult for me.	4(7.4)	22(40.7)	24(44.4)	4(7.4)	0
3.11. I do not know much about jobs available to people with disabilities.	1(1.9)	5(9.3)	43(79.6)	5(9.3)	0
3.12. My family prefers that I stay home rather than work.	0	30(55.6)	23(42.6)	1(1.9)	0
3.13. Most employers will not hire me because of my disability.	0	2(3.7)	10(18.5)	27(50)	15(27.8)
3.14. Loss of financial benefits is a barrier to work for me.	0	3(5.6)	9(16.7)	36(66.7)	6(11.1)
3.15. I received a large settlement from my injury and do not need money from work.	24(44.4)	30(55.6)	0	0	0

3.16. I am confident in my ability					
to work.	0	18(33.3)	19(35.2)	17(31.5)	0
3.17. Working at a job is important to me.	0	1(1.9)	1(1.9)	44(81.5)	8(14.8)
3.18. Work is not that important to					
me because I do other important					
activities, such as volunteering, homemaking or travel.	40(74.1)	13(24.1)	0	1(1.9)	0
3.19. Pressure ulcers make					
working difficult or impossible for me to maintain a job.	2(3.7)	0	0	6(11.1)	0
3.20. I prefer not to work.	26(48.1)	26(48.1)	0	2(3.7)	0
	` ,	, ,		, ,	
3.21. My transportation is not	0	6(11.1)	3(5.6)	33(61.1)	12(22.2)
sufficient to maintain a job and be a reliable employee.					
3.22. I am physically capable of	0	6(18.5)	26(48.1)	16(29.6)	2(3.7)
working.	Ů	3(13.2)	20(1011)	10(2)10)	_(0.7)
3.23. Working is worth the effort	0	0	2(3.7)	42(77.8)	10(18.5)
to me.			,	,	
3.24. I am concerned that working	0	15(27.8)	34(63.0)	5(9.3)	0
is too stressful.					
3.25. I get fatigued easily and this	0	8(14.8)	19(35.2)	27(50.0)	0
makes maintaining a job difficult.					
3.26. Loss of medical benefits is a	2(3.7)	2(3.7)	13(24.1)	37(68.5)	0
barrier to work for me.					
3.27. Jobs that require long	2(3.7)	0	0	11(20.4)	41(75.9)
distance travel (airplane, train)	, ,			, ,	, ,
make working difficult.	22/61 1)	10/25 2)	2(2.7)	0	0
3.28. Government programs are available to help me to get a job or	33(61.1)	19(35.2)	2(3.7)	0	0
have helped me to get a job.					
3.29. Even if I am able to get a job	0	2(3.7)	14(25.9)	29(53.7)	9(16.7)
(or already have a job), keeping a					
job would be (is) difficult.	0	0	4/7 4	16(00.0)	24(62.0)
3.30. Government programs are more helpful in getting a job rather	0	0	4(7.4)	16(29.6)	34(63.0)
than keeping a job.					
1 0 3		I	I		1

Among 54 subjects 19 (35.2%) participants were disagree, 15 (27.8%) participants were neutral, 17 (31.5%) participants were agree and 3 (5.6%) participants were strongly agree with towards employment(Trait3.1).

In this study reveals that 27 (50.0%) participants were disagree, 11 (20.4%) participants were neutral, 15 (27.8%) participants were agree and 1 (1.9%) participants were strongly agree with towards employment (Trait3.2).

In this study reveals that 2 (3.7%) participants were strongly disagree, 11 (20.4%) participants were disagree, 1 (1.9%) participants were neutral, 27 (50.0%) participants were agree and 13 (24.1%) participants were strongly agree with towards employment (Trait3.3).

In this study reveals that 3 (5.6%) participants were strongly disagree, 10 (18.5%) participants were disagree, 9 (16.7%) participants were neutral, 27 (50.0%) participants were agree and 5 (9.3%) participants were strongly agree with towards employment (Trait3.4).

In this study reveals that 3 (5.6%) participants were strongly disagree, 9 (16.7%) participants were disagree, 18 (33.3%) participants were neutral and 16 (29.6%) participants were agree with towards employment (Trait3.5).

In this study reveals that 2 (3.7%) participants were strongly disagree, 7 (13.0%) participants were disagree, 23 (42.6%) participants were neutral, 19 (35.2%) participants were agree and 3(5.6%) participants were strongly agree with towards employment (Trait3.6).

In this study reveals that 10(18.5%) participants were disagree, 16(29.6%) participants were neutral, 23(42.6%) participants were agree and 5(9.3%) participants were strongly agree with towards employment (Trait3.7).

In this study reveals that 5(9.3%) participants were strongly disagree, 9(16.7%) participants were disagree, 17(31.5%) participants were neutral, 17(31.5%) participants were agree and 48(88.9%) participants were strongly agree with towards employment (Trait3.8).

In this study reveals that 2 (3.7%) participants were strongly disagree, 5(9.3%) participants were disagree, 7(13.0%) participants were neutral, 27(50%) participants were agree and 13(24.1%) participants were strongly agree with towards employment (Trait3.9).

In this study reveals that 4(7.4%) participants were strongly disagree, 22(40.7%) participants were disagree, 24(44.4%) participants were neutral and 4(7.4%) participants were agree with towards employment (Trait3.10).

In this study reveals that 1(1.9%) participants were strongly disagree, 5(9.3%) participants were disagree, 43(79.6%) participants were neutral and 5(9.3%) participants were agree with towards employment (Trait3.11).

In this study reveals that 30(55.6%) participants were disagree, 23(42.6%) participants were neutral and 1(1.9%) participants were agree with towards employment (Trait3.12).

In this study reveals that 2(3.7%) participants were disagree, 10(18.5%) participants were neutral, 27(50%) participants were agree and 15(27.8%) participants were strongly agree with towards employment(Trait3.13).

In this study reveals that 3(5.6%) participants were disagree, 9(16.7%) participants were neutral, 36(66.7%) participants were agree and 6(11.1%) participants were strongly agree with towards employment (Trait3.14).

In this study reveals that 24(44.4%) participants were strongly disagree and 30(55.6%) participants were disagree with towards employment (Trait3.15).

In this study reveals that 18(33.3%) participants were disagree, 19(35.2%) participants were neutral and 17(31.5%) participants were agree with towards employment (Trait3.16).

In this study reveals that 1(1.9%) participants were disagree, 1(1.9%) participants were neutral, 44(81.5%) participants were agree and 8(14.8%) participants were strongly agree with towards employment (Trait3.17).

In this study reveals that 40(74.1%) participants were strongly disagree, 13(24.1%) participants were disagree and 1 (1.9%) participants were agree with towards employment (Trait3.18).

