

**EXPERIENCE OF PEOPLE WITH SPINAL CORD INJURY ABOUT  
PARTICIPANT IN SPORTS AS A LEISURE ACTIVITY IN CENTRE  
FOR THE REHABILITATION OF THE PARALYSED.**



By

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## **Statement of Authorship**

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis presented by me any other degree or diploma or seminar.

No others person's work has been used without due acknowledgement in the main text of the thesis.

This thesis has not been submitted for the award of any other degree or diploma in any other tertiary institution.

The ethical issue of the study has been strictly considered and protected. In case of dissemination of the findings of this project for future publication, it will be duly acknowledged as undergraduate thesis.

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## Abstract

**Background:** As the spinal cord is responsible for conducting afferent and efferent stimuli between the periphery and the brain, when this organ is injured, organic structures and functions are compromised, resulting in limitations to perform Activities of Daily Living (ADLs). Sports participation as a leisure could have substantial benefits on the physical and psychosocial well-being of people with SCI.

**Objective:** The objectives were to identify the perception about sports as a leisure activity, to identify the preference of leisure activity as an inclusive sport, to recognize new idea from service user about inclusive sports.

**Methodology:** This study was a conducted by using qualitative content analysis approach of phenomenological qualitative research design to collect in-depth information of participants' perception. Participants were selected by using convenient sampling. Data was collected using face to face interview with a semi-structured questionnaire. Data was analyzed by using content analysis. The Researcher was study completed in Spinal cord injury Unit at Centre for the Rehabilitation of the Paralyzed (CRP), Savar, Dhaka. Sample of this study was Persons who has the SCI at CRP inpatient unit and also involve their leisure activity like as sports activity. Researcher was selected people with SCI patient by the use of random selection procedure. For this type of study the sample size was ten who met the inclusion criteria was selected.

**Result and Discussion:** After analyzing data, it was founded that in CRP inpatient unit; most of the SCI patient understood about sports and most of the participant are satisfactorily to involve this kind of leisure activity. They also added some recommendations. Most of the participants wish that to include some different type of leisure activity. Some of the participant opinion about the purpose of inclusive sports as a leisure activity in CRP is to improve physical balance, give inspiration, therapeutic purpose, refreshment and social participation etc.

**Conclusion:** The results of this study was indicate that participation in sports as a leisure activity after SCI is associated with increased community integration; reduce depression and quality of life. Participation in inclusive sports should be recognized as an adjunct to current SCI rehabilitation programs, with the potential to contribute to improved rehabilitation outcomes.

**Key words:** *Spinal Cord Injury, Inclusive Sports, Leisure, Social inclusion*

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## **List of Acronyms**

**ADL** - Activities of Daily Living.

**ASIA**- American Spinal Cord Injury Association

**BHPI**- Bangladesh Health Professions Institute

**CRP** - Centre for the Rehabilitation of the Paralysed

**QCA**- Qualitative Content Analysis

**SCI** - Spinal Cord Injury

**USA**- United States of America

**UK**- United Kingdom

**WHO** - World Health Organizations.



# CHAPTER 1

## INTRODUCTION

Bangladesh is a developing country. There is lots of health problem in this country. Spinal Cord Injury (SCI) is continuous to be a major cause of disability throughout the Asia as well as in Bangladesh (Islam, Hafez and Akter, 2011). In Bangladesh, there is no specialized government hospital for the treatment and rehabilitation of people with SCI. The only one non- government organization is the Centre for the Rehabilitation of the Paralyzed (CRP), which has been working in this field for the last 35 years (Islam, Hafez and Akter 2011). These injuries can also devastating condition with enormous financial, social, and personal costs (Vafa, Movaghar and Sohei, 2009). As the spinal cord is responsible for conducting afferent and efferent stimuli between the periphery and the brain, when this organ is injured, organic structures and functions are compromised, resulting in limitations to perform Activities of Daily Living (ADLs) (Clin Rehabil, 2011). People living with SCI face many challenges and barriers to physical activity participation, social participation, and overall quality of life. Sports participation as a leisure could have substantial benefits on the physical well-being and psychosocial well-being of people with SCI (Kathleen, Martin Ginis and Lude *et al.* 2012).

### 1.1 Background of the study

SCI is a major public health problem in Bangladesh. According to World Health Organization (WHO), there are about 20 million people worldwide and most of them are using wheelchair because of spinal cord injury (World Health Organization, 2011). There are approximately 262.000 people with SCI in the United States in 2009 (National SCI Statistical Center, 2010). Recovery from SCI is influenced by the interaction between many variables such as the unique personal, social, cultural and economic circumstances of the person who has been injured (Livneh, Schmidt Read and Waring, 1997). Recent years have seen a growing understanding of the role of psychologic factors in the rehabilitation of patients with spinal cord injury (Hasan, S.A *et al.* 2009). Although research has suggested that those individuals who recover from depressive episodes engage in higher frequencies of leisure activity that those who do not recover (Elliot & Shewchuck, 1995).

In Bangladesh, Centre for the Rehabilitation of the Paralysed (CRP), the causes of spinal cord injury has been reviewed retrospectively by Md. Fazlul haque, (1993), and found that 72% patients were traumatic cases. There are 3 main causes of injury, 43% resulted from a fall from height such as a tree, 20% were associated with falling while carrying a heavy load on the head (a common practice in Bangladesh), 18% were resulted from a road traffic accident and 5% formed a very diverse group which included assault, stab injury, sports injury, and bull attack. In traumatic causes 60% patients were presented paraplegia and 40% were tetraplegia. Among the 28% in non-traumatic SCI the main causes were pott's disease, 21% with a spinal tumor. 10% transverse myelitis, 6% gulliaen barre syndrome and 1% cervical spondylitis. In non-traumatic cases 84% were paraplegic and 16% were tetraplegic. The male female ratio was 7.5:1 and common age group between 10-40 similar to that reported from Jordan and Thailand (Md. Fazlul haque, 1999). Other countries have similar statistics; in Japan 43% traumatic SCI are caused by a fall from a height and 18% by road traffic accident. In India 55% are caused by a fall from a height and 13% road traffic accident, and in Thailand 43% of injuries are caused by a fall from a height (Md. Fazlul haque, 1999). Regular Sports exercise activity conferring positive health benefit in the SCI population. Specifically, in SCI it has been shown to decrease medical complications, increase life expectancy and improve both quality of life and social interaction (Curtis KA *et al.* 2004). In UK (Royal Victoria Hospital) to conduct a research study about "perception of the effect of sport on rehabilitation of SCI patients." Sample size was 100. A general benefit of sporting activity was recognized by 78.8% and a rehabilitation benefit by 69.7%. Self-reported benefits included increase in fitness, quality of life, confidence and social contact (Spinal Cord Injury, 2004).

In Musgrave Park Hospital, The Spinal Cord Injury Unit has a 15-bedded inpatient unit serving the population of Northern Ireland (1.7 million). It primarily admits patients with SCI for rehabilitation. They conduct a study about "To establish patients' perception of the effect of sport on rehabilitation". The result of this study was a high proportion of patient's perceived sporting activity as beneficial and their Self-reported benefits included increase in fitness, quality of life, confidence and social contact (Spinal Cord, 2004). Plying improved social interaction as a result of exercise. Lack of adherence to an exercise programme has been shown to result in loss of the accrued psychological well-being (Patient perception of the impact of sporting, 2005). Play is one kind of leisure activity. Leisure is very essential for all type of patients.

In US National Library of Medicine prepare a research study for spinal cord injury patients about Eight independent studies (N = 615 participants) were identified from a comprehensive database search. There is some evidence that leisure therapy offers an opportunity to enhance short-term treatment gains in community-based spinal cord injury rehabilitation (U.S. National Library of Medicine, 2014).

In acute stage surgery and medical treatment is good for SCI patients. But day by day only medical treatment is not enough for SCI patients. Sports and leisure activity is very important to improve physical and mental condition of SCI patients. Sport and leisure begin to become part of the medical treatment due to crucial role in the process of facing the "disadvantage" by disabled individuals. The benefits of sports practice to individuals with SCI are improvement of oxygen maximum uptake, gain in aerobic capacity, reduction of the risk of cardiovascular diseases and of respiratory infections, decrease in the incidence of medical complications (urinary infections, scars and renal infections), reduction of hospitalizations, increase of life expectancy, increase of the levels of community integration, assistance in the facing of the disability, favoring of independence, self-image, self-esteem and life satisfaction improvement besides decrease in the probability of psychological disorders (Sports on quality of life of individuals with spinal cord injury, 2011).

