PREVALENCE OF LOW BACK PAIN AMONG THE CLINICAL PHYSIOTHERAPISTS AT CRP.

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

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PREVALENCE OF LOW BACK PAIN AMONG THE CLINICAL PHYSIOTHEREPIST AT CRP.

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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 declare that for any publication, presentation or dissemination of information of the study, I would be bound to take written consent from my supervisor.

Signature: **Date:**

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Abbreviations

ADL: Activities of Daily Living.

BHPI: Bangladesh Health Professions Institute.

CRP: Centre for the Rehabilitation of the Paralysed.

LBP: Low Back Pain.

PT: Physiotherapist.

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Abstract

Purpose: To identify the prevalence of low back pain among the clinical physiotherapists. *Objective*: To identify how many physiotherapists experience of low back pain, to explore male female ratio among physiotherapist's, to find out more affected age group, explore the job experience of the participants, evaluate the poor posture which responsible for low back pain, to find out job satisfaction among physiotherapists. *Methodology*: The study design was cross sectional. Total 50 samples were selected by simple random sampling. Data was collected by mixed type of questionnaire. Descriptive statistics were used for data analysis which focused through table, pie and bar chart. Data were numerically coded and captured in Microsoft Excel, using an SPSS 16.0 version software program. *Results*: The findings of the study will provide a baseline of information about low back pain among physiotherapists. In percentage 80% participants suffered from LBP and 20% have not suffered from LBP. Male and female who suffered from LBP was 62.5% female and 37.5% male. The participants who were in between 24-30 years most commonly suffered from LBP (76%). The participants who's job experience was less than 5 years those were more experienced LBP (75%). Most of the participants suffered from LBP in their first 1-2 years of work (30%). Moderately (46%) affected pain among the participants. Most common risk factor was working in bending position (55%). Most common pain relieve posture was lying posture of the participants who suffered from LBP (45%).Clinical practice hamper moderately (42%) among the participants. Most of the participants (60%) were worked 8 hourly. Among the participants 42% were told moderately ADL effect in their life. 64% of the participants were not aware about their posture. Among the participants 54% were suggest mobile bed and 46 % were suggest adequate space during their clinical practice. *Conclusion*: Low back pain (LBP) is a common health problem. In this survey there was a high prevalence of LBP among physiotherapist. Therapist must focus on proper technique posture and adhere to a regimen of self-care to reduce the risk of pain.

CHAPTER –I: INTRODUCTION

1.1 Introduction

It is developed by The National Collaborating Centre for Primary Care (2009) that lower back is commonly defined as the area between the bottom of the rib cage and the buttock creases. Some people with non-specific low back pain may also feel pain in their upper legs, but the low back pain usually predominates. Musculoskeletal disorders, which are often back pain, occur when there is a mismatch between the physical requirements of the job and the physical capacity of the human body (Safe Computing Tips, 2005-2008).

Shiel (2009) explained that low back pain is pain and stiffness in the lower back. It is one of the most common reasons people miss work. Anderson (1996) claimed that low back pain is usually caused when a ligament or muscle holding a vertebra in its proper position is strained. Mary and Ann stated that (2006) vertebrae are bones that make up the spinal column through which the spinal cord passes. When these muscles or ligaments become weak, the spine loses its stability, resulting in pain. Because nerves reach all parts of the body from the spinal cord, back problems can lead to pain or weakness in almost any part of the body (European Agency for Safety and Health at Work, 1993).

Peter (2000) explained that low back pain can occur if any job involves lifting and carrying heavy objects, or if anyone spends a lot of time sitting or standing in one position or bending over. It can be caused by a fall or by unusually strenuous exercise. Albayrak et al., (2007) also stated that back pain can be brought on by the tension and stress in some people. It can even be brought on by violent sneezing or coughing.

People who are overweight may have low back pain because of the added stress on their back (Meligrsted and Westgaard, 1991). Back pain may occur when the muscles, joints, bones, and connective tissues of the back become inflamed as a result of an infection or an immune system problem it is established by Putz-Anderson (1988). Arthritic disorders as well as some congenital and degenerative conditions may cause back pain. Nathan (1992) claimed that back pain accompanied by loss of bladder or bowel control, difficulty in moving your legs, or numbness or tingling in your arms or

legs may indicate an injury to your spine and nerves, which requires immediate medical treatment.

Several risky factors are associated with the development or exacerbation of back pain in the workplace, including physical, biomechanical, individual predisposition, and psychosocial conditions (Bureau of Labor Statistics, 2005).

1.2 Background of the study

Low back pain is extremely common. Though estimates vary widely, studies in developed countries report point prevalence's of 12% to 33%, one-year prevalence's of 22% to 65%, and lifetime prevalence of 11% to 84%. (National institute of safety and health, 1997). In the U.S., nonspecific mechanical low back pain is the fifth most common reason for all physician visits, and the second most common symptomatic reason, accounting for approximately 2.3% of all physician visits (Bureau of Labor Statistics, 1993).

Webster and Snook (1994) established that about one-quarter of U.S. adults report low back pain lasting at least a whole day in the last three months. 7.6% of U.S. adults randomly surveyed by telephone had at least one occurrence of severe acute low back pain during a one-year period, with 39% of those seeking medical care for the episode *(*Williams. Harris, 2007*)*.

Low back pain is the most common cause for chronic or permanent impairment in U.S. adults under the age of 65, and the most common cause of activity limitations in persons under the age of 45 and it is established by Winkel & Westgaard (1992). Between 2% and 8% of the U.S. work force is disabled or compensated for back injuries each year. Approximately 5% of people with back pain disability are thought to account for 75% of the costs associated with low back pain (Department of Labor & Bureau of Labor Statistics, 1992). The number of cases of back pain is increasing over time. In 2001, around 19 workers in every 100,000 suffered from back pain. This number had almost doubled by 2003 (32 per 100,000 workers) (European Agency for Safety and Health at Work, 1993).

1.3 Justification of the study

From this study physiotherapist's will able to identify the risks that can influence their activities. Physiotherapists may provide proper recommendation for every single risk which will be helpful for better service. Beside this it will be help to established guidelines in line with ergonomics for space, equipment, furniture and environmental conditions of their workplace. This study will also help to improve their awareness, especially about their posture when treating patients. Besides this it will be helpful for professional development which is crucial for current situation of the profession. From this study researcher can identify the risk factors of the workplace and adjustment of equipment's and posture which are harmful for the physiotherapist because physiotherapist have to treat a patient in various aspect work condition with frequent change of the posture. So the study may help to their awareness about their posture. And finally will help to discover the role and importance of physiotherapy in every sector of Bangladesh.

Peter (2000) claimed that low back pain may cause a great deal of pain and suffering among the clinical professional who have done work with great effort such as physiotherapist. These are the most common lost time injuries and most costly occupational problems. Job activities that may cause chronic low back pain span diverse workplaces and practices. It also may decrease productivity and the quality of products and services. Workers experiencing aches and pains on the job may not be able to do quality work.

During practice physiotherapist often work in awkward body postures, often accompanied by repetitive movements of upper limb, increased muscle activity and prolonged static head and back postures. In addition, when physiotherapists treat their patients they don't give any concentration about their posture so suffered from musculoskeletal disorders especially low back pain (Albayrak et al., 2007).

1.4 Research Question

What is the prevalence of low back pain among clinical physiotherapist's at CRP ?

1.5 Objective

1.5.1 General objective

To identify the prevalence of low back pain among the clinical physiotherapists.

1.5.2 Specific Objectives

- To identify the percentage of male and female physiotherapists among the low back pain sufferings.
- To demonstrate which age group were more affected.
- To explore the job experience of the participants who suffered low back pain.
- To clarify the working postures which were responsible for low back pain among physiotherapists.
- To evaluate the percentage of work place environment satisfaction among the physiotherapists who suffered low back pain.

1.6 Operational Definition

Age: The number of years that a person has direct lived or a thing has existed.

Gender: The fact of being male or female.

Prevalence: The degree to which something is prevalent; especially the percentage of a population that is affected with a particular disease at a given time.

Low back pain: Low back pain refers to pain felt in lower back. It may also have back stiffness, decreased movement of the lower back, and difficulty standing straight.

Activities of daily living: Task that enable individual to meet basic needs in style.

CHAPTER –II: LITERATURE REVIEW

Low back pain

Pain in the low back, often referring into the hip, buttock or one leg. The cause may be muscle strains or trigger points, instability due to weak postural muscles, hypo mobile spinal facet joints, or degeneration or herniation of spinal disks (Quittan, 2002).

Low back pain, which are often soft-tissue injuries, occur when there is a mismatch between the physical requirements of the job and the physical capacity of the human body (Safe Computing Tips, 2005-2008).

Pain in the lower back is called low back pain, it also affect muscles, tendons, ligaments and nerves. This can develop when the same muscles are used over and over again or for a long time without taking time to rest. The chance of getting this type of injury increases if the force exerted is high and/or the job requires an awkward posture. Low back pain may be postural, dysfunctional or derangement syndrome. (Work place safety and insurance board, 1992) Medical terms used to describe low back pain are PLID (prolapsed intervertebral disc), disc lesion, spondylolisthesis, spondylolysis and degenerative disc diseases (Peter, 2000).

The burden of low back pain on society continues to rise despite the vast amount of research and time devoted to its resolution. Many aspects of low back pain remain poorly understood, including risk factors for developing acute low back pain and attributing the cause of low back pain to a specific pathology. Despite the large variety of treatments which have been evaluated through randomized controlled trials and meta-analyses, the effect sizes are often small, even for commonly used treatments such as exercise for chronic low back pain (European Agency for Safety and Health at Work, 1993).

Hagberg and Wegman (1987) given one potential explanation for the continued poor outcomes of low back pain, despite the attention it has received, is that research priorities are typically developed by government and industry authorities, funding

agencies, and researchers who can have agendas that differ from those of clinicians and patients.

Heavy physical work has been defined as work that has high energy demands or requires some measure of physical strength. Some biomechanical studies interpret heavy work as jobs that impose large compressive forces on the spine (Marras et al., 1995). Heavy physical work appeared to include other potential risk factors for back disorder, particularly lifting and awkward postures.

Lifting is defined as moving or bringing something from a lower level to a higher one. The concept encompasses stresses resulting from work done in transferring objects from one plane to another as well as the effects of varying techniques of patient handling and transfer. Forceful movements include movement of objects in other ways, such as pulling, pushing, or other efforts. Several studies included in this review used indices of physical workload that combined lifting/forceful movements with other work-related risk factors (particularly heavy physical work and awkward postures). Some studies had definitions for lifting which include criteria for number of lifts per day or average amount of weight lifted (Nathan, 1992).

Bending is defined as flexion of the trunk, usually in the forward or lateral direction. Twisting refers to trunk rotation or torsion. Awkward postures include non-neutral trunk postures (related to bending and twisting) in extreme positions or at extreme angles. Risk is likely related to speed or changes and degree or deviation from non-neutral position (Pope et al., 1984).

Static work postures include isometric positions where very little movement occurs, along with cramped or inactive postures that cause static loading on the muscles. In the studies reviewed, these included prolonged standing or sitting and sedentary work. In many cases, the exposure was defined subjectively and/or in combination with other work-related risk factors (National institute of public safety and health, 1997).