In this study reveals that 2 (3.7%) participants were strongly disagree and 6(11.1%) participants were agree with towards employment (Trait3.19).

In this study reveals that 26(48.1%) participants were strongly disagree, 26(48.1%) participants were disagree and 2(3.7%) participants were agree with towards employment (Trait3.20).

In this study reveals that 6(11.1%) participants were disagree, 3(5.6%) participants were neutral, 33(61.1%) participants were agree and 12(22.2%) participants were strongly agree with towards employment (Trait3.21).

In this study reveals that 6(18.5%) participants were disagree, 26(48.1%) participants were neutral, 16(29.6%) participants were agree and 2(3.7%) participants were strongly agree with towards employment (Trait3.22).

In this study reveals that 2 (3.7%) participants were neutral, 42(77.8%) participants were agree and 10(18.5%) participants were strongly agree with towards employment (Trait3.23).

In this study reveals that 15(27.8%) participants were disagree, 34(63.0%) participants were neutral and 5(9.3%) participants were agree with towards employment (Trait3.24).

In this study reveals that 8(14.8%) participants were disagree, 19(35.2%) participants were neutral, 27(50.0%) participants were agree with towards employment (Trait3.25).

In this study reveals that 2 (3.7%) participants were strongly disagree, 2(3.7%) participants were disagree, 13(24.1%) participants were neutral and 37(68.5%) participants were agree with towards employment (Trait3.26).

In this study reveals that 2 (3.7%) participants were strongly disagree, 11(20.4%) participants were agree and 41(75.9%) participants were strongly agree with towards employment (Trait3.27).

In this study reveals that 33(61.1%) participants were strongly disagree, 19(35.2%) participants were disagree and 2(3.7%) participants were neutral with towards employment (Trait3.28).

In this study reveals that 2 (3.7%) participants were disagree, 14(25.9%) participants were neutral, 29(53.7%) participants were agree and 9(16.7%) participants were strongly agree with towards employment. (Trait3.29).

In this study reveals that 4(7.4%) participants were neutral, 16(29.6%) participants were agree and 34(63.0%) participants were strongly agree with towards employment (Trait3.30).

4.3 Participant's Psychosocial Related information

Table: 4 Psychosocial Related Questionnaire of the Participant (n=54)

Traits	Never	Rarely	Sometimes	Usually	Always
	n (%)	n (%)	n (%)	n (%)	n (%)
4.1. I feel left out.	8 (14.8)	16 (29.6)	16 (29.6)	8 (14.8)	6 (11.1)
4.2. I have someone who will listen to me when I need to talk.	0	4(7.4)	11(20.4)	29(53.7)	10(18.5)
4.3. I feel isolated from others.	11(20.4)	18(33.3)	10(18.5)	11(20.4)	4(7.4)
4.4. I have someone who makes me feel appreciated.	0	2(3.7)	13(24.1)	31(57.4)	8(14.8)
4.5. I feel that people are around me but not with me.	11(20.4)	11(20.4)	17(31.5)	12(22.2)	3(5.6)

In this study reveals that 8 (14.8%) participants were never, 16 (29.6%) participants were rarely, 16 (29.6%) participants were sometimes, 8 (14.8%) participants were usually and 6 (11.1%) participants were always with psychosocial related questionnaire (Trait 4.1).

In this study reveals that 4(7.4%) participants were rarely, 11(20.4%) participants were sometimes, 29(53.7%) participants were usually and 10(18.5%) participants were always with psychosocial related questionnaire (Trait 4.2).

In this study reveals that 11(20.4%) participants were never, 18(33.3%) participants were rarely, 10(18.5%) participants were sometimes, 11(20.4%) participants were usually and 4(7.4%) participants were always with psychosocial related questionnaire (Trait 4.3).

In this study reveals that 2(3.7%) participants were rarely, 13(24.1%) participants were sometimes, 31(57.4%) participants were usually and 8(14.8%) participants were always with psychosocial related questionnaire (Trait 4.4).

In this study reveals that 11(20.4%) participants were never, 11(20.4%) participants were rarely, 17(31.5%) participants were sometimes, 12(22.2%) participants were usually and 3(5.6%) participants were always with psychosocial related questionnaire (Trait 4.5).

CHAPTER -V DISCUSSION

Spinal cord injury previously reported in both local (Ning GZ et al, 2012) and global (Grivna M. et al, 2015) where they found male are predominant than female, in my study also found 93% (n=50) were male and 7% (n=4) were female. Distribution of age in this study showed more people in their 2nddecade and 3rddecade was vulnerable to spinal cord injury. Injury was evident from the fact that 53.7% of the respondent were from villages and it was also supported by Rahman ZM (Hoque, 1999). Majority of the participants of this study had traumatic paraplegia (55.6%) and the principle cause was fall from height (51.9%) and road traffic accident (29.6%) which was found to be consistent with other global literatures (Rahimi-Movaghar 2013). High number of people with complete spinal cord injury evident by category A in ASIA scale was noted as 59.8% respondents were in this group and this trend was found common with (Hoqueet al.,1994)and(Islam et al.,2011).

In this study structured questionnaire attitudes toward employment reveals that 5 (9%) have strongly disagree towards employment and 7 (12%) have strongly agree, 10 (19%) shows disagree towards employment, 12 (22%) show neutral towards employment, 18 (34%) have agree towards employment and 7(12%)havestrongly agree towards employment. Another study reveals that 41% were employed and comfort with their employment and 59% were unemployed facing different types of barriers (Gupta et al., 2011).

In this study among 54 participants reveals that 6 (11%) have never faced psychosocial related problem and 10 (19%) shows rarely psychosocial related problem, 13 (25%) shows sometimes psychosocial related problem, 18 (34%) have usually psychosocial related problem and 6 (11%) have always psychosocial related problem. In this study shows 11% participants needed psychological treatment.

Another similar study found where shows severe depression was 6% and moderately severe depression was 30% and moderate depression was 28% also this study recommend for psychological treatment for those 6% severe depression patients(Lim et al., 2017).

Limitation

As the study is focused on predisposing factors of spinal cord injury patients in social participation in the community and the setting should in participant's home or community settings but it was not possible for the researcher to go to the different area far away from Dhaka city, for this reason this study not represents the overall image of Bangladesh in respect of the study. The research project was done by an undergraduate student and it was first research project. So the researcher had limited experience with techniques and strategies in terms of the practical aspects of research. As it was the first survey of the researcher so might be there were some mistakes and in depth information might not be collected properly that overlooked by the supervisor and the honorable teacher.

