

**QUALITY OF LIFE OF WOMEN WITH LOW BACK PAIN  
ATTENDING AT MUSCULOSKELETAL UNIT IN CRP**

**Mst. Fajilatun Zannat**

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

DU Roll No: 169

Registration No: 5257

Session: 2012 - 2013

BHPI, CRP, Savar, Dhaka



**Bangladesh Health Professions Institute (BHPI)**

Department of Physiotherapy

CRP, Savar, Dhaka -1343

Bangladesh

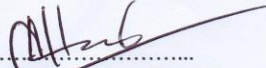
February, 2017

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

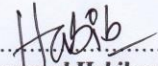
**QUALITY OF LIFE OF WOMEN WITH LOW BACK PAIN**

**ATTENDING AT MUSCULOSKELETAL UNIT IN CRP**

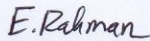
Submitted by Fajilatun Zannat, for the partial fulfillment of the requirements for the degree of Bachelor of Science in Physiotherapy (B. Sc. PT).



.....  
**Mohammad Anwar Hossain**  
Associate Professor of Physiotherapy, BHPI  
Head of the Department of Physiotherapy  
CRP, Savar, Dhaka  
Supervisor



.....  
**Mohammad Habibur Rahman**  
Assistant Professor  
Department of Physiotherapy  
BHPI, CRP, Savar, Dhaka



.....  
**Ehsanur Rahman**  
Assistant Professor,  
Department of Physiotherapy  
BHPI, CRP, Savar, Dhaka



.....  
**Md. Shofiqul Islam**  
Assistant Professor  
Department of Physiotherapy  
BHPI, CRP, Savar, Dhaka



.....  
**Md. Obaidul Haque**  
Associate Professor & Head,  
Department of Physiotherapy  
BHPI, CRP, Savar, Dhaka

### Declaration

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

Signature: *Fajilatun Zannat*

Date: *04.10.2017*

Mst. Fajilatun Zannat  
Bachelor of Science in Physiotherapy (B. Sc. PT)  
DU Roll Number: 169  
Registration No: 5257  
Session: 2012-2013  
BHPI, CRP, Savar, Dhaka-1343  
Bangladesh

## Contents

	<b>Page No.</b>
Acknowledgment	i
Acronyms	ii
List of figures	iii
List of table	iv
Abstract	v
<b>CHAPTER I: INTRODUCTION</b>	<b>1-9</b>
1.1 Background	1-4
1.2 Rationale	5
1.3 Research Question	6
1.4 Objectives	7
1.4.1 General objective	7
1.4.2 Specific objectives	7
1.5 Conceptual framework	8
1.6 Operational definition	9
<b>CHAPTER II: LITERATURE REVIEW</b>	<b>10-19</b>
<b>CHAPTER III: METHODOLOGY</b>	<b>20-25</b>
3.1 Study design	20
3.2 Study area	20
3.3 Study population	20
3.4 Sampling procedure	20-21
3.4.1 Inclusion criteria	21
3.4.2 Exclusion criteria	21

3.5 Sample size	21
3.6 Data collection tools	22
3.6.1 Measurement tools	22
3.6.2 SF-36	22
3.7 Data collection procedure	22
3.8 Data analysis	22-24
3.9 Ethical consideration	25
<b>CHAPTER IV: RESULTS</b>	<b>26-52</b>
<b>CHAPTER V: DISCUSSION</b>	<b>53-56</b>
Limitation of the study	57
<b>CHAPTER VI: CONCLUSION AND RECOMMENDATION</b>	<b>58-59</b>
<b>REFERENCES</b>	<b>60-65</b>
<b>APPENDIX</b>	<b>66-86</b>
Informed consent (English)	66
Informed consent (Bangla)	67
Questionnaires (English)	68-76
Questionnaires (Bangla)	77-86
Permission latter	87

## **Acknowledgement**

At first I am grateful to almighty Allah for giving me the passion to complete the study in fixed time. The second acknowledgement must go to my family members who had always inspired me and provided all necessary supports.