Category of Low back pain

Putz-Anderson (1988) argued that there are three Categories of low back pain. First one is Back pain only (93%) musculoligamentous, fracture, spondylosis, infection, tumor, non-back related. Second one is Sciatica (4%), it includes radiculopathy and associated symptoms: bowel, bladder, saddle anesthesia (cauda equina syndrome) and third one is Spinal Stenosis (3%).

Back pain categorized by (European Agency for Safety and Health at Work, 1993) simple and complex. Simple Back Pain which is treated by (non steroid anti-inflammatory drugs) NSAID and muscle relaxants for six weeks and improve (90% in 3 days), second one is Complicated Back Pain, more than 25 years age group are highly affected and it occurs due to malignancy, infection, trauma, intervertebral disc prolapsed or degenerative changes.

LBP is also classified according to etiology. Mechanical or nonspecific LBP has no serious underlying pathology or nerve root compromise. A century of intense study has produced no clear understanding of commonplace back pain. Secondary LBP, occurring in fewer patients, is associated with underlying pathology. Metastatic cancer, spinal osteomyelitis, and epidural abscess account for back pain patients. The most common neurologic impairment associated with back pain is herniated disc, and 95% of disc herniation occurs at the lowest two lumbar intervertebral levels (European Agency for Safety and Health at Work, 1993).

Duration of developing low back pain

This is difficult to predict to measure the time to developing low back pain. An employee may notice symptoms such as muscle, joint or tendon soreness within the first several weeks of a new job. Workers with pre- existing medical problems may be at higher risk of developing symptoms those healthy workers. Some disorders may take several years before symptoms are identified. Some employees may never develop a back pain (Department of labor and industries, 1997).

The length of daily working hours as a risk factor for the development of low back pain was studied, it was found that some sample worked 8 hours/ day and few were worked 5 hours/ day. Working part time was shown to postpone the occurrence of sick leave due to back pain by approximately half a year, but a reduction in low back complaints was identified. It is suggested that any reorganization of work activities to counteract musculoskeletal injuries from repetitive work should aim to break up the muscular activity patterns over time periods considerably shorter than the 5 hours working /day of the part time workers in the present study (Meligrsted &Westgaard, 1991).

Causes of low back pain

Kuorinka and Forcier (1995) argued that low back pain is neither a disease nor a diagnostic entity of any sort. The term refers to pain of variable duration in an area of the anatomy afflicted so often that it is has become a paradigm of responses to external and internal stimuli. The incidence and prevalence of low back pain are roughly the same the world over wherever epidemiological data have been gathered but such pain ranks high (often first) as a cause of disability and inability to work, as an interference with the quality of life, and as a reason for medical consultation. In many instances, however, the cause is obscure, and only in a minority of cases does a direct link to some defined organic disease exist.

Sommerich et al., (1993) showed that low back pain can occur as results from trauma, osteoporotic fractures, infections, neoplasms, and other mechanical derangements such causes can be identified and must be dealt with appropriately. In the vast majority of instances the cause of low back pain is obscure or nebulous, and these cases are the focus of concern for WHO.

A minority of cases of back pain result from physical causes. Trauma to the back caused by a motor vehicle crash or a fall among young people and lesser traumas, osteoporosis with fractures, or prolonged corticosteroid use among older people are antecedents to back pain of known origin in most instances. Relatively less common vertebral infections and tumors or their metastases account for most of the remainder.

Specific causes account for less than 20% of cases of back pain and it has been shown by Winkel and Westgaard (1992).

Non-specific back pain is thus a major problem for diagnosis and treatment. Studies in the United Kingdom identified back pain as the most common cause of disability in young adults. The survey implicated back pain in more than 100 million work days lost per year. A survey in Sweden suggested that low back pain increased the number of work days lost from 7 million in 1980 to four times that (28 million) by 1987, however, social compensation systems might account for some of this increase and it had shown by Hagberg and Wegman (1987).

Sommerich et al., (1993) explore that people with low back pain often turn to medical consultations and drug therapies, but they also use a variety of alternative approaches. Regardless of the treatment, most cases of acute back pain improve. At the time, people in such cases may credit the improvement to the interventions some of which clearly are more popular and even seemingly more effective than others (e.g. chiropractic and other manipulative treatments in which the laying on of hands and the person to-person interaction during the treatment may account for some of the salutary results).

Mechanical cause of Low Back Pain

Mechanical pain occurs when the joint between two bones placed in opposition. When surroundings ligaments and other soft tissues are over stretched the patient will initially feel major discomfort only but as the time passespain will eventually develop (Mckenzie, 1995). Mechanical LBP classified as in the three relatively simple categories postural syndrome, dysfunction syndrome, and derangement syndrome (Mckenzie, 1995).

The postural syndrome

The postural syndrome refers to the pain that occurs from the mechanical stress when a person maintains a faulty posture for a long period. This occurs most commonly when poor sitting or standing postures are adopted. There were no abnormalities in the muscles strength or flexibility, but if faulty posture continues, strength, and

flexibility imbalance will eventually develop. Here no pathology, no movement loss, no objective signs in this syndrome (Mckenzie, 1995).

The dysfunction syndrome

The dysfunction syndrome from the postural syndrome in that adoptive shortening and resulting loss of mobility causes pain prematurely that is before achievement of full normal end range of movement. The causes may be prolonged poor postural habits or it may be a result of contracture and adhesions formed during the healing of tissues after trauma or derangement (Mckenzie, 1995).

The derangement syndrome

The derangement syndrome occurred by mechanical deformation of tissues as a result of anatomical disruption, displacement within the intervertebral disc. The derangement syndrome is usually characterized by constant pain, but intermittent pain may occur depending on size and location of the derangement. There is a partial loss of movement, some movements being full range and others partially or completely blocked. The deformities in kyphosis and scoliosis may occur of this syndrome in the acute stage (Mckenzie, 1995).

Risk factors

Contrary to popular belief, the erect posture of humans depends on the normal curvatures of the spine and such curvatures are not thus the cause of back pain. Obesity that results in a heavy paunch and pregnancy in its later stages, can, however, distort the curvature of the spine and result in back pain. In the case of pregnancy, the pain usually amyloid- rates once the child is delivered. Some activities such as jogging and running on cement roads rather than cinder tracks, heavy lifting, and prolonged sitting (especially in cars, trucks, and poorly designed chairs) can provoke back pain. Nevertheless, strong psychological factors do play a role.

Physical factors

In awkward postures the joints are more susceptible to injuries and the muscles have less capacity for exerting force. Long time standing or prolong sitting position also cause low back pain. Workers who have long-term static postures this type of

repeated static posture can give rise to injuries, particularly when repeated for months or years. Prolonged standing may result in fatigue and discomfort in the legs. It can lead to the development of musculoskeletal disorders (e.g. painful feet and other foot problems) and varicose veins. Prolonged sitting requires the muscles to hold the trunk, neck and shoulders in a fixed position. This squeezes the blood vessels in the muscles, reducing the blood supply. An insufficient blood supply accelerates fatigue and makes the muscles prone to injury. Manual handling refers to the transfer, pushing, pulling and carrying of loads by one or more employees (European Agency for Safety and Health at Work, 1993).

Organizational and psychosocial factors

Daily exposure to physical risk factors and insufficient rest or recovery time are among the principal organizational factors that can lead to low back pain. Mental strain can cause muscular tension, and increase existing physical strain. Work conditions that may increase mental strain include Psychologically demanding activities, in which the workers are exposed to high levels of work stress, work pressure and mental demands, as a consequence for example of tight deadlines and low levels of autonomy and Activities in which there is little support from colleagues, supervisors and managers (European Agency for Safety and Health at Work, 1993).

Individual factors

Individuals differ in their susceptibility to low back pain. Factors such as prior medical history, physical capacity and age are very important. Obesity, pregnancy, rheumatoid arthritis, acute trauma and endocrine logical disorders are other examples of individual non-occupational factors that may affect the occurrence of LBP (European Agency for Safety and Health at Work, 1993).

Factors relating to social context

Social context provides some important non-work risk factors relating to LBP. Some types of sport, leisure activities and housekeeping work at home can all increase susceptibility to LBP. The relation between work activities and LBP is multi-factorial. This means that when different physical factors are present, coexisting with organizational factors (and also individual and social factors), a work situation may

arise in which there is a high risk of developing LBP. (European Agency for Safety and Health at Work, 1993).

Physiotherapist

Physiotherapy is a health care profession concerned with human function and movement and maximizing potential. Physiotherapists who treats injury or dysfunction with exercises and other physical treatments of the disorder. Chartered physiotherapists work with a broad variety of physical problems, especially those associated with the neuromuscular, musculoskeletal, cardiovascular and respiratory systems. They may work alone, with physiotherapy colleagues or teams and with other healthcare professionals in multi-professional teams (Sommerich et al., 1993).

They were treating patients by various techniques such as mobilization, manipulation, passive exercises and other strengthening exercises. When treating patients it is important to maintain good posture of a physiotherapist. During treating patient they have to stay prolong sitting or standing posture, and so that physiotherapist can be affected by back pain also. Mobilizations/manipulative physiotherapy, McKenzie therapy, Specific core stabilization exercises, Stretches, Ergonomic advice and Postural advice are the technique of a physiotherapist to manage a patient (European Agency for Safety and Health at Work, 1993).

Education to become a physiotherapist

The world confederation of Physical Therapy recommends that the education for entry level of physiotherapists is based on university level studies, of a minimum of four years, independently validated and accredited as being at a standard that accords graduates full statutory and professional recognition. After finishing graduate level of study a student can study in M.sc in PT,Ph D, M Phil, MS Ortho (medicine), etc (WCPT, 1995).

Physiotherapists (graduate) are now working independently in outpatient's clinic, assessing and diagnosing and complete management responsibility for patient. Prescribing drugs would entail the range of medication as their condition related for both oral use and for injection. With responsibilities physical therapist works in

Hospitals, Private clinics ,Rehabilitation centers ,and long term care ,Home care programs ,including schools for children with special needs ,Child development centers, Public health units or health planning agencies, Industry and commercial places ,Recreation centers (Ritchie, 1999).

Qualified Physiotherapist

In order to be eligible to register with the Health Professions Council and practice as a physiotherapist, one will have to graduate from an approved course (University of Salfordn.d.)

Physiotherapists have a duty to keep up to date with new knowledge generated by research with what their peers thinking and by formally evaluating outcome their practice. Physiotherapists have responsibilities to patient with safe and effective interventions, to treat patient with respect and dignity, to involve patients in decision making about their treatment .Physiotherapists have ethical responsibilities to payers for the services. Programed for the professional development should be put on the place to facilitate full compliances as a part of the individual's professional responsibility (Mead, 2003).

In Bangladesh the professional association for physiotherapist is named Bangladesh Physiotherapy association .It was established in 2001 and the aim of this association is to develop profession status through qualified physiotherapist with quality treatment. It was organized conferences, mobile clinic service, get together, annual meeting of congress which held on 2-6th June in Vancouver, Canada (Physical Therapy, 2008).

Like other country Bangladesh also adopted the Physiotherapy and Physiotherapy plays a vital role in health system of the country. Bangladesh health care structure is gradually including physiotherapists to provide a complete health care service (CRP's annual report, 2005-2006)

Job Prospect of physiotherapists

CRP provides employs for physiotherapists and continually tries to promote the therapy professions by lobbying and networking with the government in order to create posts for employment and awareness of the value of health care professions in the country (CRP annual report, 2006-2007).