6.1 Conclusion

This study comprehends about the experienced predisposing factors responsible for hindrance after SCI in terms of physical, attitudinal, functional, environmental, social and economic aspects towards their social participation in community. Although spinal cord injury causes a residual disability to the people but they can participate if these identified predisposing factors can resolve. So identification of these predisposing factors will help to give emphasize on designing the overcoming strategy of those challenges. In accordance of the participants, bowel-bladder issues and pain impedes a lot in undertaking their pre injury activities. In avoidance family members, lack of support, lack of social support are also remarkable barriers faced by women with spinal cord injury. In social life they confronted the prejudice and social stigma about their disability. Inaccessibility of public transport, physical, environmental barriers hinders them mostly from their all kinds of community participation whereas lacks of assistance and equipment issues are the most experiencing predisposing factors in the field of activity. Poverty and unemployment also acts as major economic barriers in the way of social participation. So, if these predisposing factors are minimized or overcoming strategies are developed and implicate, these female with spinal cord injury can participate them in their community life successfully.

6.2 Recommendations

The purpose of the study was to find out the predisposing factors responsible for hindrance after SCI. Though the study had some limitations but investigator identified some further step that might be taken for the better accomplishment of further research. The main recommendations would be as follow: The random sampling technique rather than the convenient would be chosen in further in order to enabling the power of generalization the results, the duration of the study was short, so in ratio of rural and urban participants were not equal, in case of further the equality of the rural and urban participant should be maintained for the accuracy of the result, in this study, the investigator took the people only recommended in the community as a sample for the study. So for further study investigator strongly recommended to

include the patients from all over the Bangladesh to ensure the generalizability of this study. future wider time would be taken for conducting the study, investigator use only 60 participants as the sample of this study, in future the sample size would be more, the ratio of rural and urban participants were not equal, in case of further the equality of the rural and urban participant should be maintained for the accuracy of the result, in this study, the investigator took the people only from area of Dhaka and in the neighborhood of the city as a sample for the study. So for further study investigator strongly recommended to include the patients from all over the Bangladesh to ensure the generalizability of this study.

REFFERENCES

- Arafat, S.Y., (2016). Anti-Ulcerants: The driving force of the pharma market of Bangladesh. Intenational Journal of Perceptions in Public Health, 1(1):1-2.
- Brain and Spinal Cord.org, (2012). Educate.Guide.Inspair, [Online]. United State: Brain and Spinal Cord.org. Available: http://www.brainandspinalcord.org/spinal-cord-injuries/index.html[Accessed on 14 May 2013].
- Barclay, L., McDonald, R., Lentin, P. and Bourke-Taylor, H., (2016). Facilitators and barriers to social and community participation following spinal cord injury. Australian Occupational Therapy Journal, 63(1):19-28.
- Crewe, N.M. and Krause, J.S., (2009). Spinal cord injury. Medical, psychosocial and vocational aspects of disability. Athens: Elliott and Fitzpatrick, 289-304.
- Chen, Y., Tang, Y., Vogel, L.C., and Devivo, M.J., (2013). Causes of Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation/Winter, 19(1):1-8.
- Colangelo, J., (2014). Care considerations for patients with spinal cord injuries. Radiologic technology, 86(1):33-54.
- Claus, E.B., Wahab, M.A., Burger, P.C., Engelhard, H.H., Ellison, D.W., Gaiano, N. Gutmann, D.H., Heck ,D.A., Jallo, G.I., Kruchko, C., Kun, L.E., Maria, B.L., Rumboldt, Z., Seminara, D., Spinella, G.M., Stophel, L., Reya, R.W., Wrensch, M., and Gilbertson, R.J., (2010). Defining future directions in spinal cord tumor research. Journal of Neurosurgery Spine, 12(2):117-121.
- Chaves, E.S., Boninger, M.L., Cooper, R., Fitzgerald, S.G., Gray, D.B. and Cooper, R.A., (2004). Assessing the influence of wheelchair technology on perception of participation in spinal cord injury. Archives of Physical Medicine and Rehabilitation, 85(11):1854-1858.
- Coppla and Marlin, (2013). Causes of Spinal Cord Injuries, [Online]. USA: Coppla& Marlin, P.C.Available: http://www.coppolamarlin.com/Spinal-Cord-Injuries/Causes-of-Spinal-Cord-Injuries.shtml [Accessed on 14 May 2013].
- Capaul, M., Zollinger, H., Satz, N., Dietz, V., Lehmann, D., and Schurch, B., (1994). Analyses of 94 consecutive spinal cord injury patients using ASIA definition and modified Frankel score classification. Paraplegia, 32:583-587.
- Dahlberg, A., Kotila, M., Leppänen, P., Kautiainen, H. and Alaranta, H., (2005). Prevalence of spinal cord injury in Helsinki. Spinal Cord, 43(1):47.
- Frankel, H.L., Coll, J.R., Charlifue, S.W., Whiteneck, G.G., Gardner, B.P., Jamous, M.A., Krishnan, K.R., Nuseibeh, I., Savic, G. and Sett, P., (1998). Long-term survival in spinal cord injury: a fifty year investigation.

- Grivna, M., Eid, H.O. and Abu-Zidan, F.M., (2015). Epidemiology of spinal injuries in the United Arab Emirates. World journal of emergency surgery, 10(1):20.
- Ginis, K.A., Latimer, A.E., Hicks, A.L. and Craven, B.C., (2005). Development and evaluation of an activity measure for people with spinal cord injury. Medicine and Science in Sports and Exercise, 37(7):1099-1111.
- Groce, N., (1999). An overview of young people living with disabilities. New York: UNICEF.
- Guo, H., Liu, J., Qi, X., Ning, G., Zhang, H., Li, X. and Ma, X., (2012). Epidemiological characteristics of adult SCIWORA in Tianjin, China: a preliminary study. European spine journal, 21(1):165-171.
- Gupta, N., Solomon, J. and Raja, K., 2011. Employment after paraplegia in India: a postal survey. Spinal cord, 49(7):806.
- Hart, C. and Williams, E., (1994). Epidemiology of spinal cord injuries: a reflection of changes in South African society. Spinal Cord, 32(11):709.
- Hoque, M.F., Grangeon, C. and Reed, K., (1999). Spinal cord lesions in Bangladesh: an epidemiological study 1994–1995. Spinal cord, 37(12):858.
- Hammell, K.W., (2004). Quality of life among people with high spinal cord injury living in the community. Spinal Cord, 42(11):607-620.
- Hossain, S.I. and Khundkar, S.H., (2013). Bacteriological status of pressure sore-A study of 50 cases. Bangladesh Journal of Plastic Surgery, 3(1):19-23.
- Hoque, M.F., Grangeon, C. and Reed, K., (1999). Spinal cord lesions in Bangladesh: an epidemiological study 1994–1995. Spinal cord, 37(12):858.
- Islam, M.S., Hafez, M.A. and Akter, M., (2011). Characterization of spinal cord lesion in patients attending a specialized rehabilitation center in Bangladesh. Spinal Cord, 49(7):783-786.
- Krahn, G.L., (2011). WHO world report on disability. Disability and Health Journal, 4(3):141-142.
- Kennedy, P., Lude, P. and Taylor, N., (2006). Quality of life, social participation, appraisals and coping post spinal cord injury. Spinal Cord, 44(2):95-105.
- Lee, B.B., Cripps, R.A., Fitzharris, M. and Wing, P.C., (2014). The global map for traumatic spinal cord injury epidemiology. Global incidence rate. Spinal Cord, 52(2):110.
- Lofvenmark, I., Norrbrink, C., Nilsson Wikmar, L. and Löfgren, M., (2016). 'The moment I leave my home-there will be massive challenges': experiences of living with a spinal cord injury in botswana. Disability and Rehabilitation, 38(15):1483-1492.