In Bangladesh it is not a new concept now. There were rehabilitation center of Spinal Cord Injury names Center for the Rehabilitation of the Paralyzed (CRP) which the biggest rehabilitation center of Asia pacific is providing their service since last 30 years. Every year there were admitted a huge number of patient who backs to their community after getting rehabilitation from CRP. The OTs plays a vital role in increasing people's functional skills and abilities, enabling them to spend leisure time in a fruitful way. In April 2010 the OT Inpatient Unit started some exciting advanced skills training for SCI patients. Bracelets, earrings, friendship bands, handkerchiefs, wall mats, jute hangers and different ornaments are made in these classes, and then sold. The purpose of the training is to improve patients' hand skills, self-confidence and opportunities for socialization (Centre for the Rehabilitation of the Paralysed, 2010). OTs select patients from bed rest, active and rehabilitation phases to help them improve their skills, self-confidence and to help pass their time meaningfully. The Executive Director of CRP formally opened the program. Researcher has completed basement placement in 2<sup>nd</sup> year in the SCI unit at CRP. CRP is the renowned rehabilitation center for the persons with SCI (Annual report of CRP, 2013-2014). Researcher observed that the inclusive sports in CRP. At that time researcher was curious to know about SCI patient's experience of sports as a leisure activity among the CRP.

## **1.2 Significant of the study**

CRP plays a vital role in providing therapeutic intervention for the SCI patient. Therapists use different types of techniques to provide intervention for that patient. It takes long time to complete the rehabilitation program. In CRP have some opportunity to participate in different type of leisure activity such as gardening, sports etc. But this sport is different type of sports as a leisure activity for SCI patient. Such as- Table Tennis, Wheelchair Basketball, Volleyball, Ring posting, Golf throwing etc. All sports are trying to inclusive for all patients. Participate in new experience that may changes their mind, expectation of life. Most of the people do not know about the profession of Occupational Therapy. Occupational Therapy is a unique profession in Bangladesh (Wilson and Wilcok, 2005). The occupational therapists and of occupational therapy will be able to enrich their knowledge and resource by using this study in Bangladesh. They will also establish different management strategies for the Person with SCI. As an Occupational Therapist their important role is inclusion in society. When a patient participates in inclusive sports this is one kind of social inclusion and occupational therapy has a part to engage the patient of their leisure activity. It is the important for patient. Researcher was interested to explore the experience of sports as a leisure activity in SCI patient among the CRP. Because it is very important to identify continuing opportunity for inclusive sports as leisure activity should be appropriate for different type of SCI patient. This study also identified common challenge and recognizes new idea from service user about inclusive sports. In rehabilitation program of SCI occupational therapist and other professionals are work together. By this study all professionals would be benefited to maintain some recommendation.

## **1.3 Aim**

The aim of this research is to explore the experience of SCI about participant in sports as a leisure activity in CRP.

## **1.4 Objective**

- To identify the perception about sports as a leisure activity.
- To identify the preference of leisure activity as an inclusive sports.
- To recognize new idea from service user about inclusive sports.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Rehabilitation and Inclusion for disability

Rehabilitation is helping the individual achieve the highest level of functioning, independence, participation and quality of life possible (DeLisa, 2004). In the context of rehabilitation, the relationship of sport and disability are particularly important, because the term to rehabilitate comes from the medieval Latin "habilitas", meaning "to make able" (Merriam Webster Online Dictionary, 2008) and involves building bridges over disruptions that have occurred between the past and present, and with regard to control over one's life (Norman, Sandvin & Thommesen *at al.* 2004). The popular portrayal of sports in disability as "ability not disability counts" (e.g., Dallas Mavericks online), suggests that the aim of sport and rehabilitation are actually similar, only at different ends of the normal distribution curve. Thus, the methods of training, increasing motivation, and social conduct in sport may be of particular relevance to rehabilitation efforts and structures (Rawal, 2008).

1200 men, women and children become paralysed due to an accident or illness every year (Dallas Mavericks, 2000). Many more people acquire a different disability that means they need to use a wheelchair. This is one kind of rehabilitation. All will benefit by participating in wheelchair sport and leading a healthier, more active life (Rawal, 2008). Through sport many people whose lives have been traumatically changed can enjoy the tremendous physical and psychological benefits of participation and competition. If a recently disabled person focuses on something they can do, and potentially can excel in, they can gain increased confidence which results in a positive outlook that can influence other areas of their lives (White, Driver and Warren, 2010). Sport can make an amazing difference to the life of a person with a spinal cord injury:

- It aids rehabilitation
- It decreases the need for long term healthcare and medical treatment because of the healthy lifestyle
- It restores independence enabling people to undertake everyday tasks more easily including dressing, transferring in and out of their wheelchairs to the car, bath and bed
- It motivates disabled people by giving them new goals and increases confidence and self-belief (Fernandez *et al.* 2010).

The inclusion of physical activity and sports into rehabilitation services is associated with the legacy of the medical rehabilitation specialist Sir Ludwig Guttmann (1976) who was also known as the founder of the International Stoke Mandeville Games Federation. Later models of Jocheim (1990); Rimmer (1999) and Schüle and Huber (2004) suggest physical activity programs within a health promotion delivery system of rehabilitation from hospital into the community.

As clinicians, occupational therapists recognize that providing the highest standard of care means having a comprehensive knowledge of the issue the client is experiencing. This includes any background information and involvement from the client's friends and family whenever possible (Nicole Wandell, 2011). In order to comprehend the research in the areas of social participation and leisure, this paper will provide a critical appraisal of research in these areas while highlighting the impact of social participation and experience of leisure for persons with a SCI.

## **2.2 Important of sports for SCI patients**

Sports can develop the potential of individuals and communities building self-confidence, competence, life and social skills, health and well-being and allowing real achievement through competitive success or qualification in coaching and leadership (Developing Social Inclusion and the Sport, 2001). It can also play an important role introducing social tensions and conflicts at the community and national level by addressing the sources of this exclusion and providing an alternative entry point into the social and economic life of communities (Sport to Promote Social Inclusion and Diversity, 2013). Increased social participation by disabled people in sport.

- Increased satisfaction of disabled people with the sports offer (sports activities, facilities, access and experience).
- All rehabilitation organizations will assess how their performance and what future results they are likely to achieve. It is the effective for development of rehabilitation programs.
- Sports can develop the potential of individuals and communities building self-confidence.
- The sector becomes more effective and efficient through a collective approach.
- Positive outcomes for disabled people and a self-improvement culture.

- Social inclusion of all people with disabilities.
- Inclusive sports are very effective to relief stress for SCI patients (Inclusive sport and NDSOs, 2011).

### **2.3 Inclusive sports**

The term "sport" has roots in the Middle English term *disporten* that comes from Old French *desporter*, which means to divert, to carry away (The American Heritage, 2003). Thus, sport can be understood as an active means for recreation, carrying a person away from every day's burden. Today, sport has different meanings depending on culture and history (Clin Rehabil, 2011). In the Anglo-American culture it is considered as mostly a competitive form of organized physical exertion involving skills and regulations, while in the central European cultures it is typically understood in a broader sense and means "all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels" (European Sports Charter, 2001).

Sport is an activity in which players or teams compete against each other, usually an activity that involves physical effort. When this sports was integration or expectable for all type of disable people according to modification of sports system or equipment's is called inclusive sports (European Sports Charter, 2001).

In our CRP, only SCI patients are involve in inclusive sports. But all type of disable people is involved in inclusive sports according to modification of sports system or equipment's. So, need to include all type of disable people in inclusive sports among CRP.

#### **2.3.1 Aim of inclusive sports:**

- Increased social participation by disabled people in sport.
- Increased satisfaction of disabled people with the sports offer (sports activities, facilities, access and experience).
- All organizations will assess how their performance and what future results they are likely to achieve.
- The sector becomes more effective and efficient through a collective approach.
- All organizations will develop the capability to measure, review and improve performance.
- Positive outcomes for disabled people and a self-improvement culture.
- Social inclusion of all people with disabilities (Inclusive sport and NDSOs, 2011).

Inclusive sports can develop the potential of individuals and communities building self-confidence, competence, life and social skills, health and well-being and allowing real achievement through competitive success or qualification in coaching and leadership (Developing Social Inclusion and the Sport, 2001).

## **2.4 Inclusive sports in Bangladesh**

An inclusive sport has been proven to improve the psychological status of the tetraplegics and paraplegics (Clin Rehabil, 2011). In Bangladesh, even now disability is not accepted normally. The disabled persons are always cast aside. If the disabled person is poor then the condition is much worse than with rich man. Disabled people are neglected who cannot contact with people or relatives outside of the house. Sports are therefore impossible to consider (Kathleen, Martin Ginis and Lude *et al.* 2012). In CRP, this situation is different than the other areas of Bangladesh. At CRP, patients from all socio-economic classes receive the same treatment and same level of care. Rehabilitation programs include sports for all patients. All sports are trying to be inclusive for patients. Participate in new experience that may change their mind, expectation of life (Annual Report of Centre for the Rehabilitation of the Paralyzed, 2012-2013).

However, at other CRP projects, such as Gonokbari where female patients are rehabilitated, there are no such sports programs. Instead other activities including sewing and gardening. From their rehabilitation and recreation if it can be proven that sporting activity can improve psychological status and quality of life, then it is recommended that the inclusion of a sports program will be indicated.

## **2.5 Spinal Cord**

The Spinal Cord is the major reflex center and conduction pathway between the body and brain. This is cylindrical in shape and slightly flattened in anterior and posterior areas (Back, 2006). Spinal cord is a communicating link between the spinal nerves and the brain. So, ultimately the spinal cord is the major conduit through which motor and sensory information travels between the brain and the body (Kirshblum, 2011). The receptor of the body receives the sensory stimuli from environment which sends signals to the brain. As a result this reduces vital capacity which affects endurance level for activity.