Physiotherapists have a lot of area to get employment and in many situations physical Therapist will function in a multidisciplinary team with other health care professionals in the care of patient. Employment of physical therapists is expected to Grow faster than the average for all occupations through (Physical Therapists, 2008).

Physiotherapy Clinical Practice

"The chartered society of Physiotherapy (CSP) has also been actively involved in developing accountability – related practice frame works in response to external forces. This has included a recent view and revision of standards of Physiotherapy practice that now reflects the current scope and nature of practice", (CSP Curriculum Framework, 1996). In addition to the demand for evidence-based practice, the need for

Physiotherapists and other workers to undertake continuing professional development And reflective practice has been identified in recent UK Government documentation. This has reinforced the importance of public accountability (Morris, 2002).

Centre for the rehabilitation of the paralyzed (CRP)

CRP was established in 1979 by a group of Bangladeshi therapist in collaboration with Miss Valerie Taylor, a British Physiotherapist, following her 10 years of experience in treating paralyzed people in Bangladesh. Apart from providing high quality treatment and rehabilitation services. CRP is internationally recognized for work promoting equal rights opportunities for disabled people and training the pioneers of vital health professions in Bangladesh (Centre for the rehabilitation of the paralyzed, 2002). Its holistic approach tries to consider the patient, physical, emotional, social, and economic need during and following treatment (Barai, 2003). CRP is working to improve the quality of life for her disabled people. It has 100 beds for treatment and rehabilitation of paralyzed people in words and has a physiotherapy

department, occupational therapy department, speech and language therapy department, outpatient facilities, social welfare department; special needs school and pediatrics unit for children with disabilities, operation theatre, x-ray and pathology department, training institute, sports and recreational facilities (Barai, 2003).

CHAPTER –III: METHODOLOGY

3.1 Design of the study

The study was conducted by using cross sectional study design. A cross sectional study is the simplest variety of descriptive or observational epidemiological study that can be conducted representative samples of a population .The aim of this design is to describe the relationship between disease and other factors of interest as they exist in specified population at a time, without regard for what may have preceded or predicated the health status found at the time of study. These studies gather information about the prevalence of health related states and condition, but they cannot distinguish between newly occurring and long established condition

This study aimed to find out the prevalence of low back pain among the clinical physiotherapist's at CRP. For this reason the investigator used a quantitative research model in the form of a prospective type survey in design. The investigator choose the design in quantitative research method because in this way investigator was able to use a large number of participants and therefore collected the data objectively through this way data was reduced to numbers for statistical analysis in order to draw conclusion.

Borden (1999) claimed that survey research is one of the most common forms of research that involves the researchers asking a large group of people questions about a particular topic or issue and these are related to the interest of the participant. Hick's (2000) claimed that survey is a method of collecting data which involves the researcher measuring relevant sample variables (often using s questionnaire) without any form of manipulation or systemic intervention. Bowling (1998) discussed this idea with the survey the researcher usually approaches a sample of target group of interest, interviews them or ask them questionnaire. "The survey is a method of collecting information form a sample of the population of interest usually by personal interviews (face-face telephone) postal or other self-completion questionnaire methods or diaries" (Samantha, 2001).

Bailey (1997) claimed that survey methods are used frequently to gather information about a large population in order to answer a set of hypothesis. Information collected in survey research covers attitudes, values, opinions, motives and the information of

respondents work situation, environment. Living situation, behaviors and so on. Survey is usually cheaper and quicker than experimental design and also confounding variables can be controlled during data collection (Hicks, 2000).

3.2 Study Site

As this study was about exploring the prevalence was of low back pain among the clinical physiotherapist of CRP, So the site was CRP Savar and CRP Mirpur, the physiotherapists work.

3.3 Study area

Musculoskeletal was the study area.

3.4 Population of the study

Clinical physiotherapists who are working at CRP were the population of this study.
A population refers to the members of a clearly defined set or class of people, objects or events that are the focus of the investigation (Samantha, 2001).

Bailey (1997) claimed that a population is the total group or set of events to which hypothesis apply. The population shares a specific set of characteristics or criteria that have been established by the investigator. The criteria of study population are determined from a literature review and the goals for the study. Selection criteria were established gradually as the assumption and theoretical base of the study unfold. In this research, the total number of population was 57.

3.5 Sample size

The expected sample size to conduct the research was 196. But the researcher could manage just 50 subjects because of having resource constrain.

$$n = \left\{\frac{Z(1-\frac{\alpha}{2})}{d}\right\}^2 \times pq$$

Here,

$Z(1-\frac{\alpha}{2})$= 1.96

P= 0.85(Here P=Prevalence and P=85%)

q= 1-p

=1-0.85

=0.15

d= 0.05

3.6 Sample of the study

50 Physiotherapists were selected from the population of this study, of them 18 were working at Musculoskeletal Department, 07 at Neurological Department, 09 at Stroke Rehabilitation Unit, 12 at Pediatric Department and 04 at Spinal Cord Injury Department.

Samantha (2001) claimed that sample is a group chosen or obtained from a much larger group- the population. Bailey (1997) claimed that a sample is a subset of the population that has been selected to participate in the project. Sample should represent the population as closely as possible. For survey research, it is better to get as many subjects as possible with the consideration of the size of the ideal population (Bowling, 1997). Sometimes the sample size may be big and sometimes it may be small, depending on the population and the characteristics of the study (Bailey, 1997).

Hicks (2000) claimed that many researchers thought that it needs hundred people to participate in a survey. But this is not necessary to have crowds of people taking part in research as sample. There is no easy way of establishing the best size of sample since this decision depends very largely on the research which is being undertaken as well as on the investigator's knowledge of the relevant population's characteristics.

3.6.1 Sampling procedure of the study

Samples were selected conveniently from Savar and Mirpur CRP of Dhaka. The researcher established inclusion and exclusion criteria and purposively selected the individuals who fitted those factors and volunteered to participate in the study. 50 samples for this study were selected for this study according to the inclusion and exclusion criteria. .

Samantha (2001) claimed that sampling is an important concept in research. Basically it is about how to choose the people who will study or who will participate in research. Findings the appropriate number and type of people take part in study is called sampling (Hicks, 1999).

Bowling (1997) state that samples who will be studied most easily, cheaply or quickly should be selected for the study by using convenience sampling procedure. Samples were taken by using convenience-sampling method due to the time limitation and also for the small size of population and as it was the one of the easiest, cheapest and quicker method of sample selection (Bowling, 1997).

Bowling (1997) claimed that convenience sampling is usually used for exploring complex issues: for examples, in economic evaluation, in complex evaluations of health states.

3.6.2 Inclusion criteria of the study:

- Both male and female physiotherapist were selected- In this study, the investigator wanted to explore the low back pain ratio among them.
- Only physiotherapist with their Bachelor degree in Physiotherapy were selected.
- Physiotherapists who had suffer from low back pain.
- Physiotherapists who were willing to participate in the study, otherwise they will not give exact information that will helpful to the study.

3.6.3Exclusion criteria of the study:

- Subjects who were not willing to participate.
- Pregnant physiotherapist, the prevalence of LBP during pregnancy varies over time. Onset of LBP occurs most commonly during the third month to the seven months. But in most cases, after pregnancy this problem is resolved.
- Physiotherapist who had LBP due to pathological case. i.e.- Ankylosing Spondylitis, Tuberculosis.

3.7 Method of data collection:

Finding the appropriate number and type of people to take part in the study is called sampling (Hicks, 2000). In this study data were collected by face to face interview technique and by using structured questionnaire. Mixed type questionnaire included both open and close ended question. The investigator went to therapists to take permission if they are interested to take part in this study. Firstly, the investigator introduced her and the research project and its purpose. Then investigator met with individual PT's to find out if they were interested in participating. For data collection, the investigator used only questionnaire in English with the possible easiest wording. In questionnaire investigator did not used Bengali version of the question. Survey usually, use questionnaires or interviews by which information is gathered (Hicks, 1999).

3.8 Materials used for the research project

Questionnaire, consent forms, pen, papers, pen drive, SPSS (Statistical Package for the Social Sciences) software were used to analyze data, Harvard Referencing 2012 and computer were also used.

3.9 Questionnaire:

Data was collected using a questionnaire on paper and the questions types were a mix of both structured questions. These questions were used to collect nominal and ordinal data for research findings and were setup sequentially. There were questions relating to work related musculoskeletal disorders among the PT.

Questionnaire is a method of collecting information whereby subjects answer a set of questions usually predefined by the researcher (Hicks, 1999). Questionnaire must be kept in short that the respondent will finish it but long enough to obtain the desired information and the question should be sequenced in a logical order that they follow one another (Baily, 1997).

The survey technique using a specially advised questionnaire as it is highly appropriate way of conducting such a study (Hicks, 1999). Bowling, A (1997) claimed that a basic underlying of questionnaires is that researchers and respondents share the same theoretical frame of reference and interpret the words, phrases and concepts used in the same way.

3.10 Informed Consent

Before conducting research with the respondents, it is necessary to gain consent from the subjects (Baily, 1997). For this study interested subjects were given consent forms and the purpose of the research and consent forms were explained to the subject verbally. They were told that participation is fully voluntary and they have the right to withdraw at any time. They were also told that confidentiality would be maintained. Information might be published in any presentations or writing but they will not be identified. The study results might not have any direct effects on them but the members of Physiotherapy population may be benefited from the study in future. They would not be embarrassed by the study. At any time the researcher will be available to answer any additional questions in regard to the study

3.11 Data analysis

The data analysis was performed in the program statistical package for social science (SPSS) version 16.The presentation was performed in SPSS and in Microsoft office word 2007. Every questionnaire was rechecked for missing information. At first put the name of variables in the variable view of SPSS and the types, values, decimal, level alignment and measurement level of data. The next step was to input data view of SPSS. After input of all data researcher rechecked the inputted data to ensure that all data had been accurately transcribed from the questionnaire sheet to SPSS data view. Then the raw data was ready for analysis in SPSS. Microsoft Word Excel was also used to present data using table, column and pie chart.

The result of this survey was consisted of qualitative data. The collected data was illustrated with bar graphs, table and pie chart. By this survey a lot of information was collected. All these results gave a basic idea about low back pain among the physiotherapist's. The result was calculated in percentages and descriptive statistics were presented.

Data analysis is the process of systematically arranging and presenting information in order to search for ideas. The aim of the data analysis is to find out the meaning of the collected information (Minichiello et al cited in Sarmin 2005). The study used descriptive statistics. Generally descriptive statistics are often used in conjunction with survey methods. However the three most commonly used form of descriptive

are: Measure of central tendency and Measure of dispersion, bar graph, histogram, pie chart and frequency polygon (Hicks, C M 2000).

Bowling, A (1997) claimed that descriptive survey approach enables the researcher to gain an understanding of individual clients on certain issues and problems in clinical practice and from professional and managerial policy.

Hicks, C M (2000) claimed that it is very difficult to make any sense out of a large amount of information simply looking at the raw data. Bar graphs are typically used to present nominal and ordinal data. It presents data in a series of vertical rectangle, with each rectangle representing the number of scores in a particular category (Hicks, C M 2000).