- Lim, S.W., Shiue, Y.L., Ho, C.H., Yu, S.C., Kao, P.H., Wang, J.J. and Kuo, J.R., (2017). Anxiety and depression in patients with traumatic spinal cord injury: a nationwide population-based cohort study. PloS one, 12(1):e0169623.
- Manns, P.J. and Chad, K.E., (1999). Determining the relation between quality of life, handicap, fitness, and physical activity for persons with spinal cord injury. Archives of Physical Medicine and Rehabilitation, 80(12):1566-1571.
- Momin, A.K.M., (2005). An evaluation of the impact of medical services provided by general hospitals compared with services Aaigned to a social model perspective at a spinal cord injury centre in Bangladesh. The social model of disability: Europe and the majority world. The Disability press, 163-179.
- Maharaj, J.C., (1996). Epidemiology of spinal cord paralysis in Fiji: 1985-1994. Spinal cord, 34(9):549.
- Muller, R., Peter, C., Cieza, A. and Geyh, S., (2012). The role of social support and social skills in people with spinal cord injury-a systematic review of the literature. Spinal Cord, 50(2):94-106.
- McCammon, J.R. and Ethans, K., (2011). Spinal cord injury in Manitoba: a provincial epidemiological study. The Journal of Spinal Cord Medicine, 34(1):6-10.
- McMillen, J.C. and Cook, C.L., (2003). The positive by-products of spinal cord injury and their correlates. Rehabilitation Psychology, 48(2):77-85
- McClure, L.A., Boninger, M.L., Oyster, M.L., Roach, M.J., Nagy, J. and Nemunaitis, G., (2011). Emergency evacuation readiness of full-time wheelchair users with spinal cord injury. Archives of Physical Medicine and Rehabilitation, 92(3):491-498.
- Ning, G.Z., Wu, Q., Li, Y.L. and Feng, S.Q., 2012. Epidemiology of traumatic spinal cord injury in Asia: a systematic review. The Journal of Spinal Cord Medicine, 35(4):229-239.
- Nevedal, A., Kratz, A.L. and Tate, D.G., (2016). Women's experiences of living with neurogenic bladder and bowel after spinal cord injury: life controlled by bladder and bowel. Disability and Rehabilitation, 38(6):573-581.
- Noreau, L., Fougeyrollas, P. and Vincent, C., (2002). The LIFE-H: Assessment of the quality of social participation. Technology and Disability, 14(3):113-118.
- Ottomanelli, L. and Lind, L., (2009). Review of critical factors related to employment after spinal cord injury: implications for research and vocational services. The journal of spinal cord medicine, 32(5):503.

- Phalkey, R., Reinhardt, J.D. and Marx, M., (2011). Injury epidemiology after the 2001 Gujarat earthquake in India: a retrospective analysis of injuries treated at a rural hospital in the Kutch district immediately after the disaster. Global health action, 4(1):7196.
- Porter, M.E., (2010). What is value in health care?. New England Journal of Medicine, 363(26):2477-2481.
- Piatt, J.A., Nagata, S., Zahl, M., Li, J. and Rosenbluth, J.P., (2016). Problematic secondary health conditions among adults with Spinal cord injury and its impact on social participation and daily life. The Journal of Spinal Cord Medicine, 39(6):693-698.
- Perenboom, R.J. and Chorus, A.M., (2003). Measuring participation according to the international classification of functioning, disability and health (ICF). Disability and Rehabilitation, 25(11-12):577-587.
- Pentland, W., Walker, J., Minnes, P., Tremblay, M., Brouwer, B. and Gould, M., (2002). Women with spinal cord injury and the Impact of Aging. Spinal Cord, 40(8):374-387.
- Qureshi, M.A., Khalique, A.B., Pasha, I.F., Asad, A., Malik, A.S., Shah, M.Q. and Ahmed, A., 2010. Epidemiology of non-disaster spinal injuries at a spine unit. J Coll Physicians Surg Pak, 20(10):667-70.
- Quadir, M.M., Sen, K., Sultana, M.R., Ahmed, M.S. and Taoheed, F., (2017). Demography, diagnosis and complications of spinal cord injury patients in a rehabilitation center of Bangladesh. The JournelNeuro Rehabilitation, 4(244):2376-0281.
- Rahimi-Movaghar, V., Sayyah, M.K., Akbari, H., Khorramirouz, R., Rasouli, M.R., Moradi-Lakeh, M., Shokraneh, F. and Vaccaro, A.R., (2013).
 Epidemiology of traumatic spinal cord injury in developing countries: a systematic review. Neuroepidemiology, 41(2):65-85.
- Rahman, A., Ahmed, S., Sultana, R., Taoheed, F., Andalib, A. and Yasir, A., (2017). Epidemiology of spinal cord injury in Bangladesh: A five year observation from a rehabilitation center. J Spine, 6(367):2.
- Reinhardt, J.D., Ballert, C., Brinkhof, M.W. and Post, M.W., (2016). Perceived impact of environmental barriers on participation among people living with spinal cord injury in Switzerland. Journal of Rehabilitation Medicine, 48(2):210-218.
- Recio, A.C., Felter, C.E., Schneider, A.C. and McDonald, J.W., (2012). Demonstration of its utility for recalcitrant wounds below the Level of Injury. The Journal of Spinal Cord Medicine, 35(1):58-63.
- Riley, B.B., Rimmer, J.H., Wang, E. and Schiller, W.J., (2008). A conceptual framework for improving the accessibility of fitness and recreation facilities