## **2.6 Spinal Cord Injury**

The Spinal Cord is a column in central nervous system which extends in the vertebral canal from the level of the foramen magnum to the level of the Vertebrae Lumber 1 or Lumber 2. If any injury or lesions occur in Spinal Cord then it is called Spinal Cord Injury (Trombly, C *et al*, 1995). A spinal cord injury occurs when the spinal cord is damaged. Most spinal cord injuries are a result of accidents which break the bones of the neck or the back. When the bones of the neck or back are broken they may damage the spinal cord. This is because the spinal cord lies in a tunnel made by these bones. This usually paralyses the muscles and causes loss of feeling below the level of injury (World Health Organization, 1996).

SCI (SCI), either traumatic or non-traumatic in origin, and the disabilities that follow are of great concern to the medical world, to the person affected, their family and society as whole (Pedro Cuesta, 2010). Traumatic SCI annual incidence rates yielded values ranging from 12.1 (Pangalila, 2000) to 57.8 (Barat,1998) cases per million, with Motor Vehicle Collisions (MVC), falls, violence and sports activities being leading causes. Non-traumatic SCI appears to represent a significant proportion of individuals with SCI admitted to rehabilitation settings and, as in traumatic SCI; there is an enormous socioeconomic burden in caring for these people. An estimate of the incidence of non-traumatic as well as traumatic SCI is needed for adequate health care planning (Pedro Cuesta, 2010).

## **2.7 Type of injury**

A spinal cord injury is either an incomplete or complete injury.

### **2.7.1 Incomplete spinal cord injury**

With an incomplete spinal cord injury the spinal cord is able to get some messages to and from your brain. There is some movement and/or feeling below the level of injury. This includes feeling and muscle activity in the rectum (Hamilton Health Sciences, 2011).

### **2.7.2 Complete spinal cord injury**

There is more damage to the spinal cord than with an incomplete injury. With a complete spinal cord injury there is a loss of feeling and movement throughout the body below the level of injury. When your doctor uses this term it means that you also have no feeling or muscle activity in your rectum (Hamilton Health Sciences, 2011).

## **2.8 Leisure**

To provide enjoyable leisure and sport activities that alleviates mental stress while maximizing fun. It organize activities and other events for all people to reduce stress, motivating the work, and making fun and it also help all people appreciate the importance of leisure in modern lifestyles (Clin Rehabil, 2011).

So, leisure is very important for all people with disable. Because leisure reduces stress level, may changes their mind, expectation of life.

In 2010; Nicole Wandell, Pacific University conduct a research for SCI patients. This research has systematically examined the relationship between specific dimensions of leisure participation and depressive behavior (Caldwell, Dattilo, & Kleiber, 1998). As occupational therapists we assist our clients by “supporting health and participation through engagement in occupation” (AOTA, 2008). For clients with SCI, intervention may include re-introduction to leisure activities and social participation and exploration of programs built around adaptations for SCI (The Effect of Social Participation on Adults with Spinal Cord Injuries, 2010). Sport and Recreation and Links to Leisure Program in the Eurobodalla provide access to community recreational activities for people with a disability. Fun is the main focus of the Disability Trust’s Sport and Recreation Services, which provides opportunities for people of all ages with disabilities to participate in and enjoy physical and creative activities (Sport and Recreation-Links to Leisure, 2014).

## **2.9 Social inclusion**

Social Inclusion is a process, which assists people participate fully in life from uneconomic, social and cultural perspective (Livneh, Antonak and Kirsblum *et al.* 1997).

- If a person is "excluded" from society, he/she does not have equal access to services, facilities, resources, power, and opportunity.
- Some of the reasons people are excluded from equal participation can be poverty, racism, disability and gender discrimination (National Action Plan for Social Inclusion, 2007).

A socially inclusive society is defined as one where all people feel valued, their differences are respected, and their basic needs are met so they can live in dignity and social exclusion is the process of being shut out from the social, economic, political and cultural systems which contribute to the integration of a person into the community (Cappo, 2002).

In other words, the concept of social inclusion, like any concept in social sciences, cannot be defined without clarifying other assumptions about social life: the nature of the social bond,

some idea about socialization, some idea about mechanisms of social reproduction (Livneh, Antonak and Kirsblum 1997). Social inclusion from recognition perspective at level of society-

Social inclusion here (as a descriptive term of social ontology) means two things, depending on emphasis:

- From subject's perspective: positive affirmation of socially significant features which allow for development of personal identity within that society's framework

- From society's perspective: socialization of individuals, reproduction of society through maintenance of core symbolic/cultural/moral fabric (Social inclusion as recognition, 2010).

According to the United Nations Educational, (2011) Scientific and Cultural Organization (UNESCO), an inclusive society is defined "as a society for everyone, in whom every individual has an active role to play. That society is built on the fundamental values of fairness, equality, social justice, human rights and freedoms, as well as on the principles of tolerance and recognition of the diversity" (UNESCO, 2012).

According to UNESCO, any society with these characteristics should incorporate mechanisms that enable citizens to participate in decisions that affect their lives and ultimately, their common future (UNESCO, 2012). This definition is consistent with the basic elements that Sen. (2000) identifies for an inclusive society, which he defines as the one where there is a widespread sense of shared life experiences, active social participation, equal opportunities and universal enjoyment of basic levels of wellbeing.

According to Cobigo, (2012), we can say that the concept of social inclusion is closely related to the "full and fair access to collective resources and activities; the maintenance of social relationships with the family, friends and acquaintances, and the developing of the sense of group belongingness.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Study Design**

Qualitative method was chosen to conducting this study. Qualitative Content Analysis (QCA) approach of Qualitative method was used to conduct the study where the participants shared their views, feelings, opinions and experience on a particular event. It is said that, QCA facilitates to create a contextual meaning of text from the actual words through the development of emergent theme (Bryman, *et al.* 36). For this reason, researcher was selected qualitative research design to identify patient's views, perceptions and experiences.

Moreover, it explores about human's practical life phenomenon. In this study researcher found this approach appropriate because each of the participants had an own point of view on their experience as a service receiver, they express a detailed view on that particular event and they had their own thoughts, attitudes and motivation regarding the rehabilitation process. On the other hand, this study was conducted on the natural setting of the participants. Researcher wanted to show the participants experience not the researcher's view and on this regard, there have been said that, qualitative research tells about ordinary peoples understanding and explanation of their own reality , not the researcher's preconceived views and perceptions of others reality (Ohman, 2005). This approach of qualitative method helped to show the participants actual response of their practical experience which lastly formed the theme of the study by the interpretation and judgment of the collected data.

#### **3.2 Study Setting**

The Researcher collected data from Spinal cord injury Unit at Centre for the Rehabilitation of the Paralyzed (CRP), Savar, Dhaka. This was founded in 1979 in response to the desperate need for services for spinal injured patients; the Centre for the Rehabilitation of the Paralysed (CRP) has developed into an internationally respected organization. CRP focuses on a holistic approach to rehabilitation, recognizing that all aspects of the rehabilitation process (About CRP, 2010). Researcher was choosing this setting because the participant was available in SCI unit.

### **3.3 Sample of this study**

Sample of this study was selected by Persons who has the SCI at CRP inpatient unit and also involve their leisure activity like as sports activity. Researcher was selected people with SCI patient by the use of random selection procedure. For this type of study the sample size is 10.

### **3.4 Participant selection procedure**

The researcher was interested to obtain perception of the participants. The study was a qualitative type of study. The researcher was interested to obtain a complete understanding of the leisure activity by analyzing a range of participant's experience. Researcher used the convenient sampling. Researcher used the convenient sampling because the participants of this study were selected conveniently from the SCI unit of Center for the Rehabilitation of the Paralyzed (CRP) at saver. After taking permission from the SCI unit researcher discussed with responsible professional of this project about the research. Researcher makes a list of SCI patient who were regular participate in Inclusive sports at CRP. Qualitative research tents to focus on the collecting of detail amount of data from relatively small sample of subjects by asking question or observing behavior (Hair & Bush, 2003).

### **3.5 Informed consent**

The researcher used an information sheet and consent form both in English and Bengali to take the participant's consent for participating in the study. {APPENDIX-3 English} and {APPENDIX-4 Bengali}. Researcher informed the participant about details of the study by the information sheet which included the aim, objectives, way of collecting data from the participant and the ethical considerations of the study. Researcher give opportunity of the participant to read the information sheet if person with educated, but in case of the participant who was not educated than researcher read that out to them. There was also been used the consent form containing the consent of the participant that he was participating in the study and giving permission to the researcher to start the data collection sessions.