3.12 Ethical consideration

It should be ensured by the investigator that it would maintain the ethical consideration at all aspects of the study (Baily, 1997). Because it is the crucial part of the all form of research (Hicks, 1999,). At first to conduct this study, the research project was submitted to the Physiotherapy Department, Bangladesh Health Professions Institute and obtained approval. During the course of this study, interested subjects were given consent forms and the purpose of the research and the consent form were explained to them verbally in both Bengali and English. For this study, the investigator did not interfere with their patients and clinical practice.

3.13 Rigor

During the data collection and data analysis the researcher always tried not to influence the process by his own perspectives, values and biases. No leading questions were included in the questionnaire. When conducting the study the researcher took help from the supervisor when needed.

3.14 Limitation of the study

Several limitations of the study should be considered. The research topic is quite new, so there was no information about the prevalence of low back pain among physiotherapists. The result of the study cannot be generalized to a wider population, as the samples were collected only from Savar and Mirpur CRP.

As data collection was done by questionnaire, so there may be problem in validity and reliability of questionnaire. It is feasible method to collect the data in questionnaire. The researcher was a 4th year B.Sc.(Hon's.) in physiotherapy student and this was her first research project. She 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 that overlooked by the researcher.

CHAPTER-IV: RESULTS

The aim of my research is to explore the prevalence of low back pain among the clinical physiotherapist's. Data were numerically coded and captured in Microsoft

Excel, using an SPSS16.0 version software program. The investigator collected the descriptive data and calculated as percentages and using bar and pie chart. 50 participants taken to explore the prevalence of low back pain among the clinical physiotherapist's.

Prevalence of LBP

Among the 5o participants 40 participants (80%) have suffered by LBP and 10 participants (20%) were not suffered by LBP. (Figure -1)

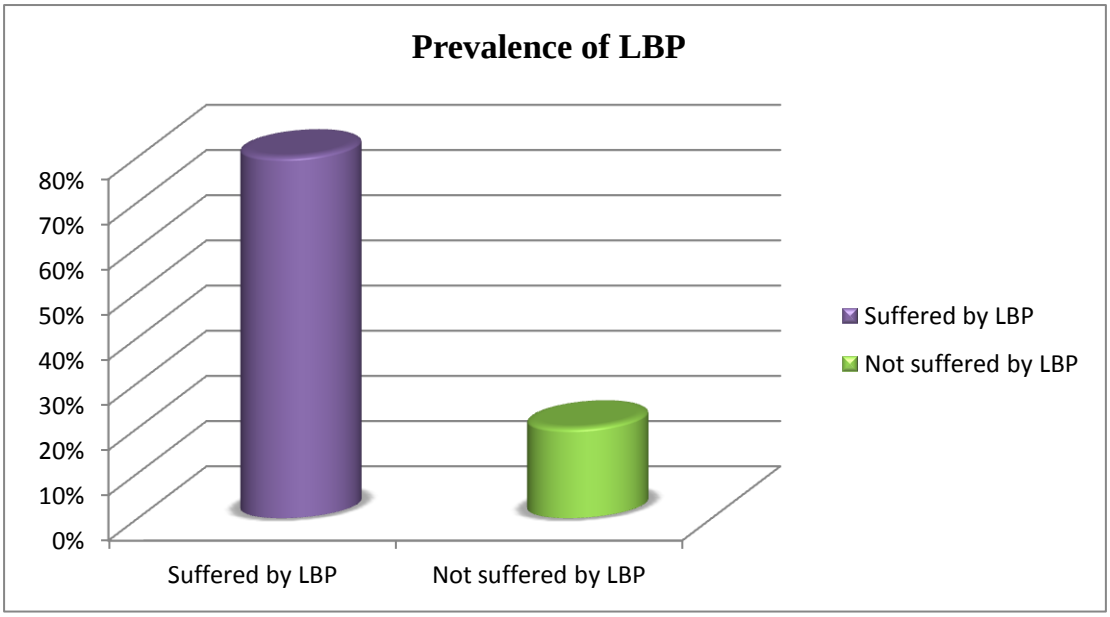

Figure 1: Prevalence of LBP

Age Distribution of the Participants

Among the 50 participants who have suffered from LBP, the lowest age was 24 and highest age was 44 years. And frequency is 38 (76%) participants in between 24-30 years, 11 (22%) were in between 31-37 years, and 1(2%) was in between 38-44 years (Figure-2).

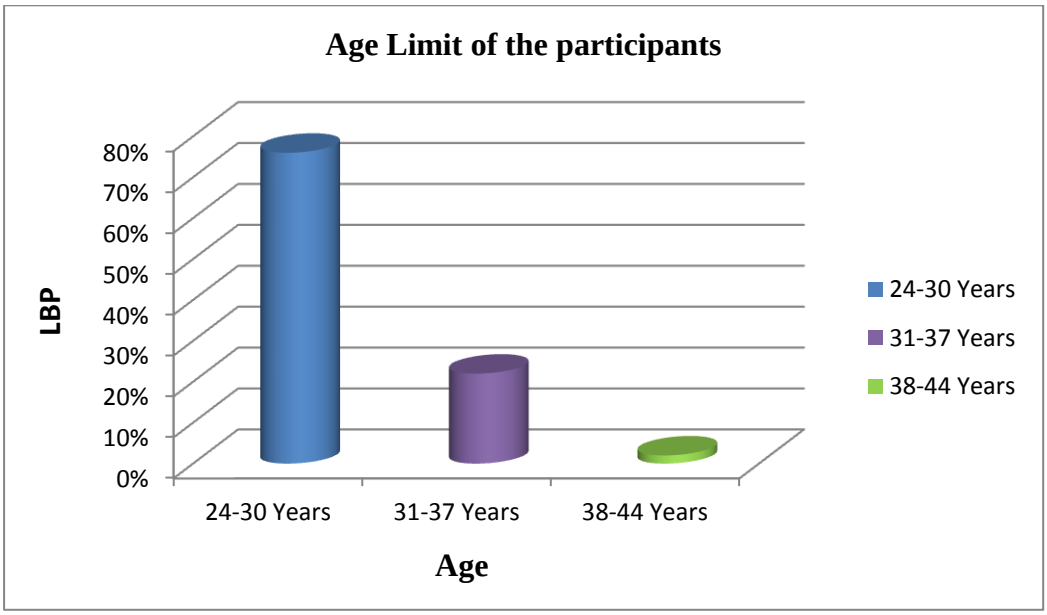

Figure 2 : Age Limit of the Participants

Age and Prevalence of LBP :

About 50 participants were selected as sample, among them the mean age were 1.26 (SD ± .487), median were 1.00 mood 1.

		Age of the participants	Prevalence of LBP
N	Valid	50	50
Mean		1.26	1.20
Median		1.00	1.00
Mode		1	1
Std. Deviation		.487	.404

Table -2

Age	Frequency	Percent	Cumulative Percent
24-30	38	76.0	76.0
31-37	11	22.0	98.0
38-44	1	2.0	100
Total	50	100.0	

Table -3

Male Female Ratio

Among the 50 participants 28 were female and 22 were male. And from them participants who suffered from LBP 25 were female and 15 were male. So the percentage of female and male who suffered from LBP is 62.5% and 37.5% respectively. (Figure -3)

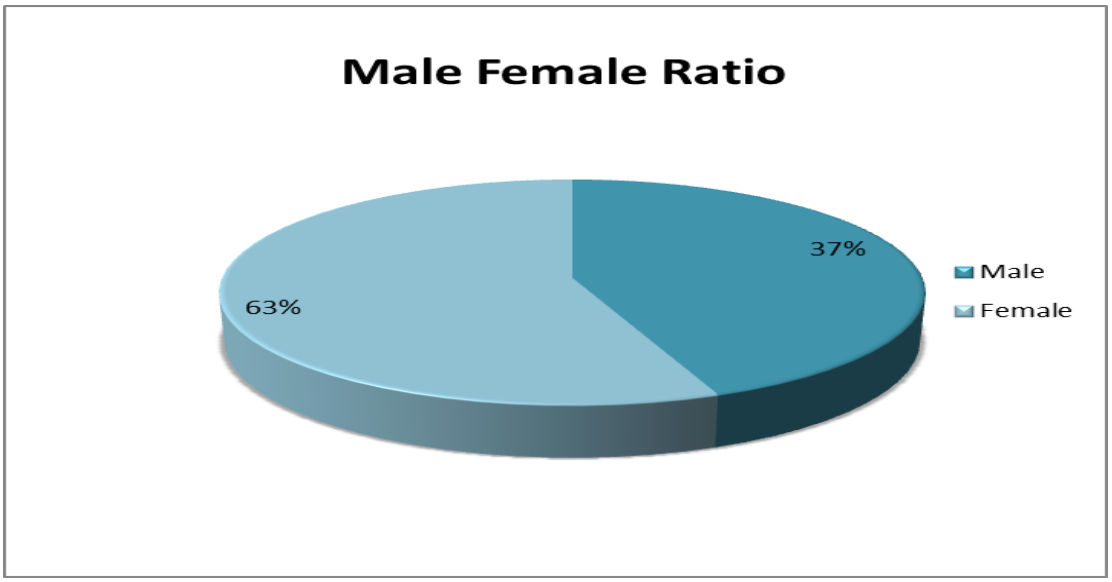

Figure 3: Male Female Ratio

Gender and LBP

In the table shows that, all the 50 participants, 22participants were male. And from them 15 (37.5%) were suffered from LBP, 7(70%) participants were not suffered from LBP. On the other hand 28 participants were female, those, from 25(62.5%) participants were suffered from LBP and 3 (30%) participants were not. (Table: 4).