- for people with disabilities. Journal of Physical Activity and Health, 5(1):158-168.
- Razzak, A., Roy, R. and Khan, S., (2017). Demographic profile of spinal cord injury (SCI): a hospital-based prospective study in Bangladesh. Disability, CBR& Inclusive Development, 27(4):138-155.
- Rathore, M.F.A., Rashid, P., Butt, A.W., Malik, A.A., Gill, Z.A. and Haig, A.J., 2007. Epidemiology of spinal cord injuries in the 2005 Pakistan earthquake. Spinal cord, 45(10):658.
- Silver, J., Ljungberg, I., Libin, A. and Groah, S., (2012). Barriers for individuals with spinal cord injury returning to the community: A preliminary classification. Disability and Health Journal, 5(3):190-196.
- Scelza, W.M., Kirshblum, S.C., Wuermser, L.A., Ho, C.H., Priebe, M.M. and Chiodo, A.E., (2007). Spinal cord injury medicine. Community reintegration after spinal cord injury. Archives of Physical Medicine and Rehabilitation, 8(3):71-75.
- Sekaran, P., Vijayakumari, F., Hariharan, R., Zachariah, K., Joseph, S.E. and Kumar, R.S., (2010). Community reintegration of spinal cord-injured patients in rural South India. Spinal Cord, 48(8):628-632.
- Scovil, C.Y., Ranabhat, M.K., Craighead, I.B. and Wee, J., (2012). Follow-up study of spinal cord injured patients after discharge from inpatient rehabilitation in Nepal in 2007. Spinal Cord, 50(3):232-237.
- Shingu, H., Ikata, T., Katoh, S. and Akatsu, T., (1994). Spinal cord injuries in Japan: a nationwide epidemiological survey in 1990. Spinal Cord, 32(1):3.
- Scelza, W.M., Kirshblum, S.C., Wuermser, L.A., Ho, C.H., Priebe, M.M. and Chiodo, A.E., (2007). Spinal cord injury medicine. Community reintegration after spinal cord injury. Archives of Physical Medicine and Rehabilitation, 8(3):71-75.
- Schneidert, M., Hurst, R., Miller, J. and Üstün, B., (2003). The role of environment in the International Classification of Functioning, Disability and Health (ICF). Disability and rehabilitation, 25(11-12):588-595.
- Singh, A., Tetreault, L., Kalsi-Ryan, S., Nouri, A. and Fehlings, M.G., (2014). Global prevalence and incidence of traumatic spinal cord injury. Clinical Epidemiology, 6:309.
- Tasiemski, T., Bergström, E., Savic, G. and Gardner, B.P., (2000). Sports, recreation and employment following spinal cord injury. Spinal Cord, 38(3):173.
- Ullrich, P.M., Jensen, M.P., Loeser, J.D. and Cardenas, D.D., (2008).Pain intensity, pain interference and characteristics of spinal cord injury.Spinal Cord, 46(6):451.
- Van den Berg-Emons HJG, Bussmann JBJ, Sluis TAR, Bergen MP, Van der Woude LHV, Stam HJ., (2004). Restoration of the level of everyday physical

- activity during spinal cord injury rehabilitation. Journal of Rehabilitation Research Development, 41:461–467
- Vissers, M., Van den Berg-Emons, R., Sluis, T., Bergen, M., Stam, H. and Bussmann, H., (2008). Barriers to and facilitators of everyday physical activity in persons with a spinal cord injury after discharge from the rehabilitation centre. Journal of Rehabilitation Medicine, 40(6):461-467.
- van Koppenhagen, C.F., Post, M.W., van der Woude, L.H., de Witte, L.P., van Asbeck, F.W., de Groot, S., van den Heuvel, W. and Lindeman, E., (2008). Changes and determinants of life satisfaction after spinal cord injury: a cohort study in the Netherlands. Archives of Physical Medicine and Rehabilitation, 89(9):1733-1740.
- Whiteneck, G., Meade, M.A., Dijkers, M., Tate, D.G., Bushnik, T. and Forchheimer, M.B., (2004). Environmental factors and their role in participation and life satisfaction after spinal cord injury1. Archives of physical medicine and rehabilitation, 85(11):1793-1803.
- Warburton, D.E., Nicol, C.W. and Bredin, S.S., (2006). Health benefits of physical activity. Canadian Medical Association Journal, 174(6):801-809.
- Waters, R.L., Adkins, R.H. and Yakura, J.S., (1991). Definition of complete spinal cord injury. Spinal Cord, 29(9):573.
- World Health Organization, (2001). International Classification of Functioning, Disability and Health:ICF. World Health Organization. http://apps.who.int/iris/bitstream/10665/4 2407/7/9241545429_tha%2Beng.pdf.
- Ziniya, M.R., (2013). Demographic profile of spinal cord injury: a retrospective study (Doctoral dissertation).

APPENDIX A: IRB PERMISSION:



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই) Bangladesh Health Professions Institute (BHPI)

(The Academic Institute of CRP)

Ref.

CRP-BHPI/IRB/10/18/1253

Date 22/10/2018

To Taspia Tabassum B.Sc. in Physiotherapy Session: 2013-2014, Student ID:112130201 BHPI, CRP, Savar, Dhaka-1343, Bangladesh.

Subject: Approval of the thesis proposal "Predisposing factors responsible for hindrance into workplace after Spinal Cord Injury" by ethics committee.

Dear Taspia Tabassum,

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. The Following documents have been reviewed and approved:

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

The purpose of the study is to determine predisposing factors responsible for hindrance into workplace after Spinal Cord Injury. The study involves use of a "The life Situation Questionnaire" questionnaire to identify or find out explore the Barrier to return work for spinal Cord Injury people in the social community that may take 20-30 minutes to answer the questionnaire, the members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 10:00 AM on 24th January, 2018 at BHPI.

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,

Kalbahamana

Muhammad Millat Hossain

Assistant Professor, Dept. of Rehabilitation Science

Member Secretary, Institutional Review Board (IRB)

BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বংলাদেশ, ফোন ঃ ৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪ ফ্যাব্র ঃ ৭৭৪৫০৬৯

CRP-Chapain. Savar, Dhaka-1343, Tel: 7745464-5, 7741404, Fax: 7745069, E-mail: contact@crp-bangladesh.org, www.crp-bangladesh.org

APPENDIX B: PERMISSION LETTER

Permission letter

July 21st, 2018

Assistant Manager.

Rehabilitation Wings,

Centre for the Rehabilitation of the Paralysed (CRP)

Chapain, Savar, Dhaka - 1343.

Through: Head of Physiotherapy department, BHPI.

Subject: Permission to collect data in order to conduct my research project.

Dear Sir,

With due respect and humble submission to state that I am Taspia Tabassum, student of 4th professional B.Sc. in physiotherapy at Bangladesh Health Professions Institute (BHPI). According to the course curriculum, I have to conduct a research project for the partial fulfillment to complete of the degree of B.Sc in Physiotherapy. The title of my research project is "Predisposing factors responsible for hindrance into workplace after Spinal Cord Injury". My research project will be conducted under the supervision of Md. Shofigul Islam, Assistant Professor, Department of Physiotherapy, BHPI, CRP. I want to collect data for my research project from the community with Spinal Cord Injury Patients. So, I need permission for collecting data from the community. I would like to assure that anything of my study will not be harmful for the participants.