### **3.6 Ethical consideration**

Ethical considerations were importance to avoid ethical problem. Researcher was needed to maintain some ethical considerations. Proper ethical consideration tells about the transparency of any work which is mandatory to avoid conflicts. So, to keep the accountability and transparency of the work, the researcher needed to maintain some ethical considerations from the first phase of the study. First of all, the researcher was granted the permission of conducting the study from the supervisor and course coordinator of Department of Occupational Therapy, Bangladesh Health Professions Institute (BHPI) which was the academic institute of CRP. Then researcher would like to take to permission for data collection from the SCI (SCI) unit of Savar, CRP. The participants would be informed before the invite participation in the study. A written consent form was used to take the permission of each participant for the study. The researcher was to ensure that all participants are informed about their rights and reserves and about the aim and objectives of the study. Researcher was ensuring that the organization (CRP) not hampered by the study. All kinds of confidentiality would be highly maintained. The researcher was to ensure that it not to leak out any type of confidentialities. The researcher was eligible to did the study after knowing the academic and clinical rules of doing the study about what should be did and what should not. All rights of the participant would be reserved and researcher was accountable to the participant to answer any type of study related question. The mobile phone recorder identities of participant and other information were not revealed at anywhere except the information needed in the study.

### **3.7 Data Collection Tools/Materials**

- Researcher used a mobile phone recorder to record the interview time of the participants. Audio recording was necessary to develop full transcripts of the interview, which should be accessible to independent analysis (polgar and Thomas, 1991). The use of recording method in interview requires great trust in the judgment.
- Pen, pencil and Paper (white) was used to write down field notes or observation note from all participants.
- Consent form for the taking permission from the participants.
- Questionnaire, clip board was also used to collect the data.

### **3.8 Inclusion criteria**

- People who are regular participate in inclusive sports as a leisure activity in CRP of inpatient unit.
- Both male and female patients.
- People who was admitted in CRP of at list one month.

### **3.9 Exclusion criteria**

- People who does not take treatment in CRP in SCI unit.
- SCI patients with another condition.
- People who does not regular participate in inclusive sports as a leisure activity in CRP of inpatient unit.

### **3.10 Field test**

The researcher accomplished the field test with two participants before starting the collection of data. It is important to carry out a field test before collecting the final data as it helps the researcher to refine the data collection plan. This test was performed to identify any difficulties that exist in the questionnaires. By finding any difficulties, the investigator rearranged the questions to make it more understandable, clear and enough for the participants and the study.

### **3.11 Data Collection procedures**

The aim of this research is to explore the experience of inclusive sports as a leisure activity in SCI patient among CRP. The researcher was collected data from SCI patient who were admitted for treatment in CRP and also involve their leisure activity like as sports activity. Data for this study was collected by interview with semi structured questions. The researcher was used face-to-face interview with a semi-structured question for data collection. Interviewing is one of the techniques used to gather data in qualitative research. The researcher was used to qualitative methodology and ask pre- set, open-ended questions addressing a variety of issues in relation to find out the perceptions. It is useful because this technique ensures that the researcher obtained all information required, while at the same time gives the participants freedom to respond and illustrate concepts.

The researcher collected the data by own self. At first, the researcher was arranged a quiet place for communication with SCI patient who were admitted for treatment in CRP and also

involved their leisure activity like as sports activity. The researcher selected the participant from the record book of Inclusive sports. Spend some time building rapport through trusting a therapeutic relationship with participants. The researcher was explained the study question and aim of the study. The researcher then took the opinion of the participants by using an information sheet and consent form. After completing these primary steps, the researcher was asked questions to identify the experience of inclusive sports as a leisure activity and to collect suggestions from client to improve the service in SCI patient in CRP. All questions and information sheets was translated into Bangla. Interview session was conducted in Bengali and the session was recorded by mobile phone recorder. The interview session was based on the question. The interviewee was asked according to the questions listed on the question. The mean time of the interview was 20 min to half an hour. Venue of interview was Redaway Hall. A diary was used to record the attitude, experience, time, data, and place, to collect data.

### **3.12 Data Analysis**

The researcher selected qualitative content analysis (QCA) method to analyze the data. It facilitates the formation of core data through a systematic method of reduction and analysis. The theme of the study was created by systematic reduction and analysis of data. QCA follows three steps (coding, categorizing and generating theme) to show the result of the study. In a short line, it is said that, texts are coded into established categories to support the generation of ideas (Priest *et al.* 2003).

At the beginning of the data analysis, researcher listened to the recorded data several times. The recorded data were then transcribed into Bengali. Researcher started the data analysis with reading all data repeatedly to achieve immersion and obtain a sense of whole, and then researcher was read the data word by word to derive the code. Codes were then being sorted into categories. Categories used to organize and generate themes. At first, Researcher systematic organizing of the, transcripts of interviews and other associated materials to ensure the research question was addressed. Then data was effaced through transcription from the interviews of audio recording. After formulating the transcription, the researcher gave it to three individuals who were good in English with the intention that they could transform it separately from Bengal to English. Then the researcher confirmed the accuracy of the data. After that the researcher read it several times to recognize what the participants wanted to say. All data was analyzed using three stages: question analysis, content analysis and analysis of enough themes. Data was coded into broad categories as dictated by the



research question. Content analysis started when the researcher notes the answers of the participants according to every question and determines the codes from these answers. Finally analysis of interview data was done by analyzing text from the categorized data and coded themes.

### **3.13 Rigor of the study**

The rigorous manner was maintained to conduct the study by the researcher. All of the steps in this research process were supervised by an experienced supervisor. This study was conducted in a systemic way by following the steps of research under supervision of an experienced supervisor. During the interview session and analyzing data, the researcher never tried to influence the process by own value, perception and biases. The researcher accepted the answer of the questions whether they were of positive or negative impression. During asking question, the researcher always tried to avoid leading. The transcripts were translated by another three individuals to avoid biasness and researcher checked it several the times with his own translation and recording to reduce any mistake and compared it with the Bangla transcript. The participants' information was coded accurately and checked by the supervisor to eliminate any possible errors. Researcher tried to keep all the participants' related information and documents confidential. At last in the result section, the researcher used scientific manner and didn't interpret the outcomes of the result.

## **CHAPTER 4**

### **RESULT AND DISCUSSION**

Result and discussion were carried out all at once and present together in this chapter. This analysed by the facts and figures which were collected from the participant's views and practical experience. These views and experiences are regarding impact of SCI patient who was service user about inclusive sports (Baily, 1997). The study conducted eight categories which describes the experience of inclusive sports as a leisure activity in SCI patient among the CRP. The objective of the study was to find out the perception about of sports as a leisure activity, to explore the preference of leisure activity as an inclusive sport, to find out new idea from service user about inclusive sports.

In this section coding were selected on the basis of participant's views and opinions by which the theme was selected. The findings were described by using the table and also highlighted their interview is a coding basis.

## Summary of the data analysis and result

<b>Aim</b>	<b>Objective</b>	<b>Questions</b>	<b>Categories</b>	<b>Themes</b>
The aim of this research is to explore the experience of SCI about participant in sports as a leisure activity in CRP.	1. To identify the perception about of sports as a leisure activity.	Questions No. 1, 2, 3	1.1. SCI patients could understand about sports as a leisure activity in CRP. 1.2. SCI patient's opinion about the purpose of inclusive sports is refreshment and social participation in CRP.	Person with SCI could understand about the sports and the purpose of inclusive sports is refreshment and social participation as a leisure activity in CRP.
	2. To identify the preference of leisure activity as an inclusive sports.	Questions No. 4, 5, 6, 7, 8	2.1. Regular participation in inclusive sports as a leisure activity in CRP of SCI patient. 2.2. Playing game of leisure activity would like to more participate before getting injury of SCI patient. 2.3. Participants are very satisfied after participating in leisure activity among CRP.	Person with SCI patient are regular participating in inclusive sports as a leisure activity in CRP and they are very satisfied after participating in this leisure activity.
	3. To recognize new idea from service user about inclusive sports.	Questions No. 9, 10	3.1. Participant doesn't face difficulty during taking part of inclusive sports as a leisure activity in CRP. 3.2. Need to include more new game for further development of inclusive sports at CRP.	Person with SCI patient's has opinion about need to more new game should be include.

## 4.1 Result

Under these eight categories there have been emerged three themes which are as follows:

### Summary of theme that emerged from data

#### *Theme 1*

Person with SCI could understand about the sports and the purpose of inclusive sports is refreshment and social participation as a leisure activity in CRP.

#### *Theme 2*

Person with SCI patient are regular participating in inclusive sports as a leisure activity in CRP and they are very satisfied after participating in this leisure activity.

#### *Theme 3*

Person with SCI patient's has opinion about need to more new game should be include.

## 4.2 Discussion

Each table describes the interview findings. The tick was given only for those columns where the participants expressed their opinion. Here, 'P' means participant and P1, P2, P3... means number of participant. Below there is given the description of the category and coding:

### Categories: 1.1

#### SCI patients could understand about sports as a leisure activity in CRP

Coding	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
Could not understand	√				√					√	3
Could Understand		√	√	√				√	√		5
Could not understand						√	√				2

**Table 1:** Understanding about sports as a leisure activity in CRP among SCI patients

When sports were integration or expectable for all type of disable people according to modification of sports system or equipment's is called inclusive sports. Most of the SCI patients could not understand about these inclusive sports as a leisure activity but they have idea about sports in CRP.