			Prevalence of LBP		Total
			Suffered by LBP	Not suffered by LBP	
Gender	Male	Count	15	7	22
		% within gender	68.2%	31.8%	100.0%
		% within Prevalence of LBP	37.5%	70.0%	44%
	Female	Count	25	3	28
		% within gender	89.3%	10.7%	100.0%
		% within Prevalence of LBP	62.5%	30.0%	56.0%
Total		Count	40	10	50
		% within gender	80%	20.0%	100.0%
		% within Prevalence of LBP	100.0%	100.0%	100.0%

Table - 4

Suffering Period of LBP

Among the 50 participants, 40 participants were suffered from LBP in various periods of time but from them 10 did not suffered from LBP. So 4(8%) suffered for 1-15 days, 13(26%) participants were suffered for 1-6 months, 2 (4%) were suffered for 7-11 months, 15 (30%) were suffered for 1-2 years, 4 (8%) were suffered from 3-4 years, 2(4%) suffered from 4-5 years and 10 (20%) participants did not suffer LBP.
(Figure -4)

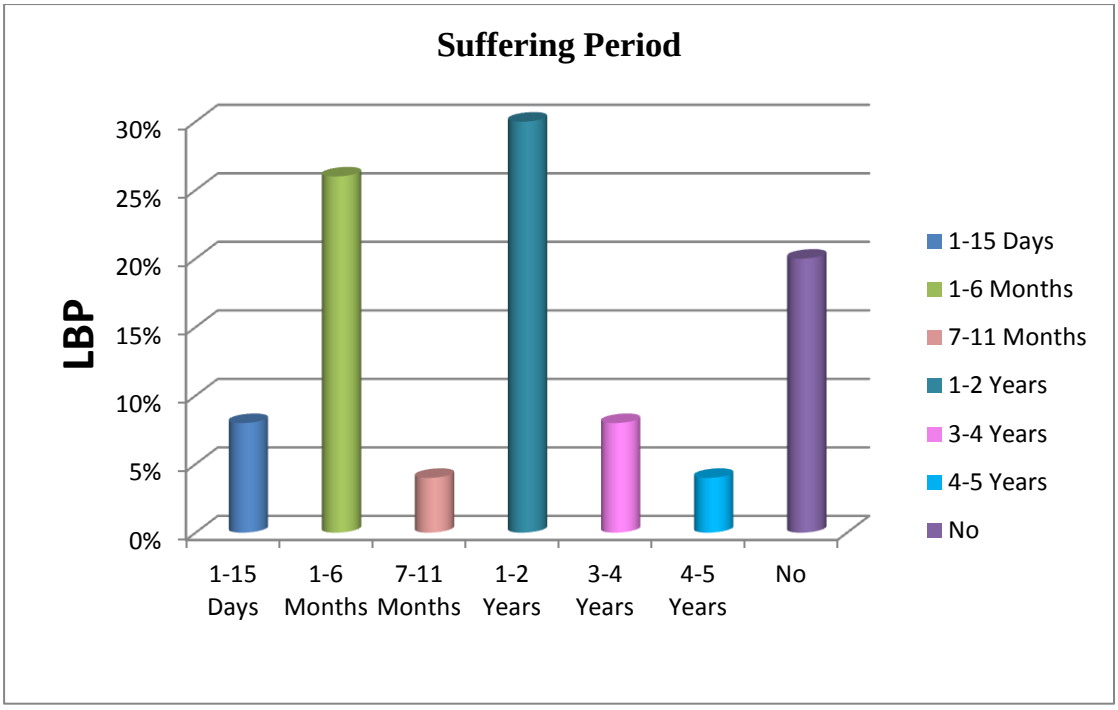

Figure -4: Suffering Period of LBP

Pain Severity

Among the 50 participants, 16 participants suffered LBP mildly, 23 participants moderately, 3were severely suffered from LBP but 8 participants not suffered from LBP. So, 32% of the physiotherapist suffered mildly, 46% moderately, 16% severely and 6% did not suffered by LBP (Figure -5).

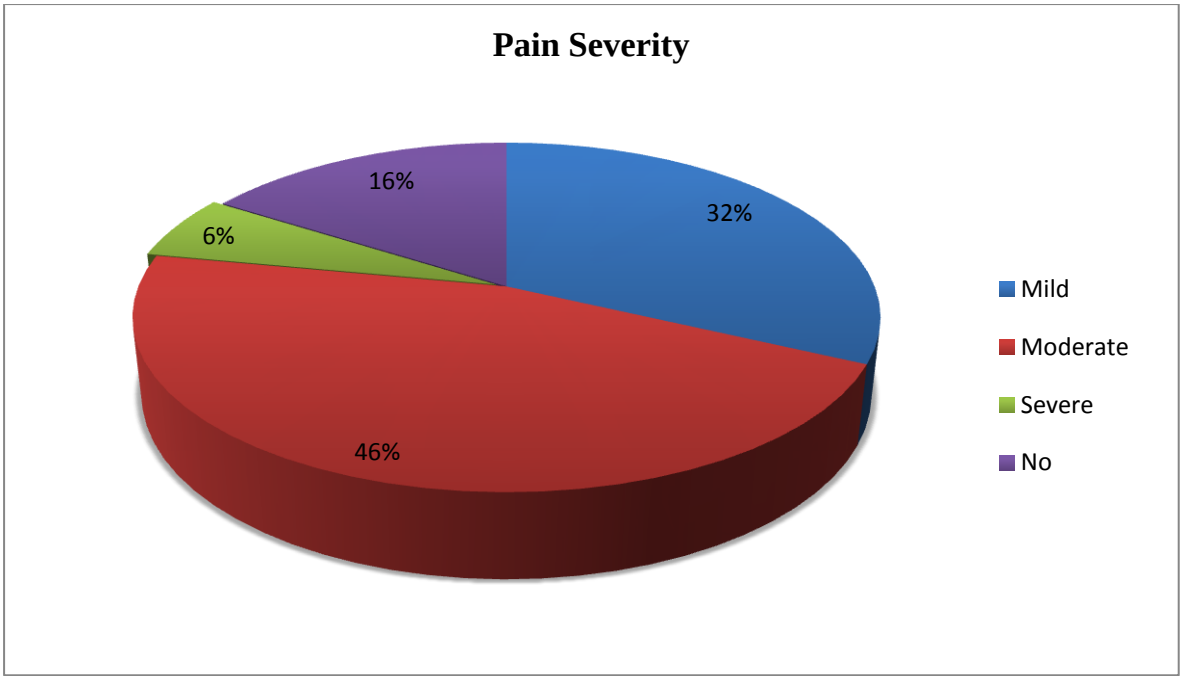

Figure 5: Pain Severity

Job Experience and LBP

Among 50 participants,40 participants suffered LBP, among them 30 (75%) participants had less than 5 years job experience, 9 (22.5%) participants had less than 10 years and 1 (2.5%) participant had more than 10 years job experience (Figure -6).

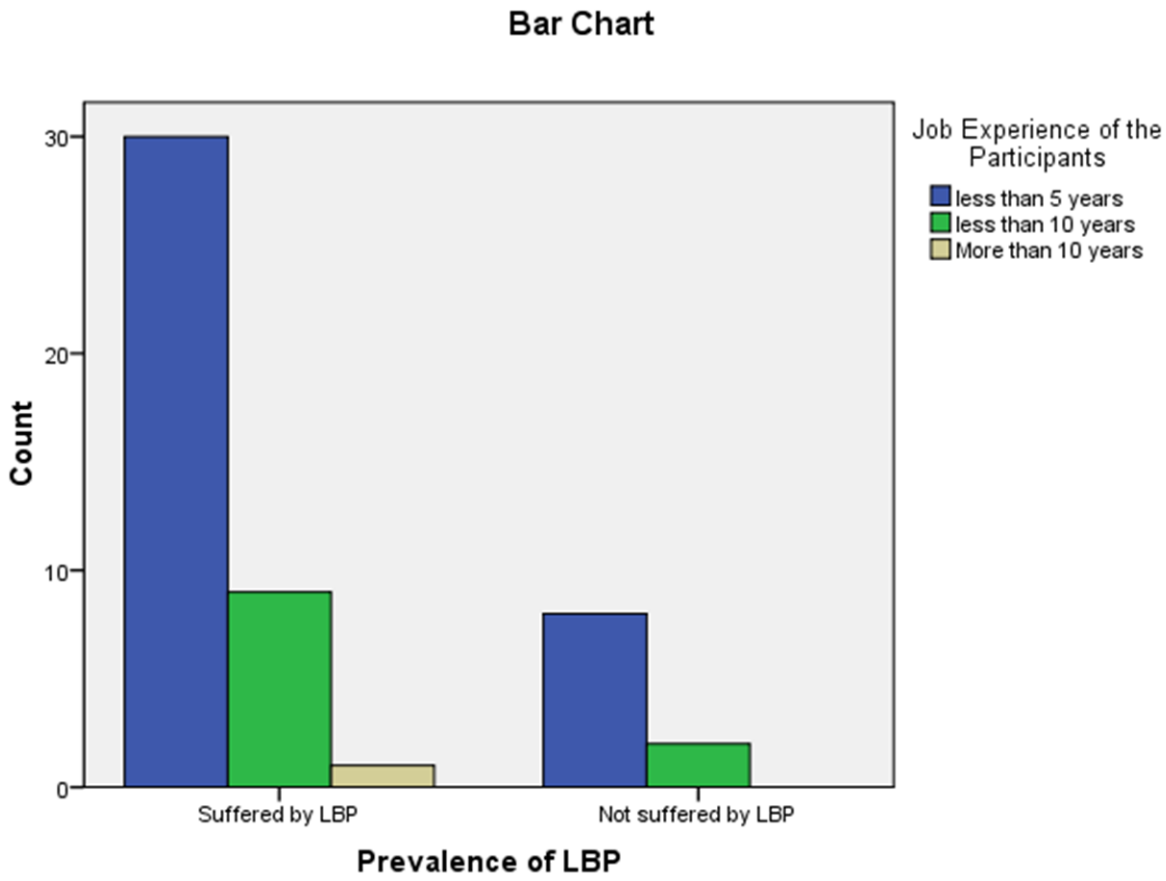

Figure :6 Job Experience and LBP

Clinical Practice Hamper

Among 50 participants 17 participants were told that, their practice were hampered not at all , whereas 21 participants with mildly hamper and 12 participants with moderately hampered clinical practice. So 34% of the participants did not have any

hamper with practice, 24 % with mildly hampered and 42% with moderately hamper. (Figure -7)

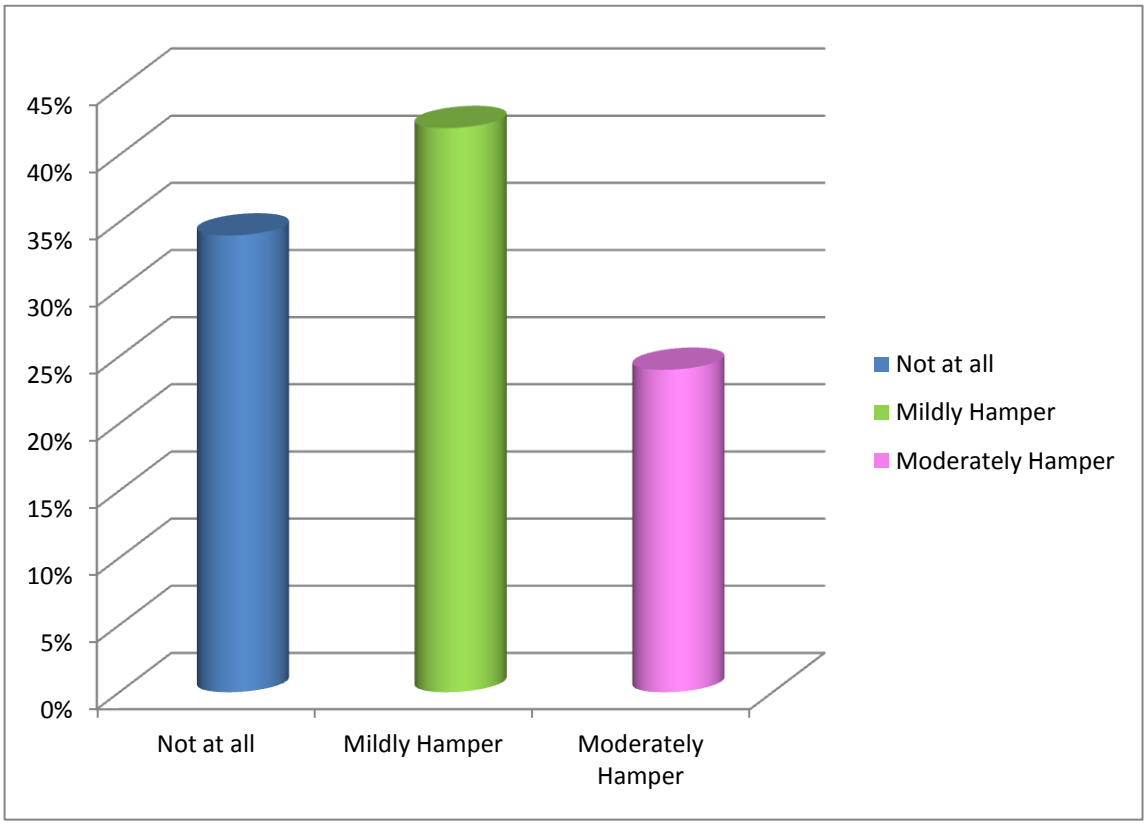

Figure -7: Clinical Practice Hamper

Working Hour of Participants

Among 50 participants, 30 (60%) participants worked 8 hours and 20 (40%) participants worked 10 hours per day (Figure-8).