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

Yours sincerely,

tanpia .

Taspia Tabassum

4th professional B.Sc. in physiotherapy

Roll-07, Session: 2013-2014

Bangladesh health professions institute (BHPI)

(an academic institute of CRP)

CRP, Chapain, Savar, Dhaka-1343.

APPENDIX C: ENGLISHCONSENT FORM

Consent Statement

(Please read out to the participants)

Assalamualaikum/Namasker,

My name isTaspiaTabassum, I am conducting this study as a part of my academic work of B.Scin Physiotherapy under Bangladesh Health Professions Institute (BHPI), which is affiliated to University of Dhaka. My study title is —Predisposing factors responsible for hindrance into workplace after Spinal Cord Injury. I would like to know about some personal and other related information regarding Spinal cord injury. You will need to answer some questions which are mentioned in this form. It will takeapproximately 20-25 minutes.

I would like to inform you that this is a purely academic study and will not be used for any other purpose. All information provided by you will kept in secure as confidential and in the event of any report or publication it will be ensured that the source of information remains anonymous and also all information will be destroyed after completion of the study.

Your participation in this study is voluntary and you may withdraw yourself at any time during this study without any negative consequences. You also have the right not to answer a particular question that you don't like or do not want to answer during interview.

If you have any query about the study or your right as a participant, you may contact with me and/or my supervisor Md. Shofiqul Islam, Assistant Professor of Physiotherapy, Bangladesh Health Professions Institute (BHPI), Savar, Dhaka.

So may I have your consent to proceed with the interview or work?

Yes	:Date:	
No	:Date:	
Signature o	f the Participant	Date:
Mobile No:		
Signature o	f the Interviewer	Date:
Mobile No:		

APPENDIX D: BANGLA CONSENT FORM

মৌখিক অনুমতিপত্র/সন্মতিপত্র

(অংশগ্রহনকারীকে পড়ে শোনাতে হবে) আসসালামুআলাইকুম/ নমস্কার,

আমার নাম তাসপিয়া তাবাচ্ছুম , আমি এই গবেষণা প্রকল্পটি বাংলাদেশ হেলথ্ প্রফেশনস ইনষ্টিটিউট (বিএইচপিআই)-এ পরিচালনা করছি যা আমার ৪র্থ বর্ষ বিএসসি ইন ফিজিওথেরাপী কোর্সের অধিভূক্ত। আমার গবেষণার শিরোনাম হল "মেরুরজ্জুতে আঘাতপ্রাপ্ত রোগীদের কর্মক্ষেত্রে প্রবেশের জন্য বাধাসমূহ"। আমি এক্ষেত্রে আপনাকে কিছু ব্যক্তিগত এবং আনুষঙ্গিক প্রশ্ন মেরুরজ্জু ক্ষতিগ্রস্থ সম্পর্কে করতে চাচ্ছি। এতে আনুমানিক ২০-৩০ মিনিট সময় নিবো।

আমি আপনাকে অনুগত করছি যে, এটা আমার অধ্যয়নের অংশ এবং যা অন্য কোন উদ্দেশ্যে ব্যবহৃত হবেনা। 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 অংশগ্রহণ স্বেচ্ছাপ্রণোদীত এবং আপনি যে কোন সময় এই অধ্যয়ন থেকে কোন নেতিবাচক ফলাফল ছাড়াই নিজেকে প্রত্যাহার করতে পারবেন। এছাড়াও কোন নির্দিষ্ট প্রশ্নু অপছন্দ হলে উত্তর না দেয়ার এবং সাক্ষাৎকারের সময় কোন উত্তর না দিতে চাওয়ার অধিকার ও আপনার আছে।

এই অধ্যয়নে অংশগ্রহণকারী হিসেবে যদি আপনার কোন প্রশ্ন থাকে তাহলে আপনি আমাকে অথবা/এবং মোঃ শফিকুল ইসলাম, সহকারী অধ্যাপক, ফিজিওথেরাপি বিভাগ, সিআরপি, সাভার, ঢাকা- ১৩৪৩ তে যোগাযোগ করতে পারেন।

আমি আপনার অনুমতি নিয়ে এই সাক্ষাৎকার ওর ক	রতে যাচিছ।
रां:	
না:	
১। অংশগ্রহনকারীর স্বাক্ষর	তারিখঃ
মোবাইল নাশারঃ	
২। সাক্ষাৎগ্রহনকারীর স্বাক্ষর	তারিখঃ
মোবাইল নামারঃ	

APPENDIX E: ENGLISH QUESTIONNAIRE

"Predisposing factors responsible for hindrance into workplace after Spinal Cord Injury".

Patients Related Information						
Patient's Identification						
Identification Number:						
Date of Interview:						
Name of respondent:						
Address:						
Dist:	P.S:	P.O:	Vill:			
Contact number:						
Consent Taken:		Yes No				

	Demographic Related Questionnaire				
S/N	Traits	Question	Skip to		
1.1	Age				
1.2	Sex	1. Male			
		2. Female			
1.3	Marital Status	1. Married			
		2.Unmarried			
		3. Widow			
		4. Divorce			
		5. Separate			
1.4	Occupation	1. Businessman			
		2. Service Holder			
		3. Teacher			
		4. Farmer			
		5. Carpenter			
		6. Driver			
		7. Others			
1.5	Income (Monthly)	1. 1000-5000			
		2. 6000-1000			
		3. 11000-20000			
		4. Others			
1.6	Education	1.Illiterate			
		2. SSC			
		3.HSC			
		4.Bachelor			
		5. Masters			

	Living Area	1. Urban						
		2. Rural						
	Medical Check List							
S/N	Traits	Question	Skip to					
2.1.	Skeletal level							
2.2	Neurological Level							
2.3	ASIA impairment scale	1. Complete:A						
		2. Incomplete:B						
		3. Incomplete: C						
		4. Incomplete:D						
		5. Not applicable						
2.4	Туре	1. Paraplegia						
		2. Tetraplegia						
2.5	Secondary complication	1. Pain						
		2. Burning sensation						
		3. Constipction						
		4.Swelling						
		5. Unrine leakage						
		6. Pressure ulcer						
		7. Urinary tract infection						
		8. Diabetic						
		9. Others						

ATTITUDES TOWARD EMPLOYMENT [1].

This question is about your attitude towards employment (you do not need to be employed for these items to be relevant to you). Please circle the response that indicates your level of agreement with the statement.