3<sup>rd</sup> Participant said that,

*“Yes of course.... Here basically table tennis, basketball, carom board, and ring post, a bamboo which is playing by throw in etc inclusive sports are running , some of patient are involve many volunteer service and some of the patient are involve in hand making tools such as- bandage, Kham etc”.*

A study in USA found that, Information about the benefit of sports for SCI patient is the support and professional interventions during the rehabilitation process. The occupational therapist, physical therapist and leisure therapist were the main professionals who supported the uptake of new leisure activities and describe about the benefit of sports every individual participant (Participation and satisfaction after spinal cord injury, 2005). When they engage any patient in inclusive sports they must be give information about inclusive sports. In our CRP, most of the participants are good understanding about inclusive sports and these sports they take as a leisure activity (Norman, Sandvin and Thommesen *et al.* 2004) but some participants are uneducated. So they are not understood about inclusive sports. Another two participants are little bet understanding. But some of the SCI patients don't know about inclusive sports as a leisure activity.

1<sup>st</sup> participant said that,

*“Sorry I don't know about that, I play just for playing. I don't know anything else”.*

A study in India found that, a good quality of life is a very important concept for most people, including individuals with disabilities. The importance of experiencing a good life has been recognized by various disablement models which embrace concepts associated with "subjective well-being" or "life satisfaction. This life satisfaction and well-being will be come when person engage various social activity or inclusive activity. But some of the disable person doesn't know about inclusion because of some person are not educated (Journal of Rehabilitation, 2004). Researcher also founded that some of the participants are uneducated. So, they don't know about the inclusive sports.

**Categories: 1.2**

**SCI patient’s opinion about the purpose of inclusive sports is refreshment and social participation in CRP.**

<b>Coding</b>	<b>P1</b>	<b>P2</b>	<b>P3</b>	<b>P4</b>	<b>P5</b>	<b>P6</b>	<b>P7</b>	<b>P8</b>	<b>P9</b>	<b>P10</b>	<b>Total</b>
Improve physical balance	√						√				2
Give inspiration		√		√							2
Therapeutic purpose			√				√	√	√		4
Refreshment and social participation			√	√	√	√		√	√	√	7

**Table 2:** Opinion about the purpose of inclusive sports is refreshment and social participation as a leisure activity in SCI patients.

In this study researcher found that, most of the participant thinks the purpose of inclusive sports as a leisure activity is Refreshment and social participation which is supported by a study conducted in Canada. It supports that, Inclusive sports and other sports also might help reduce stress, increase of the levels of community integration and give the opportunity to socialization (Basketball’s Fitness Benefits a Sure Bet, 2014).

Participant 3 said that,

*“It seems to me, this not only work for therapy but also works as a refreshment and social inclusion”.*

Some of the participant thinks that the purpose of inclusive sports as a leisure activity is therapeutic improvement. Sports and leisure activity is very important to improve physical and mental condition of SCI patients (The relevance of leisure in an illness experience, 2000)

Participant 7 said that,

*“I am playing here basketball regularly. I think, this playing gets improve our physical balance. These playing moves around of your trunk for this reasons this sports improve our body balance and it acts as a good therapy.”*

Participant 1 also said as same opinion about the purpose of inclusive sports as a leisure activity in CRP.

A study in Canada found that, some of the sports participant thinks that, the sports also help develop both upper- and lower-body strength balances. Having strong muscles helps your balance and reduces your risk of falling (Basketball's Fitness Benefits a Sure Bet, 2014).

In Bangladesh research study found that, the benefits of sports practice to individuals with SCI are increase of the levels of community integration, assistance in the facing of the disability, favoring of independence, self-image, and self-esteem and life satisfaction improvement besides decrease in the probability of psychological disorders (Sports on quality of life of individuals with spinal cord injury, 2011). In this study researcher found that, in CRP some of the disable person thinks that, the purpose of inclusive sports is inspiration and gives psychological support.

Participant 2 said that,

*“Suppose when I stay my home, then there is no person who gives me time for gossiping with me. But here if I want any person with me for 24 hours I get them. I don't like to be alone any more. When I stay alone, I become tens. But When I play and gossip with others I forget my illness. I imagine it is one kind of inspiration.”*

Participant 4 also thinks that the purpose of inclusive sports as a leisure activity is give inspiration of patient.

The popular portrayal of sports in disability as "ability not disability counts" suggests that the aim of sport and rehabilitation are actually similar, only at different ends of the normal distribution curve. Thus, the methods of training, inspiration, and social conduct in sport may be of particular relevance to rehabilitation efforts and structures (DeLisa, 2004).

In this discussion researcher found the description of theme 1, that most of the SCI patients could knowledge about of inclusive sports as a leisure activity in CRP they also know about the purpose of these inclusive sports as a leisure activity in CRP is refreshment, social participation and therapeutic treatment.

## Categories: 2.1

### Regular participation in inclusive sports as a leisure activity in CRP of SCI patient.

Coding	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
Regular participation	√	√		√	√	√	√	√	√	√	9
Sometimes absent			√								1

**Table 3:** Regular participation in inclusive sports as a leisure activity in CRP of SCI patient.

In this study researcher found that, most of the SCI patient's regular participating in inclusive sports as a leisure activity in CRP and they are satisfied after participating in this leisure activity which is supported by a study conducted in India. It support that, If patient are lay or sit alone whole day, they become mentally upset. Sports and any kind of leisure activity which play role many other people, it is the communicating processes each other and it keeps pleasure of mind. If someone exposes himself that time mind will be fresh (Psychosocial outcomes of an inclusive adapted sport, 2013). But some of the patient sometimes absent because of their personal cause.

Participant 5 said that,

*"I am playing regularly. Sometime make hand making things. I am coming here at 3:00 or 3:30 pm regularly. I make the bandage and Kham. Then start the wheel chair skill. I am also participating this skill regularly. Then I am going to the field. After the playing, going to the bed at 5:00 or 5:30 pm. On that process I spent my whole day. But I come here regularly because of I feel very pleased."*

So, it is very essential for SCI patient to regular participation in any kind of leisure activity.

## Categories: 2.2

### Playing game of leisure activity would like to more Participation before getting injury

Coding	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
Playing game	√	√	√	√	√			√	√	√	8
Listening and singing song						√	√	√		√	4
Gardening								√			1
Watching cinema							√				1



Doing fun and gossiping		√			√		√		√	√	5
Play Fluid						√					1

**Table 4:** Playing game of leisure activity would like to more Participation before getting injury

This study result researcher found that, most of the patients would like to spend their time by Playing game such as football, cricket, Ha..du..du... etc. Similar result in Canada found that, leisure refreshes our mind and reduces stress level. Sports are most popular leisure activity. Sports also might help reduce stress and give you the opportunity to socialize (Basketball’s Fitness Benefits a Sure Bet, 2014).

Participant 9 said that,

*“As I am a business man, doesn’t has free time though I played village games sometimes, as football, kabadi, karam etc”*

Participant 8 said that,

*“Before my injury, I used to playing ball in my leisure time. I am also listening to songs, used to do gardening.”*

Some of the patients would like to spend their time by listening and singing song, doing fun and gossiping before getting injury. Every person likes to spend their leisure time in a different way. Such as- Playing game, Listening and singing song, Gardening, Watching cinema, Doing fun and gossiping, play Fluid. When a person became disable, maybe he/ she loss most favorable leisure because of injury. But every individual have to necessary to involve different type of leisure.

### Categories: 2.3

**Participants are very satisfied after participating in leisure activity among CRP.**

Coding	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
Very satisfied	√				√	√	√	√	√		6
Quite satisfied		√	√	√							3
Not satisfied										√	1

**Table 5:** Participants are very satisfied after participating in leisure activity among CRP

Majority are satisfied after participating in leisure activity as an inclusive sport. Participant 1, 5, 6, 7, 8 and 9 are said that, they are so much satisfied in these inclusive sports. They enjoy there sports very much. When they playing, their mind was become very fresh and when mind was fresh everything is good.

Participant 8 said that,

*“I am really satisfied. Because, these are for our own benefit and if I am lying in my bed in the room, I feel very sad. If I am engaged in activity, it doesn’t so badly”.*

English Federation of Disability Sports in research found that, sports are a good exercise for our body. Regular exercise can keep physically fit, balance and flexibility as well as improves your quality of life.

Exercise has a positive influence on depression, self-worth, physical self-perception, including body image and self-esteem (The Physical Benefits of Sports & an Active Lifestyle, 2013). Participant 2, 3 and 4 are said that, they are quite satisfied. However here more game needs to be included because of regular same game repetition is so much boring. One participant is not satisfied because of poor strength in his both hand. So he cannot perform any kind of playing.

In this discussion researcher found the description of theme 2, though some of people are not engage in sports because of their physical condition, but most of the people are very satisfy to engage in inclusive sports among the CRP.

### Categories: 3.1

#### Participant doesn’t face difficulty during taking part of inclusive sports as a leisure activity in CRP.

Coding	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
Doesn’t face difficulty	√		√	√	√	√	√				6
Face difficulty due to fallen in wheelchair		√									1
Face difficulty due to operation								√			1
Face difficulty due to time management									√		1
Face difficulty because of poor hand function										√	1

**Table 6:** To find out problem during taking part of inclusive sports as a leisure activity in CRP

This study result researcher found that, most of the patients don't face difficulty during taking part of inclusive sports as a leisure activity in CRP. In CRP most of the professional are so much cordial. They try to best to give their Clint. If professionals are not cordial, the Clint is not feeling interest to involve any new project.