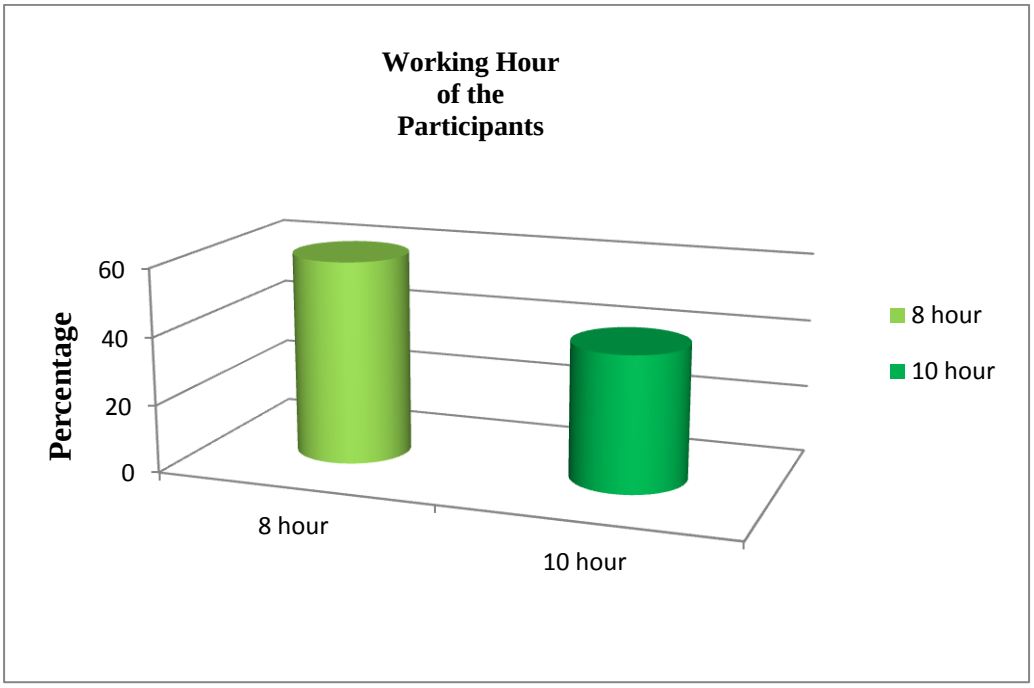

Figure 8: Working Hour of the Participants

Poor Posture

Among 50 participants, 40 participants had LBP, from them most participants 22 (55%) reported bending,12 (30%) participants reported sitting posture,5 (12.5%)

participants reported standing posture, and 1 (2.5%) participants reported lying posture which was worse posture in them (Figure-9).

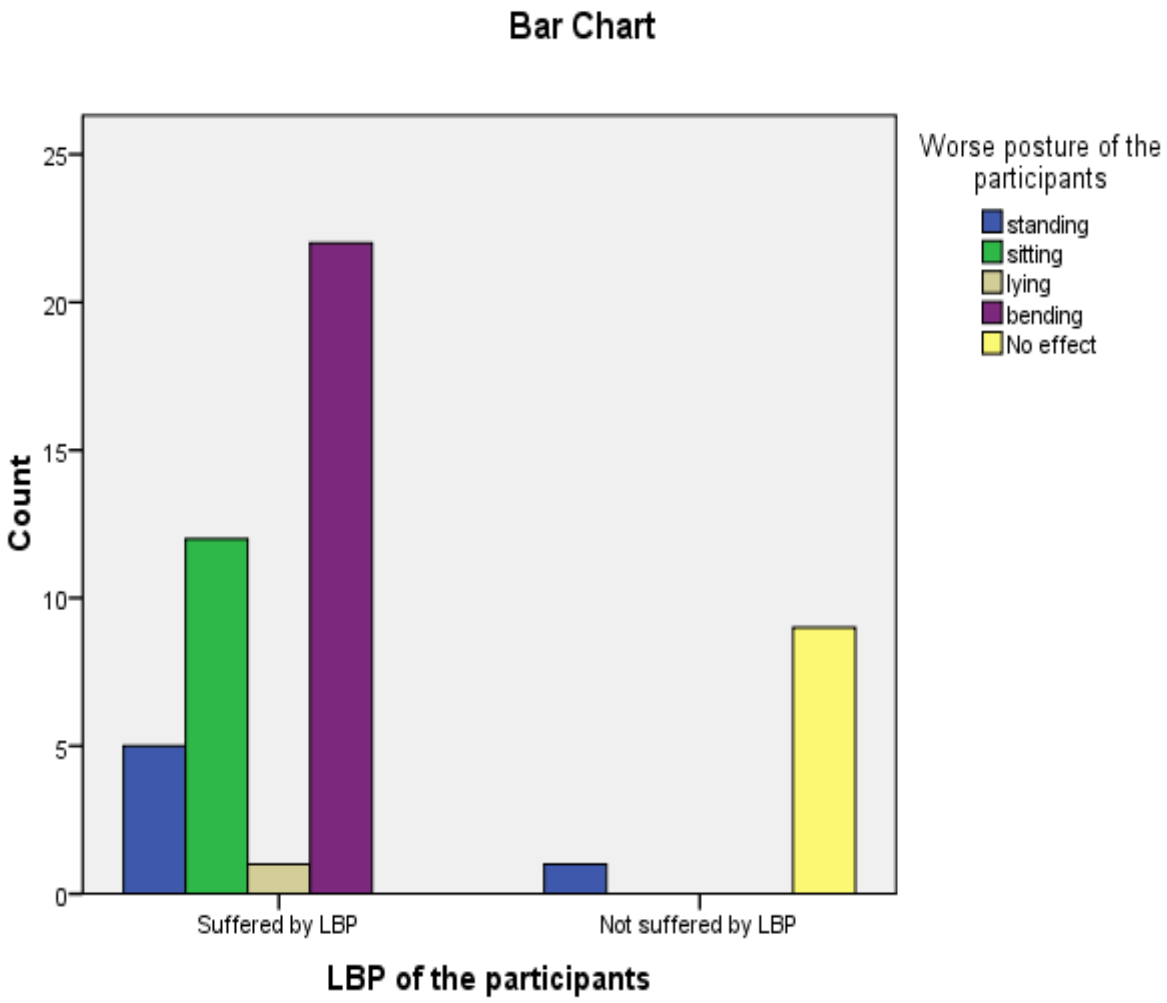

Figure -9: Poor Posture

Pain Reliever's Posture

Among 40respondents who had LBP, from them the most 18 (45%) were reported their posture as lying which may relive pain. 10 (25%) respondents told about walking, 9 (22.5%) reported standing posture and 3 participants reported sitting posture where their pain relieves (Figure -10).

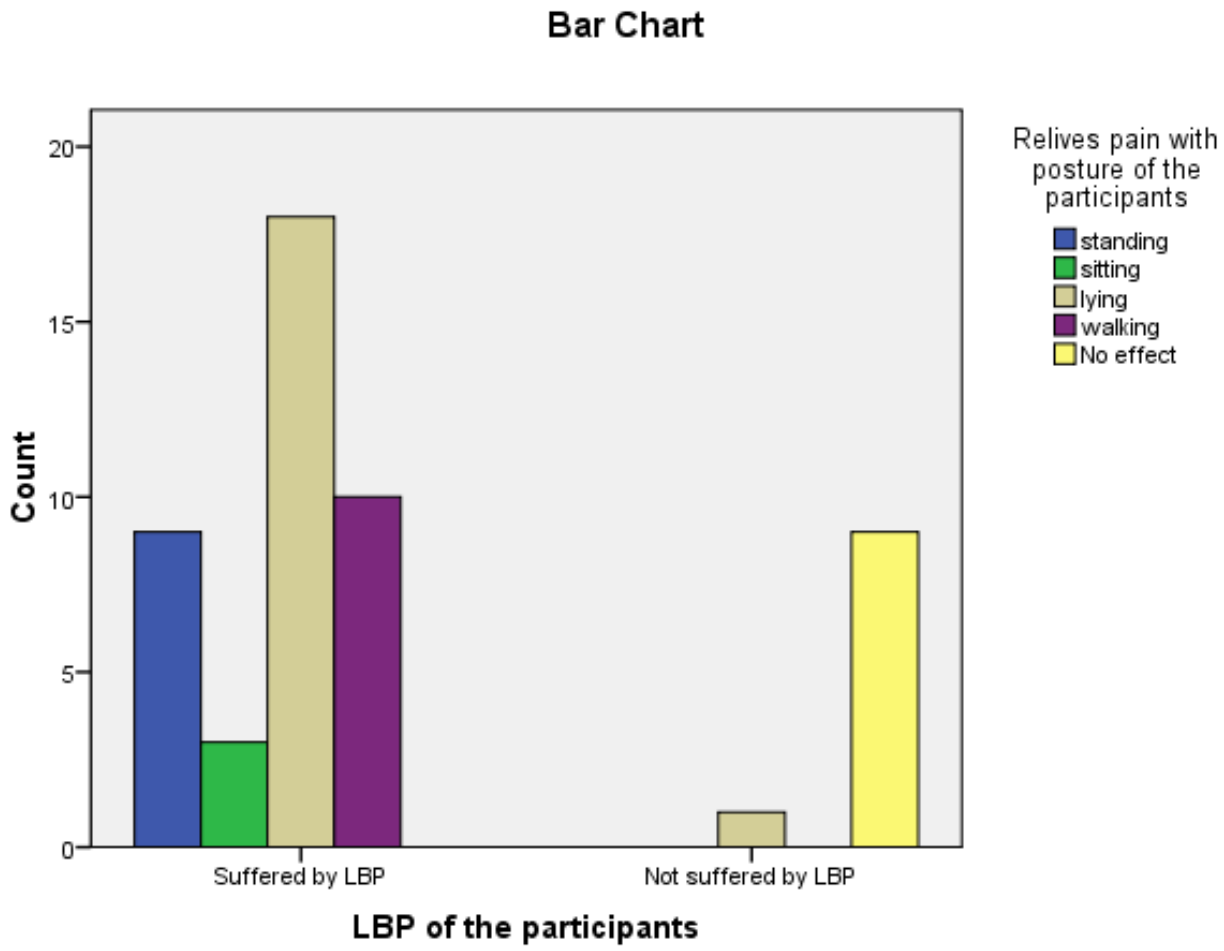

Figure 10: Pain Relieve Posture

ADL Effect

Among 50 participants, 16 (32%) participants were told that their clinical practice hamper not at all, 21 (41%) participants were told mildly hampered and 13 (26%) participants were told moderately hampered (Figuere-11).