Traits	Strongl	Disagree	Neutral	Agree	Strongl
	y				y
	Disagre e				Agree
3.1. I have the proper education and/or	1	2	3	4	5
training to work.					
3.2. I have all the necessary resources to	1	2	3	4	5
maintain a regular job (transportation,					
assistants, etc).					
3.3. I cannot do the same types of jobs that	1	2	3	4	5
I did before my injury.	1	2	2	4	
3.4. The types of jobs that I can do now just do not interest me.	1	2	3	4	5
3.5. I have children at home and that	1	2	3	4	5
makes working difficult.	1	<u> </u>	3	4	3
3.6. My health, stamina, or endurance is	1	2	3	4	5
too poor to maintain a regular job.	1	-	5		
3.7. Most of my time and energy is used to	1	2	3	4	5
take care of my SCI needs.					
3.8. Most jobs that I am trained for are not	1	2	3	4	5
accessible to people in wheelchairs.					
3.9. The types of jobs I can do now do not	1	2	3	4	5
pay enough money to be worthwhile.					
3.10. Needing attendant help makes	1	2	3	4	5
working difficult for me.	1	2	2	4	
3.11. I do not know much about jobs	1	2	3	4	5
available to people with disabilities.	1	2	3	4	5
3.12. My family prefers that I stay home rather than work.	1	2	3	4	3
3.13. Most employers will not hire me	1	2	3	4	5
because of my disability.	1	2	3	_	3
3.14. Loss of financial benefits is a barrier	1	2	3	4	5
to work for me.					
3.15. I received a large settlement from my	1	2	3	4	5
injury and do not need money from work.					
3.16. I am confident in my ability to work.	1	2	3	4	5
3.17. Working at a job is important to me.	1	2	3	4	5
3.18. Work is not that important to me	1	2	3	4	5
because I do other important activities,					
such as volunteering, homemaking or					
travel.	1		2	4	_
3.19. Pressure ulcers make working	1	2	3	4	5
difficult or impossible for me to maintain a job.					
3.20. I prefer not to work.	1	2	3	4	5
5.20. I protor not to work.	56	4	3	+	J J

56

3.21. My transportation is not sufficient to maintain a job and be a reliable employee.	1	2	3	4	5
3.22. I am physically capable of working.	1	2	3	4	5
3.23. Working is worth the effort to me.	1	2	3	4	5
3.24. I am concerned that working is too	1	2	3	4	5
stressful.					
3.25. I get fatigued easily and this makes	1	2	3	4	5
maintaining a job difficult.					
3.26. Loss of medical benefits is a barrier	1	2	3	4	5
to work for me.					
3.27. Jobs that require long distance travel	1	2	3	4	5
(airplane, train) make working difficult.					
3.28. Government programs are available	1	2	3	4	5
to help me to get a job or have helped me					
to get a job.					
3.29. Even if I am able to get a job (or	1	2	3	4	5
already have a job), keeping a job would					
be (is) difficult.					
3.30. Government programs are more	1	2	3	4	5
helpful in getting a job rather than keeping					
a job.					

Psychsocial related Questionnaire [2]							
Traits	Never	Rarely	Sometim	Usual	Always		
			es	ly			
4.1. I feel left out.	1	2	3	4	5		
4.2. I have someone who will listen to me	1	2	3	4	5		
when I need to talk.							
4.3. I feel isolated from others.	1	2	3	4	5		
4.4. I have someone who makes me feel	1	2	3	4	5		
appreciated.							
4.5. I feel that people are around me but not	1	2	3	4	5		
with me.							

APPENDIX F: BANGLA QUESTIONNAIRE

			প্রশ্নপত্র	
	"মের	রজ্জুতে আঘাতপ্রাপ্ত	রোগীদের কর্মক্ষেত্রে প্রবেশেরজন্য বাধাস	মুহ"
			রোগীসনাক্তকরণ	
সনাক্তকারী ন	াম্বার:			
সাক্ষাৎকার ত	ারিখ:			
উত্তরদাতার ন	ম:			
ঠিকানাঃ	জেলা:	থানা :	ড কঘর:	গ্ৰাম:
মোবাইল নাম্ব	ারঃ			
সম্মতি নেওয়া	হয়েছে:		হাঁ না	

রোগীর আর্থ সামাজিক প্রেক্ষাপট তথ্য						
ক্রমিকনং	বৈশিষ্ট্য	প্রশ্নউত্তর	মন্তব্য			
8						
۷.۵	বয়স					
۶.٤	লি ঙ্গ	১। পুরুষ				
		২। মহিলা				
٥.٤	বৈবাহিক অবস্থা	১। বিবাহিত				
		২। অবিবাহিত				
		৩। বিধবা				
		৪। বিবাহ বিচ্ছেদ				
		৫। অন্যান্য				
3.8	পেশা	🕽 । ব্যবসায়ী				
		২। চাকুরীজীবি				
		৩। শিক্ষিত				
		৪। কৃষক				
		৫। কাঠমিস্ত্রী				
		৬। গাড়ীচালক				
		৭। অন্যান্য				
٥.٤	মাসিক আয়	\$ \$000 - 6000				
		२।७००० - ১००००				
		v \$\$000 - \$0000				
		৪। অন্যান্য				
১.৬	শিক্ষাগত যোগ্যতা	১। অশিক্ষিত				
		২। এস.এস.সি				
		৩। এইচ. এস.সি				
		৪। ব্যাচেলর				
		৫। স্নাতক				
		৬। অনুন্য				
١.٩	বসবাস এলাকা	১। শহর				
		২। গ্রাম				

মেডিকেল চেক লিষ্ট							
ক্রমিকনং ঃ	বৈশিষ্ট্য	প্রশ্ন	মন্তব্য				
۷.۵.	স্কেলেটাল লেভেল						
২.২	নিউরোলজিক্যাল লেভেল						
২.৩	ASIA impairment scale	১ (Complete: এ					
		২ ৷ Incomplete: বি					
		৩।Incomplete:সি					
		8 ৷Incomplete:ডি					
		৫।প্রযোজ্য নয়					
₹.8	ধরণ	۱ Paraplegia					
		₹ Tetraplegia					
₹.€	পরবর্তী জটিলতা	১। ব্যথা					
		২। জ্বলে যাওয়ার মত অনুভূতি					
		৩। কোষ্ঠকাঠিন্য					
		৪। ফুলে যাওয়া					
		৫। চাপজনিত ঘা					
		৬। বহুমূত্র রোগ					
		৭৷ অন্যান্য					