Participant 3 said that,

*“No, Still I don't have to face any problem. Everything is accessible here. Here who learn table tennis, they are very cordial”.*

On the other side accessibility is the most important for any disable people. Accessibility Provides people with disabilities with many new tools or equipment to use to assist them in their daily living (Accessibility for People with Disabilities, 2005). It helps individual's lead independent lives while minimizing the risks. It also provides opportunities for social interaction. In the United States and Canada, for example, the PEBBLES Project has developed a technology solution to address the educational and social needs of the more than half a million disable people who require long-term hospital care and also provide inclusive facility to independent every individual disable person (Accessibility for People with Disabilities, 2005). CRP tries to accessible of all things for every disable persons and most of the people with disable are satisfied in this accessibility.

### Categories: 3.2

#### Need to include more new game for further development of inclusive sports at CRP

Coding	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
More new game should be included eg: (badminton, pool, Volleyball)	√		√	√	√	√		√		√	7
Allow to Play table tennis in afternoon		√									1
Need to improve ring posting game				√				√			2
Need to increase table tennis board					√	√					2
Need to concentration regular participating athletes about their physical strength and fitness.							√		√		2

**Table 7:** To find out opinion for further development of inclusive sports at CRP

In this study found that, most of the participant opinion for further development of inclusive sports at CRP is more new game should be included. Such as- badminton, pool, Volleyball. In USA one of the researches published that; most of the participants are interested to engage different type of inclusive sports. They didn't like to repeated game more and more (Delis, 2004).

Participant 3 said that,

*“I think more new game need to be added, such as badminton, pull etc can be added here. The wheelchair user can easily play pull and badminton can work for therapy. If add more game, it feel much better.”*

Participant 10 said that,

*“I have injury in my hand. The games played here aren't be played by patients those has injury in both hand.”*

It is true that everyday repeated game is so much boring. In our CRP, if we included some new game, it becomes so much interesting for disable people. In New York, 2002 Cardiff University's Students was arranged a research project for disable people of SCI about Inclusive sports. This research result find out some assessable game for wheelchair user. Such as- badminton, pool, table tennis etc. so, we have to try to include some variation in our inclusive sports and leisure activity.

Some of the participant told that, Need to concentration regular participating athletes about their physical strength and fitness.

Participant 9 said that,

*“I have a suggestion that a few days before Bangladeshi player played with Nepalian here. So, if we get better training we would do better more than before. These more facilities are needed.”*

Little participant opinion about need to concentration regular participating athletes about their physical strength and fitness. Few days ago, in our CRP arranged an international basketball competition for person with disable. This competition, Bangladeshi player played with Nepalian and Bangladeshi player were wins in this competition.

So, general people hope that if regular concentrated basketball player about their regular practice, it will be better result in future competition. Already This inclusive sports project start to regular practice in every day. Hope so, It will be better outcome for CRP.

In this discussion we found the description of theme 3 and also collected some recommendation to further development of inclusive sports.

### LIMITATION AND RECOMMENDATION

#### 5.1 Limitation of the study

Researcher has tried to follow best systematic way to conduct the study. Through searching information from different source such as manual searching on BHPI library, online database such as pub med, Hinari, Google scholar, Google, OT Seeker etc. In our CRP, only SCI patients are involve in inclusive sports. But all type of disable people is involved in inclusive sports according to modification of sports system or equipment's. So, need to include all type of disable people in inclusive sports among CRP. Inclusive sports are a new concept in Bangladesh. So there was not found any study straightly related to Inclusive sports. The most closely related studies were used to support the evidence. Besides this there were no other studies regarding this in the practice area, so the study result could not be compared with other study. The interviews were conducted in Bengoli and these were translated into English by other people to reduce biasness. This fact might be influenced sometimes to the real expression of the participants. Beside this during participant selection, the researcher could not find any female participant because of no other female SCI patient could not participant in inclusive sports.

#### 5.2 Recommendation

##### **Recommendation for the service provider:**

After completing the study, the researcher found some recommendations. Like most of the SCI patient's has opinion about need to more new game should be include such as-badminton, pool, Volleyball. Some of the participant opinion about need to improve ring posting game, need to increase table tennis board and need to concentration regular participating athletes about their physical strength and fitness.

##### **Recommendation for further research:**

As Inclusive sports is absolutely a new idea in Bangladesh. So there are so many aspects of conducting research study in this setting. Some idea might be-

- Experiences of SCI female patient, why they are not involve inclusive sports as a leisure activity in CRP.
- Conducting comparative study about patient satisfaction between CRP and other rehabilitation organization who arrange in inclusive sports.

## **CHAPTER 6**

### **CONCLUSION**

SCI is associated with reduced quality of life and increased incidence of anxiety and depression. It affects both an individual and his/ her family physically, psychologically, socially and economically. However a proper rehabilitation service facilitates them to have successful community reintegration and reduce stress and depression, sports as a leisure activity is very beneficial for every disabled person.

The results of this study indicate that participation in sports as a leisure activity after SCI is associated with increased community integration; reduce depression and quality of life. Participation in sports should be recognized as an adjunct to current SCI rehabilitation programs, with the potential to contribute to improved rehabilitation outcomes.

The inclusive sport as a leisure team has an important opportunity to maximize health and potential to increase quality of life by introducing sport in rehabilitation. Patients, in this study group, appear to recognize that this is a positive area of rehabilitation. Patients, in this sample group who had previously regularly exercised were more likely than their counterparts to partake in sport after injury. It may be helpful therefore to strongly encourage and support those who have not had a previously active lifestyle. Promoting healthy living is an important aspect of rehabilitation, and the health benefits of regular exercise should be emphasized with patients given the opportunity to explore and establish exercise regimes with the therapy team after injury. Overall, the result of this study reinforces the importance and to know the purpose of the inclusive sports as a leisure and also include if any new idea about inclusive sports for further developing of this project.

## List of References

(Reference following Harvard Style, 2014)

- Accessibility for People with Disabilities; Dec 20005; Available at: <http://www.hul.uu.nl/healthy.../sports-participation-accessibility-sports-facilitie> [Accessed 20 February 2015].
- Adler, C. (EDs.). (2006), '*Pedretti's Occupational Therapy Practice Skills for Physical Dysfunction*', pp. 954-982, United State: Elsevier.
- Annual Report of Centre for the Rehabilitation of the Paralysed (CRP): 2013-2014.
- Annual Report of Centre for the Rehabilitation of the Paralysed (CRP): 2012-2013 'Medical Care Unit: Inpatient Service'. Dhaka: Annual Report of CRP.
- Basketball's Fitness Benefits a Sure Bet, (2014); Available at: <http://www.livestrong.com.....>[ Accessed 20 February 2015]
- Back,(1999), Philadelphia: Lippincott Williams and Wilkins '*Clinically Oriented Anatomy*',vol:2 pp.432- 499, Available at: <http://www.hqlo.com/content..>, [Accessed 10 February 2015]
- Babamohamadi, H, Negarandeh, R and Dehghan-Nayeri, N. (2011) 'Coping strategies used by people with spinal Cord Injury: a qualitative study', *Spinal Cord*, 49(7), pp. 832-837, Available at: <http://www.Nature.com/uniquestg/sc/journal/v49/n7/pdf/sc201110a.pdf> [Accessed 20 November 2014]
- Centre for the Rehabilitation of the Paralysed, (2010), Available at: <http://www.assignmentpoint.com › Science › Medical> [Accessed 21 August 2014].
- Canadian Association of Occupational Therapists Code of Ethics, Available at: <http://www.caot.ca/default.asp?pageid=35> [Accessed 20 November 2014]
- Clin Rehabil, (2011), 'Inacia Sátiro Xavier de França, inclusion perspectives after SCI', *Washington: The Board of Trustees of the University of Alabama*, pp.200- 208. Available at: <http://www.archives-pmr.org/artical/soo.../pdf> [Accessed 05 October 2014]
- Dictionary of the English Language, (Ed.). (2003), *Houghton Mifflin Company*, the American Heritage, Wilmington (MA). [Accessed 20 August 2014].
- Elliot & Shewchuck, (1995), 'Psychological contributions to functional independence: a longitudinal investigation of SCI rehabilitation', *Arch Phys Med Rehabil*, Vol: 13, pp. 112-121, Available at: <http://www.banglajol.info/.../9837>, [Accessed 12 May 2014].