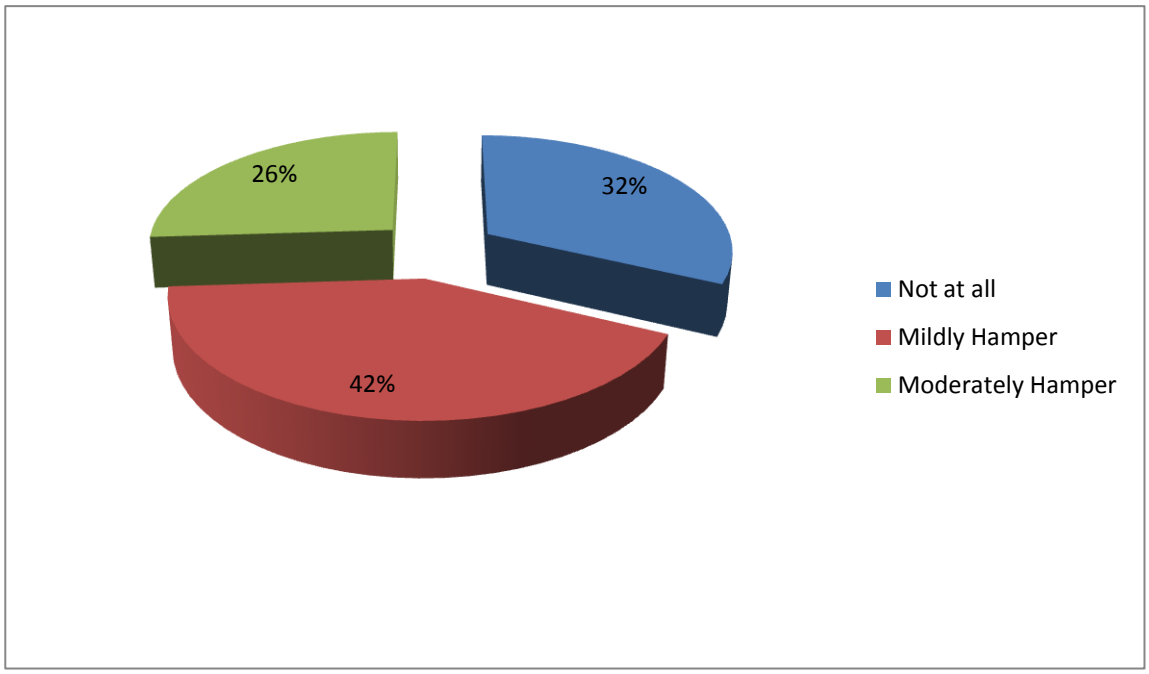

Figure -11: ADL Effect of the Participants

Postural Awareness

Postural awareness was maintained during clinical practice among 50 participants, by 18 (36%) participants but 32 (64%) participants could not maintain awareness of posture (Figure -12).

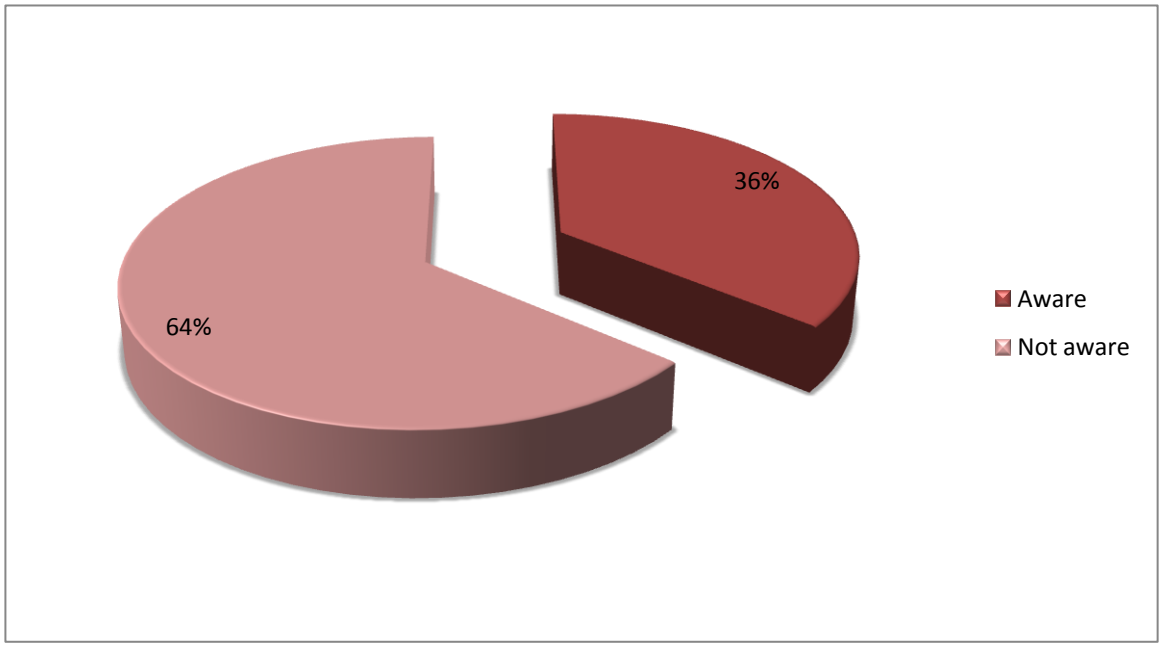

Figure -12: Postural Awareness

Job Satisfaction

Among 50 participants, in terms of work place environment 28 participants were not satisfied at all , wherease 22 participants were moderately satisfied. So, In percentage, 56% were not at all sat, and satisfied,44% were moderately satisfied with the work place environment (Figure -13).

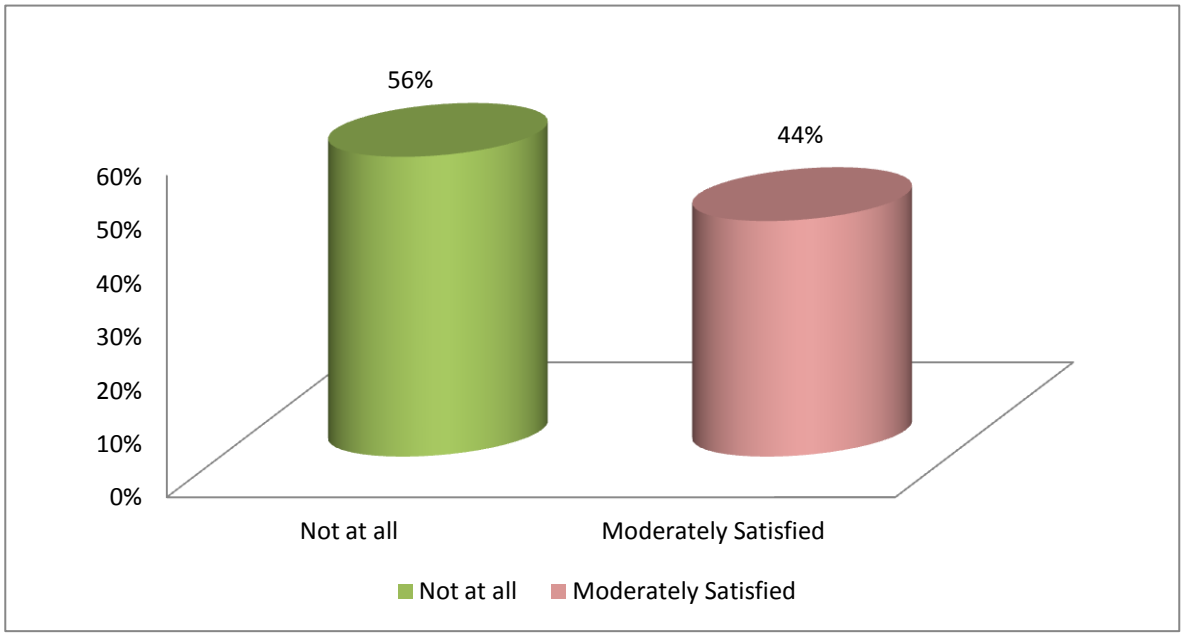

Figure -13: Job Satisfaction

Need Mobile Bed

Among 50 participants 27 (54%) suggested mobile bed which can reduce their LBP sufferings and improve clinical practice also Figure -14).

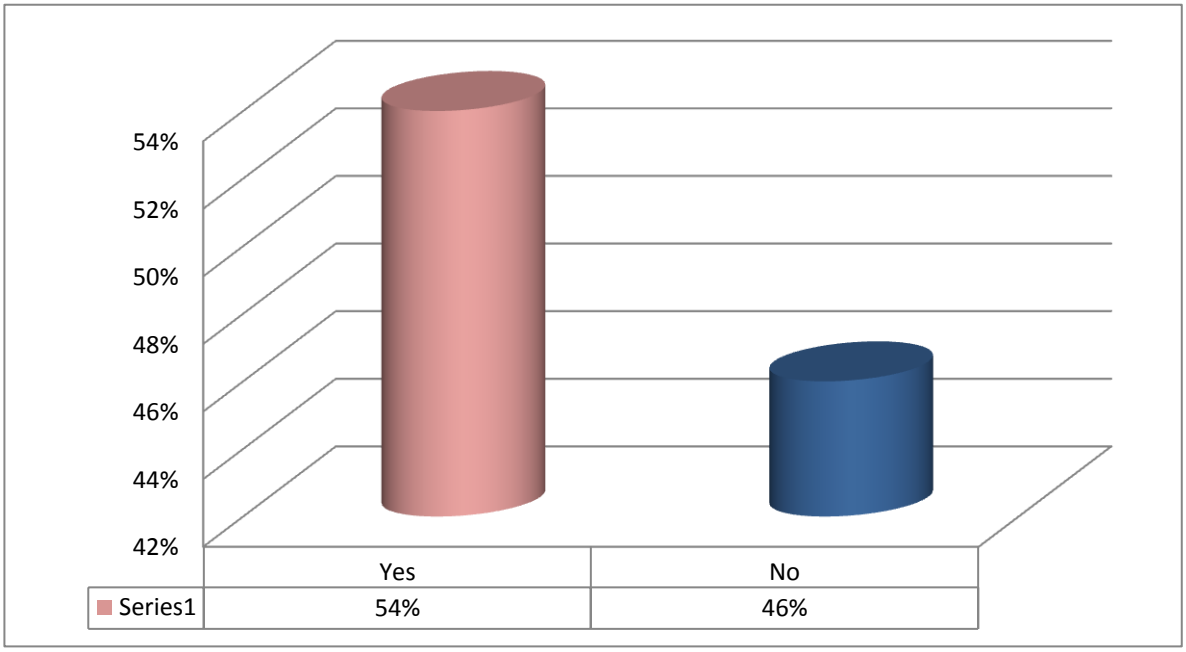

Figure -14: Suggest Mobile Bed

Need Adequate Space

Among 50 participants, 23(46%) participants suggested, adequate space

reducing LBP sufferings and provision of better treatment of the patient **(**Figure -15).