	কর্মসং এই প্রশ্নপত্রটি আপনার কর্মস	স্থোন প্রতি মনে নংস্থানের প্রতি		প্রকাশ করবে	l	
	<u>বৈশিষ্ট্য</u>	দৃড়ভাবে অসম্মতি	অসম্মতি	নিরপেক্ষ	একমত	দৃড়ভাবে সম্মতি/একমত
৩.১	আমার সঠিক শিক্ষা এবং প্রশিক্ষা আছে।	۵	٧	9	8	¢
<i>ত</i> .২	আমার চাকরি বজায় রাখার জন্য প্রয়োজনীয় ব্যবস্থা আছে, যেমন- যাতায়াত, সহযোগীতা ইত্যাদি।	۶	α	9	8	¢
೨.೨	আঘাত এর পূর্বে যে চাকরি করতাম তা এখন করতে পারিনা।	۵	ર	9	8	¢
৩.8	আমি এখন যে ধরনের চাকরি / কাজ করি তার প্রতি আমি যথেষ্ট আগ্রহী না।	۶	ν	9	8	¢
৩.৫	আমার বাসায় আমার সন্শন আছে যা আমার কাজ কে কঠিন করে দেয়।	۶	ð	9	8	Œ
৩.৬	একটি নিয়মিত চাকরি/কাজ বজায় রাখার জন্য আমার স্বাস্থ্য শক্তি বা ক্ষমতা খুবই কম।	۵	N	9	8	¢
৩.৭	বেশির ভাগ সময় এবং শক্তি আমার এই অসুস্থ তারপ্রতি যত্নবান হতে ব্যবহৃত হয়।	۶	η	9	8	¢
৩.৮	বেশির ভাগ চকরি/কাজ যা আমি প্রশিক্ষন প্রাপ্ত হয়েছি তা হুইলচেয়ার ব্যক্তিদের জন্য উপযোগী নয়।	۵	η	9	8	¢
৩.৯	এখন যে ধরনের চাকরি/কাজ করিতা আমাকে আর্থিক ভাবে স্বচ্ছলতা দেয় না।	۵	η	9	8	¢
٥.১٥	সাহায্য কারীর সাহায্য আমার কাজকে আরও কঠিন করে দেয়।	۵	η	9	8	¢
۷.১১	প্রতিবন্ধী ব্যক্তিদের চাকরি/কাজের সম্পর্কে আমি যথেষ্ট পরিমাণ সচেতননা।	۵	N	9	8	Œ.
৩.১২	আমার পরিবার চায় আমি কাজের চেয়েও বাসায় বেশি অবস্থান করি।	۵	N	9	8	¢
0.30	প্রতিবন্ধী তার কারণে বেশির ভাগ চাকরিদাতা প্রতিষ্ঠান আমাকেচা করি/কাজে নিয়োগ দিচ্ছে না।	٥	ν	9	8	¢
٥.১8	আর্থিক সমস্যা আমার কাজের একটি প্রতিবন্ধকতা।	2	٧	9	8	¢
৩.১৫	আমি আঘাতের পর বড় ধরনের সহায়তা পেয়েছি কাজেই চাকরি/ কাজের জন্য টাকার প্রয়োজন নেই।	>	η	9	8	¢

৩.১৬	আমার কাজের প্রতি আমি যথেষ্ট পরিমাণ আত্মবিশ্বসী।	۵	2	٥	8	¢
٥.১٩	আমার কাছে কর্মক্ষেত্রে একটি গুরত্বপূর্ণ বিষয়।	۵	ર	•	8	¢
O.\$b	কাজ/চাকরি আমার কাছে অনেক বেশি গুরত্বপূর্ণ নয় কারণ অন্যান্য কাজের সাথে সংযুক্ত থাকি। যেমন- ভ্রমণ, স্বেচ্ছাসেবী এবং বাসার জন্য খাবার তৈরি।	۵	Q	ø	8	¢
৩.১৯	চাপজনিত ঘা আমার কাজ/চাকরি কে কঠিন কওে তুলেছে অথবা কাজ /চাকরি বজায় রাখা আমার জন্য কঠিন হয়ে পরেছে।	۶	ર	•	8	¢
৩.২০	কাজ না করাকে আমি গুরত্ব দেই।	>	২	9	8	¢
৩.২১	আমার যাতায়াত ব্যবস্থা যথা উপযোগী নয়, আমার কাজ এবং বিশ্বাসযোগ্য কর্মী হওয়ার ক্ষেত্রে।	٤	N	9	8	φ
৩.২২	আমি শারিরিক ভাবে উপযোগী কাজ করার ক্ষেত্রে।	۵	a	9	8	œ
৩.২৩	কাজ আমার কাছে অনেক বেশি মূল্যবান।	2	২	9	8	¢
৩.২৪	আমি এই ব্যপারে সচেতন যে কাজ অনেক বেশি মানষিক চাপের হয়।	۵	ર	৩	8	¢
৩.২৫	আমি খুব সহজেই ক্লাল্ হয়ে পড়ি যার ফলে কাজ /চাকরি বজায় রাখা কঠিন হয়ে পরে।	>	Ŋ	9	8	Ø.
৩.২৬	চিকিৎসা সুবিধা রকমে যাওয়া আমার কাজের জন্য অন্যতম বাধা।	۵	ર	•	8	¢
৩.২৭	যে সমস্থ কাজে দূরে ভ্রমণ থাকে (যেমন- ট্রেন, বিমান) তা কাজ কে কঠিন করে তোলে।	>	٦	•	8	¢
৩.২৮	চাকরি পাওয়ার ক্ষেত্রে সরকারি সকল ধরনের সাহায্য পাওয়াযায়।	۵	ર	٥	8	¢
৩.২৯	যদিও আমি একটি চাকরি পাওয়ার সামর্থ্য রাখি কিন্তু তা ধওে রাখা বাবজায় রাখা কঠিন হয়ে পড়ে।	>	ર	•	8	¢
૭.૭ ૦	সরকারি ভাবে চাকরি পাওয়ার ক্ষেত্রে যত বেশি সাহায্য করে কিন্তু তা ধওে রাখা বা বজায় রাখার ক্ষেত্রে ততবেশি সাহায্য করেনা।	۵	Q	•	8	¢

	মানসিক সমস্যা সম্পর্কিত প্রশ্নপত্র								
	বৈশিষ্ট্য	কখনোনা	একেবারে কম	মাঝেমাঝে	সাধারণত	সর্বদা			
8.3	নিজেকে ছোট লাগে- নিজেকে ব্যর্থ মনে হয়	2	২	٥	8	Č			
8.২	আমার কথা বলার জন্য কোন একজন আছে যখন কথা বলার প্রয়োজনআছে	٥	2	9	8	¢			
8.७	আমার মনে হয় আমি সবার থেকে আলাদা আছে	٥	v	9	8	¢			
8.8	আমার কোন একজন আছে প্রশংসা করার জন্য	٥	2	9	8	¢			
8.0	আমি অনুভব করি আমার চারপাশে অনেকে আছে কিন্তু আমার সাথে কেউ নাই	٥	2	9	8	¢			