- Hair, JF, Bush, RP & Ortinau, DJ (2003), *Marking Research: Within a change information environment*, McGraw-Hill Irwin, New York, [Accessed 15 November 14].
- Hasan, S A. (2009), 'Rehabilitation of Patients with Paraplegia from Spinal Cord Injury: A Review', *Journal of Chittagong Medical College Teachers' Association*, 20, pp.53-57, Available at: <http://www.banglajol.info/.../3952>, [Accessed 15 June 2014]
- Hicks, CM. (Ed.). (1999), *Research Methodology for Clinical Therapists: Applied Project Design and Analysis*. New York: Churchill Livingstone.
- Hjeltnes N, Wallberg, Henriksson H. (1999) 'Improved work capacity but unchanged peak oxygen uptake during primary rehabilitation in tetraplegic patient', *The Journal of Spinal Cord Medicine*, 36, pp.691-701, Available at: <http://www.ncbi.nlm.nih.gov/.../2292...>, [Accessed 22 November 2014].
- Hoque, MF, Hasan,Z, Razzak, ATMA & Helal, SU (2012), 'Reed K an epidemiological study', *Spinal Cord Lesions in Bangladesh*, pp. 858-61, Available at: <http://www.ncbi.nlm.nih.gov/pubmed/22143680> [Accessed 11 October 2014]
- Hsieh,H & Shannon, SE (2005), 'Three Approaches to Qualitative Content Analysis', *Qualitative Health Research*, pp.1277-1288, Available at: <http://fundamentaljournals.org/.../9-G>, [Accessed 01 February 2015]
- Islam MS, Hafez MA and Akter M, (2011), 'Characterization of spinal cord lesion in patients attending a specialized rehabilitation center in Bangladesh', *Spinal cord*, pp.15-20, Available at: <http://www.ncbi.nlm.nih.gov/pubmed/21502957> , [Accessed 22 October 2014]
- Jha,M. Johansen, L. Jones,A. (2009), 'Influence of Sport Participation on Community Integration and Quality of Life' *the American J Spinal Cord*, pp.115–124, Available at: <http://www.nature.com/sc>, [Accessed 20 November 14].
- *Journal of Rehabilitation*, 2004, Available at: <http://www.tdcj.state.tx.us/.../rpd/...> [Accessed 12 March 2015].
- Kathleen A, Martin Ginis, Lude P, Elfström ML, Smithson EF. (2012), 'Psychological contributions to functional independence: a longitudinal investigation of SCI rehabilitation', *Arch Phys Med Rehabil*, Vol: 92, pp. 597-602, Available at: <http://www.banglajol.info/.../9837>, [Accessed 12 May 2014].
- Livneh & Antonak, Kirsblum, S. C. P. Burns, F. Biering-Sorensen, W. Donovan, D. E. Graves, A, Jha, M. Johansen, L. Jones, A. Krassioukov, M. J. Mulcahey, M. Schmidt Read and W. Waring . (1997), 'International standards for neurological classification of

spinal cord injury' *The Journal of Spinal Cord Medicine*, vol:34, pp.535-546 , Available at: <http://www.hqlo.com/content/...>[Accessed 23 July 2014]

- Leisure activity for people with spinal cord injuries (2000), Available at: <http://www.wheelchairnet.org/.../9410> , [Accessed 22 October 2014].
- Leisure Time for Physical Activity of People with Spinal Cord, (1998), Available at: <http://www.ncbi.nlm.nih.gov/.../PMC...>, [Accessed 22 October 2014].
- Lieberman LJ, Houston-Wilson C. (2002), 'Strategies for Inclusion: A handbook for physical educators', *Journal of Spinal Cord Medicine: Human Kinetics*, Available at: <http://www.usyd.edu.au/rcahi>, [Accessed 01 February 2015].
- Md. Fazlul haque, (1999), Centre for the Rehabilitation of the Paralysed, Available at : <http://www.lisawiltse.com> , [Accessed 01 February 2015].
- Merriam-Webster Online Dictionary, (2008). 'Rehabilitate'. Available at: <http://www.merriam-webster.com/dictionary/rehabilitate>, [Accessed 19 August 2014].
- N Rawal, C.H, (2008), 'Social Inclusion and Exclusion', *Journal of Spinal Cord Medicine*, Available at: [www.cmi.no/file/?589](http://www.cmi.no/file/?589), [Accessed 20 August 2014].
- Norman T, Sandvin JT, Thommesen H. (2004), 'A holistic approach to rehabilitation. Oslo: The Board of Trusts of the University of America, Available at: <http://unitedparalysis.org/file.pdf>, [Accessed 20 November 14].
- Ohman, A. (2005), 'Qualitative method for rehabilitation research' *Journal of Rehabilitation Medicine*, Vol: 37, pp. 273-280, Available at: <http://www.rehab.research.va.gov/jour/2013/502/pdf>, [Accessed 05 February 2015].
- Ottenbacher, K.J., Smith, P.M., Illig, S.B., Linn, R.T., Ostir, G.V., & Granger, C.V. (2004), 'Trends in length of stay, living setting, functional outcome, and mortality following medical rehabilitation', *Journal of the American Medical Association*, Vol:14, pp.1687-1695, Available at: <http://www.worldbank.org/.../socialde...> [Accessed 22 July 2014].
- Participation and satisfaction after spinal cord injury, (2005). Available at: <http://www.mydr.com.au > Sports & Fitness...> [Accessed 20 February 2015].
- Patient perception of the impact of sporting activity on rehabilitation in a spinal cord injuries unit, (2004), Available at- [http:// www. SB O'Neill/ S Maguire: nature.com](http://www.SB O'Neill/ S Maguire: nature.com) [Accessed 01 July 2014]
- Physical & Psychological Benefits of Sports, (1999) , Available at: <http://www.ooyosports.com/.....> [Accessed 20 February 2015].

- Rathore, F. Stone, JH. Blouin, M. (Ed.). (2010), *Spinal Cord Injuries in the Developing World in: International Encyclopedia of Rehabilitation*. Canada: encyclopedia.
- Sports on quality of life of individuals with spinal cord injury, (2011), Available at: [www.disability.illinois.edu/wheelchair-basketball-....](http://www.disability.illinois.edu/wheelchair-basketball-....) [Accessed 20 February 2015]
- Sports on quality of life of individuals with spinal cord injury, (2013), Available at: <http://www.scielo.br/scielo.php?pid=S1517-86922011000400008...sci.> [Accessed 02 July 2014].
- Trombly, C. (Ed.). (1995), *Occupational Therapy for Physical Dysfunction*. USA: Williams & Wilkins.
- The relevance of leisure in an illness experience, (2000) Available at: <http://www.calvin.edu/.../Relevanceofl...> [Accessed 22 October 2014].
- The Physical Benefits of Sports & an Active Lifestyle,( 2013), Available at: <http://www.nhs.uk/Livewell/Disability/Pages/fitness..> [Accessed 20 February 2015].
- United Nations Commission for Equal Rights of People with Disabilities: Convention on the Rights of Persons with Disabilities, (2012), Available at: <http://www.un.org/disabilities/default.asp?id=259>, [Accessed 22 August 2014].
- UNICEF Bangladesh, Available at: <http://www.unicef.org/bangladesh/children-htm> , [Accessed 12 July 2014].
- Van den Berg, M.E. Castellote, J.M. Mahillo Fernandez, I. (2010), ‘Incidence of SCI worldwide: a systematic review. *Neuroepidemiology*’ Vol: 34, pp.184–192, Available at: <http://www.healthmarketinnovations.org.pdf>, [Accessed 22 August 2014].
- Vafa R, Movaghar MD, Soheil S. (Ed.). (2009), *Prevalence of SCI in Tehran, Iran. J Spinal Cord Rehabilitation*. Canada: encyclopedia.
- World report on Disability: 2011 -2012
- White B, Driver S, Warren AM. ( 2010), ‘Resilience and indicators of adjustment during rehabilitation from a SCI, *Rehabil Psychol*’, Vol:55 pp. 23-32, Available at: <https://www.Rehabilitation.knoji.com/benefits-of-Psychological.pdf>, [Accessed 22 August 2014]

## Appendix-1

### Approval letter for conducting research

27<sup>th</sup> August, 2014  
The Head of the Department  
Department of Occupational Therapy  
Bangladesh Health Professions Institute (BHPI)  
Center for the Rehabilitation of the Paralyzed (CRP)  
Chapain, Savar, Dhaka- 1343

Subject: Prayer for the approval of Undergraduate Academic Research Project.

Sir,

With due respect, I beg most respectfully to state that, I am a student of 4<sup>th</sup> year, Department of Occupational Therapy, BHPI, the academic institute of CRP. As a partial fulfillment of my Bachelor Science Degree of Occupational therapy course under the medical faculty of Dhaka University, I will have to conduct a research project in this academic year which is a part of my academic curriculum. I have chosen my study area of SCI who will admit for treatment in CRP. Sample of this study will Persons who have the SCI at CRP inpatient unit.

The study titled as "Experience of SCI patient about inclusive sports as a leisure activity in CRP". The aim of this research is to identify the experience of inclusive sports as a leisure activity in SCI patient in CRP. I can make sure that the study will never harm to the participants. The detail proposal of the study is attached with the application.

I therefore, pray and hope that you would be kind enough to grant my appeal by giving the permission to conduct the study which will help me to complete a successful study as a part of my course and oblige thereby.

Sincerely yours,

Tumpa Banik

4<sup>th</sup> year, roll no- 25, session: 2010-2011, Department of Occupational Therapy.

BHPI, CRP, Savar, Dhaka- 1343.