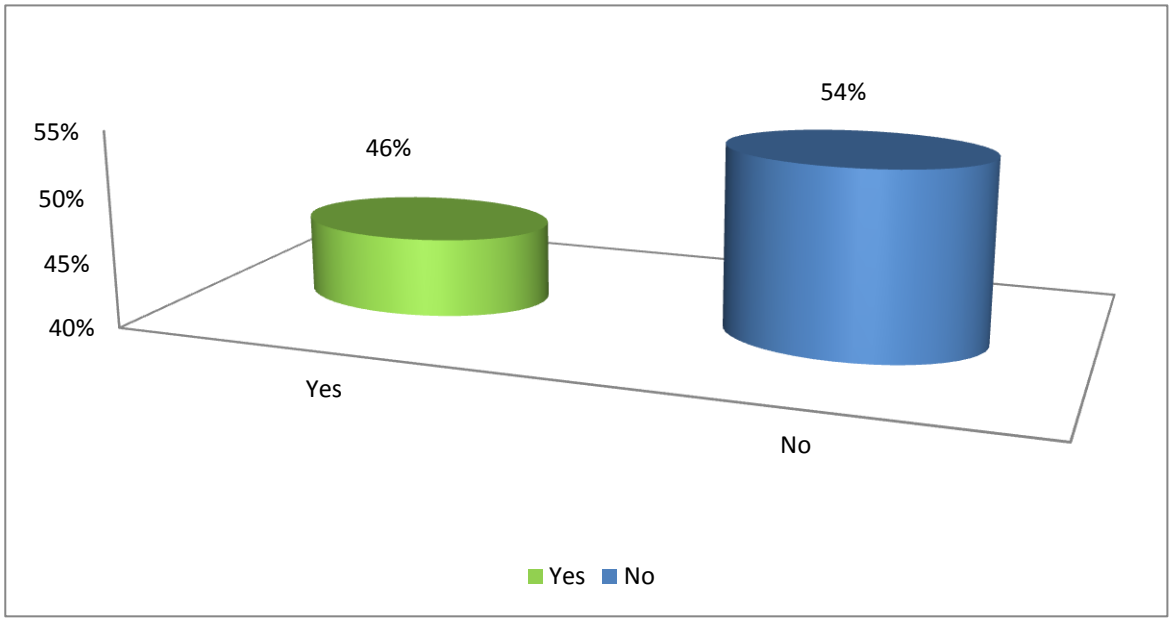

Figure -15: Need Adequate Space

CHAPTER -V: DISCUSSION

The aim of the study was to identify the prevalence of low back pain among the clinical physiotherapist at CRP. The researcher took 50 samples and tries to find out the prevalence of low back pain among physiotherapists.

In this study the prevalence was 80%. At a study on Canadian message therapist (Albert WJ et al.2008) found the prevalence of LBP was 85%, where which is similar to most other countries. A survey conducted at an annual physiotherapy meeting had 74% having had low back pain in their life time (Rugelj, 2003).In a survey carried out among Iranian Physiotherapist, prevalence was 69% (Rezaee M et al .,2010) .In another study of Malaysia LBP prevalence 84.1% which developed only after starting work at the hospital (Wong TS 2010)

Researcher found low back pain prevalence among female 62.5% and male 37.5%.Bisiachchi and Huber (2006) agreed that the females reported back pain more often than the males. Low back pain was more prevalent among female, while 37% of men reported low back pain in Nigeria and it has been established by (Omokhodion et al., 2000).

The researcher found that in the age of 24-30 years 76% participants suffered low back pain the most. According to a study in Canada the prevalence of low back was higher for younger age groups which naturally correlates with those with less years of work experience reported higher prevalence of pain (Albert WJ et al.2008).

According to a study of Nigeria the prevalence of low back pain is 48% among physiotherapist those who had been worked for more than 10 years compared to 40% among those who had been worked for less than 10 years (Albert WJ et al.2008). In this study among the 80% of participants 75% participants had less than 5 years job experience, 9 (22.5%) participants had less than 10 years and 2.5% had more than 10 years job experience.

In this survey researcher tried to find out the prevalence of low back pain and poor posture. Researcher found that among 40 participants the most 55% of the participants claimed about bending posture, 30 % reported about sitting posture. Other

study shows that bending 20 % and prolonged sitting 25 % are frequently mentioned (Omokhodian,2000).Respondents of the other study shows that, associate low back pain with heavy physical work, bending poor posture and prolonged sitting or standing.(Xu Y,1997)

A study in Malaysia by Wong TS (2010) reported that, higher levels of stress in their work and who had poor job satisfaction, they complained of LBP. In this study, job satisfaction were 56 % told not at all and 44% were moderately satisfied.

CHAPTER-VI: CONCLUSION AND RECOMMENDATION

6.1 CONCLUSION

Low back pain is a very frequently occurring phenomenon. It has a high prevalence among clinical physiotherapists. Individual risk factors and the professional risk factors noted in this survey. In the work place, the health care professionals are vulnerable to back pain problem during the course of their work routine. For the fulfillment of this study the investigator used a quantitative research model. Conveniently 50 participants among the physiotherapists were collected from CRP. The investigator used a questionnaire. Each Participant was given a questionnaire. And from the documents of the participants the researcher forms a data base for the total sample included in the study. From the data base, it was found that the prevalence ratio of LBP among the physiotherapists was 80%. The percentage of LBP was significantly higher in female PTs (62.5%). Physiotherapists first experienced their back pain within 1-2 years of work and the highest prevalence (76%) was found among in between PTs 24-30 years. Physiotherapists face various types of problem in their job one of them is work environmental problem. Most of the therapists think they need a modified working environment according to their requirements. From this study researcher can identify the risk factors of the workplace and posture which are harmful for the physiotherapist. So avoiding this factors a therapist can give more concentration to their own self and also their patient. Which ultimately help to society and for a country.

6.2 RECOMMENDATION

The recommendation evolves out of the context in which the study was conducted. The aim of the study is to find out the prevalence of low back pain among the clinical physiotherapist at CRP. Therefore main recommendations would be made:

- This study can be conducted with a large sample group for survey. If all the physiotherapists of Bangladesh were sample of the study the result will be more effective.
- Questionnaire should be developed according to department arrangement.
- A random sampling would be chosen in future in order to enabling the power of generalization of the results.
- Before conducting the study finding effective job satisfaction predictor from the participant can make the study better.
- Wider time would be taken in the future for conducting the research.

CHAPTER –VII: REFERENCES & APPENDIX

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Appendix: A

Data Collection Form

Questionnaire

Part- A : Personal Details

1. Name : …….

2.Age : .....

3.Gender : .....

4.Marital status : .....

5.Religion : .....

6.Date of interview : .....

Part – B : Back pain related

7. Do you currently suffer from low back pain?

Yes---------- No----------

[If answer is NO, please go question no. 10]

8. How long do you suffer your current low back pain?

[a] Years------ [b] Months---------- [c] and Days……

9. How do you describe the severity of the low back pain you suffer from?

[a] Mild [b] Moderate [c] severe

10. How long have you been working as a clinical physiotherapist?

[a] Less than 5 years [b] Less than10 years [c] More than10 years

11. Does low back pain hamper your clinical practice as a physiotherapist?

Yes------- No------

12. If yes, to what extend does your pain hamper your clinical practice?

Not at all ----- Mildly Hamper----- Moderately Hamper---- Severely Hamper-----

13. How many hours do you work per day as a physiotherapist?

[a] 8 hour [b] 10 hour

14. Can you maintain the correct postures during your practice?

Yes---------- No----------

15. Which posture do you work most of the time during clinical practice?

[a] Sitting [b] Forward bending [c] Standing

16. Which posture makes your pain worse?

[a] standing [b] sitting [c] lying [d] bending [e] walking

17. Which posture relives the pain?

[a] standing [b] sitting [c] lying [d] bending [e] Walking

18. Do you have lumber support in your sitting facility (Chair) during clinical practice?

Yes ---------- No ----------

19. Are you satisfied with the physical environment (structural facilities) of your work place?

Not at all ---------- Moderately Satisfied--------Satisfied ----------

20. How does your pain affect your ADL?

Not at all--------- Mildly hamper------ Moderately Hamper ---- Severely Hamper

21. In your view, how likely the pain is associated with your current clinical practice?

[a] Not associated at all [b] Associated to my clinical practice

22. What do you like to suggest in order to improve the physical environment (structural facilities) of your work place?

[a] Mobile bed [b] Sitting arrangement (Chair & Table) [c] Adequate space (free floor space) [d] Individual Computer access [e] Other, please mention ,……...

23. Have you ever taken sick leave due to Low Back Pain?

Yes ---------- No----------

24. If yes, how many days have you taken sick leave since last twelve months?

Days…….

Appendix: B

CONSENT FORM

(*Please read out to the participant*)

Assalamualaikum/Namasker, my name is *Mushfika Akter*, I am conducting this study for partial fulfillment of Bachelor of Science in Physiotherapy degree, titled "**Prevalence of low back pain among the clinical physiotherapist's at CRP**." from Bangladesh Health Professions Institute (BHPI), University of Dhaka. I would like to know about some personal and other related information about Low Back Pain. You will answer some questions which are mention in this form. This will take approximately 10 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 be treated as confidential and in the event of any report or publication it will be ensured that the source of information remains anonymous.

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 Md.Obaidul Haque, Assistant Professor Course Co-ordinator, Department of Physiotherapy, BHPI, CRP, Savar, Dhaka.

Do you have any questions before I start?
So may I have your consent to proceed with the interview?

YES ☐ NO ☐

Signature of the participant _____
Signature of the Interviewer _____

Appendix: C

Date: 13th December 2011

To,
Head of the department
Department of Physiotherapy
CRP, Savar, Dhaka.

Subject: **Prayer for permission for data collection.**

Sir,
I beg most respectfully to state that, I m a student of 4th year B.Sc in Physiotherapy. I want to conduct a study at your department as a part of my course curriculum. My research title is "**Prevalence of Low back Pain among the Clinical Physiotherapist at CRP".** So, I beg to permission from you.

May, I therefore, pray and hope that you would be kind enough to give me the permission and obliges me thereby.

Sincerely yours
Mushfika Akter
Mushfika Akter
Roll No. 11
4th year,
B.Sc. in Physiotherapy

Sir permission for data collection
13/12/11
She is allowed to Collection for data in SCI unit. Affairs
She is permitted for data collection please help her. Thanks 13-12-11
She is permitted for data collection in neurology unit and Stroke rehabe Rumana 13.12.11

Appendix: D

Date: 13th December 2011

To,
Head of the department
Department of Physiotherapy
CRP, Savar, Dhaka.

Subject: **Prayer for permission for data collection.**

Sir,
I beg most respectfully to state that, I m a student of 4th year B.Sc in Physiotherapy. I want to conduct a study at your department as a part of my course curriculum. My research title is "**Prevalence of Low back Pain among the Clinical Physiotherapist at CRP".** So, I beg to permission from you.

May, I therefore, pray and hope that you would be kind enough to give me the permission and obliges me thereby.

Sincerely yours
Mushfika Akter.
Mushfika Akter
Roll No. 11
4th year,
B.Sc. in Physiotherapy

Accept her seeking permission from us.

Mohammad Shawkat Ali
Clinical Physiotherapist &
In-charge, Physiotherapy Dept.
CRP-Mirpur.