Approved by	Comment & Signature
<b>Head of the Department</b> Nazmunnahar Assistant professor & Head of the Department Department of Occupational Therapy, BHPI, CRP, Chapain, Savar, Dhaka- 1343	As per supervisor's comment it may allow her to conduct this study <i>illaz</i>
<b>Supervisor</b> S.M. Abul Bashar Manager- Rehabilitation Wing CRP- Chapain, Savar, Dhaka- 1343	<i>Balua</i> She may start to work on the proposed proposal

## Appendix-2

### Permission letter for data collection

**Request for BHPI Official Letter**

Letter to be addressed:

Incharge of In patient unit ..... (Designation)  
Center for the Rehabilitation of the Paralyzed ..... (Name of organization)  
CRP- Chapain, Savar, Dhaka- 1343 ..... (address line 1)  
Bangladesh ..... (address line 2)  
..... (address line 3)

Subject: Data collection permission for research  
Research title :- Experience of SCI patient about inclusive sports as a leisure activity in CRP.  
Duration (start date - end date): 25.10.14 - 30.11.14

Name of Student : Tasnuva Basuk  
Academic Session : 2010-11 ..... (1<sup>st</sup> / 2<sup>nd</sup> / 3<sup>rd</sup> / 4<sup>th</sup>)  
Roll number : 25 Department: OT/PT/SLT

Any special note: yes/no, if yes please write.....  
.....  
.....

**By signing at below, I am stating that I am aware of**

- The stated purpose and given information is true
- It will require at least 3 or maximum of 7 working days to prepare after request submission date
- Incomplete application will not be processed

Student's Signature: Tasnuva Basuk & Date 20/10/2014

Recommended by Course Coordinator: .....  
OT/PT/SLT

### Appendix-3

#### Informed Consent for Participants (English)

The researcher ----- is a B.Sc 4<sup>th</sup> year student of Occupational Therapy Department of Bangladesh Health Professions Institute (BHPI) want to conduct a research about the Experience of SCI patient about inclusive sports as a leisure activity among the CRP.

The aim of this research is to explore the experience of SCI about participant in sports as a leisure activity in CRP. As an Occupational Therapist their important role is inclusion in society. When a patient participates in inclusive sports this is one kind of social inclusion and occupational therapy has a part to engage the patient of their leisure activity. It is the important for patient. I am interested to identify the experience of inclusive sports as a leisure activity in SCI patient in CRP. Because it is very important to identify continuing opportunity for inclusive sports as leisure activity should be appropriate for different type of SCI patient.

Researcher will receive permission from participant to take part in the interview. Their information will not share with others. Participant of the study will not benefit or harm from this study. They are free to decline answering any question during interview. All the information that is collected from the interview would be kept safety and maintained confidentiality. Participants can withdraw from the study at any time.

In this study I am..... a participant and I have been clearly informed about the purpose of the study . I am willing to participant in this study and I will have the right to refuse in taking part any time at any stage of the study. For this reason I will not to be bounded to answer to anybody. The researcher will be available to answer any study related question or inquiry to the participant. So with my best knowledge I agree to participant willingly with my full satisfaction in this study.

(It will be read inform of the illiterate participant)

Name & Signature / finger print of participant: Date:

Name & Signature of Researcher: Date:

Name & Signature of witness/ Finger print of participant: Date:

## Appendix- 4

### Informed Consent for Participants (Bangla)

## তথ্য বিবরণী এবং অনুমতি পত্র

আমি.....বাংলাদেশ হেল্থ প্রফেশনস্ ইনস্টিটিউট এর অকুপেশনাল থেরাপি বিভাগের ৪র্থ বর্ষের একজন ছাত্রী। আমি এস সি আই রোগীদের অবসর কর্মকাণ্ডের অর্ন্তগত সমন্বয়কারী খেলায় তাদের অনুভূতি জানতে আগ্রহী। এই অনুভূতি সনাক্তকরণই আমার গবেষণার উদ্দেশ্য। তাদের সমাজে অর্ন্তভুক্ত করাই একজন অকুপেশনাল থেরাপিস্টের গুরুত্বপূর্ণ কাজ।

যখন একজন রোগী এই ধরনের সমন্বয়কারী খেলায় অংশগ্রহন করে এটা এক ধরনের সামাজিকীকরণ এবং রোগীদের অবসর কর্মকাণ্ডের অর্ন্তভুক্ত করা অকুপেশনাল থেরাপির একটি অংশ। এটা রোগীদের জন্য একটি অত্যাবশ্যক কর্মকাণ্ড। বিভিন্ন এস সি আই রোগীদের জন্য এই অবসর কর্মকাণ্ডের অর্ন্তভুক্ত সমন্বয়কারী খেলায় অংশগ্রহনের যথার্থতাই আমার গবেষণার বিষয়বস্তু।

অংশগ্রহনকারীদের অনুমতি নিয়েই তাদের সাক্ষাতকার নেওয়া হবে। প্রদত্ত তথ্যগুলো গোপন রাখা হবে। এতে অংশগ্রহনকারীদের কোন ক্ষতি সাধন হবে না। সাক্ষাতকার চলাকালীন সময় তারা স্ব ইচ্ছায় যেকোন প্রশ্নের উত্তর দিতে পারেন, নাও দিতে পারেন। সাক্ষাতকার থেকে প্রাপ্ত তথ্য নিরাপদ এবং গোপন রাখা হবে। অংশগ্রহনকারীরা যেকোন সময় সাক্ষাতকার ত্যাগ করতে পারবেন।

এই গবেষণায় আমি ..... একজন অংশগ্রহনকারী এবং গবেষণা সম্পর্কে ভালভাবে আমি অবগত আছি। আমি স্ব ইচ্ছায় সাক্ষাতকারে অংশগ্রহন করেছি এবং যেকোন সময় আমার সাক্ষাতকার ত্যাগ করার অধিকার আছে। এই কারণে আমি কারো কাছে জবাবদিহি করতে বাধ্য নই। গবেষণা সম্পর্কিত যেকোন প্রশ্নের উত্তর দিতে গবেষকগন সর্বদা প্রস্তুত থাকবেন। তাই আমি স্ব ইচ্ছায় এই গবেষণায় নিজেকে নিয়োজিত করতে চাই।

(নিরক্ষর ব্যক্তিদেরকে উপরের তথ্যসমূহ পড়ে শুনানো হবে)

অংশগ্রহনকারীর নাম এবং স্বাক্ষর/ টিপসইঃ

গবেষকদের নাম এবং স্বাক্ষরঃ তারিখঃ

সাক্ষীর নাম এবং স্বাক্ষর/অংশগ্রহনকারীর টিপসইঃ তারিখঃ

## Appendix- 5

### Questions for the SCI patients who involve in sports as a leisure activity

#### 1. To identify perception about sports as a leisure activity-

- Please tell me about sports and leisure activity in CRP.
- What is opinion about inclusive sports as a leisure activity?
- Please tell me about the purpose of inclusive sports.
- সি.আর.পির খেলাগুলো এবং অবসর সময়ের কর্মকাণ্ড সম্বন্ধে দয়াকরে কিছু বলুন।
- একীভূত খেলা, যেগুলো অবসর সময়ের কর্মকাণ্ড হিসেবে খেলা হয় এগুলো সম্বন্ধে আপনার মতামত কি?
- সি.আর.পির একীভূত খেলাগুলোর উদ্দেশ্য সম্পর্কে দয়াকরে কিছু বলুন।

#### 2. To identify the preference of leisure activity as an inclusive sports-

- Describe the participation in inclusive sports as a leisure activity at CRP.
- What about your participation in leisure activity before getting injury.
- Explain the type of leisure activity you would like to participate more.
- Tell me about your satisfaction level after participating in leisure activity.
- Put your satisfaction level under mentioned scale-
  - Very satisfied.
  - Satisfied.
  - Not satisfied.
- সি.আর.পির একীভূত খেলাগুলোতে নিয়মিত অংশগ্রহন সম্পর্কে বর্ণনা করে কিছু বলুন।
- আপনার আঘাতের পূর্বে আপনি কেমন ধরনের অবসর সময়ের কর্মকাণ্ডের সাথে যুক্ত ছিলেন ?
- অবসর সময়ের কর্মকাণ্ডের মধ্যে আপনি কোন ধরনের কর্মকাণ্ড বেশি পছন্দ করেন দয়াকরে বর্ণনা করে বলুন ।



- এখানে চালুকৃত অবসর সময়ের কর্মকাণ্ডের সাথে যুক্ত হতে পেরে আপনার সন্তুষ্টি সম্পর্কে বর্ণনা করে বলুন।

- আপনার সন্তুষ্টির ধাপ নিচের স্কেলের মাধ্যমে উল্লেখ করুন-
  - খুব সন্তুষ্ট
  - সন্তুষ্ট
  - সন্তুষ্ট নই।

### **3. To recognize new idea from service user about inclusive sports-**

- Please tell me about your problems during taking part in inclusive sports as a leisure activity.
- Please tell me about your opinion for further development of inclusive sports service at CRP.

- এখানে চালুকৃত খেলাধুলায় অংশগ্রহণের সময় আপনি কি কোন ধরনের সমস্যার সম্মুখীন হচ্ছেন দয়াকরে বর্ণনা করে বলুন।
- এখানে চালুকৃত খেলাধুলা সম্পর্কে আপনার কোন ধরনের মতামত আছে কি? দয়াকরে বর্ণনা করে বলুন।