I would like to express the deepest and highest gratitude to my honorable supervisor, respected teacher, Associate Professor and Head of the Physiotherapy department, Mohammad Anwar Hossain for keeping me consistent supervision. Without his guidance and persistent help, this research would not have been possible.

I would like to give special thanks to my honorable teachers Md.Obaidul Haque, Associate Professor and Head of the Department of Physiotherapy, BHPI, Mohammad Habibur Rahman, Assistant Professor, Department of Physiotherapy, BHPI, Nasirul Islam, Acting Principle, BHPI and also thanks to Ehsanur Rahman, Assistant Professor, Department of Physiotherapy, BHPI. Special thanks to Md. Shofiqul Islam, Assistant Professor, Department of Physiotherapy, BHPI, for his help and guidance to collect information from research and to understand the use of SPSS for data entry and for referencing system.

This would not been possible without the genuine and selfless support and assistance provided by Fatema tuj johora, Sahnawaz sajb and Razia sultana, whom I approached during various stages of writing this research, I am nevertheless sincerely thankful and grateful for their help. I would like to express my gratitude to all of my friends in 16<sup>th</sup> batch and senior sister and brother. I must acknowledge the Physiotherapy department of Centre for the rehabilitation of the paralyzed (CRP) for the permission of data collection.

I would like to thank my patients for giving me their valuable time and also thanks to the librarian and my other teachers for their great contribution. I also thanks to IRB to give me the approval for my dissertation & data collection.

## Acronyms

<b>BHPI:</b>	Bangladesh Health Professions Institute
<b>BMRC:</b>	Bangladesh Medical Research Council
<b>CRP:</b>	Centre for the Rehabilitation of the Paralyzed
<b>CLBP:</b>	Chronic Low Back Pain
<b>CT:</b>	Computed Tomography
<b>DDD:</b>	Degenerative Disc Disease
<b>HTN:</b>	Hypertension
<b>HIZ:</b>	High Intensity Zone
<b>IRB:</b>	Institutional Review Board
<b>LBP:</b>	Low Back Pain
<b>MLBP:</b>	Mechanical Low Back Pain
<b>MRI:</b>	Magnetic Resonance Imaging
<b>QOL:</b>	Quality of Life
<b>SPSS:</b>	Statistical Package of Social Science
<b>SF-36:</b>	Short Form-36
<b>UK:</b>	United Kingdom
<b>WHO:</b>	World Health Organization

## List of Figures

		<b>Page No.</b>
Figure 1:	Residential area of the participants	27
Figure 2:	Educational level of the participants	28
Figure 3:	Marital status of the participants	29
Figure 4:	Occupation of the participants	30
Figure 5:	Income source of the participants	32
Figure 6:	Physical trauma of the participants	33
Figure 7:	Habits of the participants	34
Figure 8:	Walking nature of the participants	35
Figure 9:	Unusual posture	36
Figure 10:	Hobbies of the participants	37
Figure 11(a):	Pain intensity during last four weeks	41
Figure 11(b):	Pain interfere their indoor and outdoor activities	41
Figure 12:	General health of the participants	42



## List of Tables

	<b>Page No.</b>
Table I: Age of the participants	26
Table II: Economical status of the participants	31
Table III: Physical functioning of the participants	39
Table IV: Role physical of the participants	40
Table V: Vitality of the participants	43
Table VI: Social functioning of the participants	44
Table VI: Role of emotion of the participants	45
Table VIII: Mental health of the participants	46
Table IX: F-36 scoring among the participants	48
Table X (a): Distribution of Age and Physical functioning	49
Table X (b): Association between Age and Physical functioning	50
Table XI (a): Distribution of Occupation and Role limitation due to physical health	51
Table XI (b): Association between occupation and Role limitation due to physical health	52

## Abstract

*Purpose:* The purpose of the study was to determine the quality of life (QOL) of women with low back pain attended at musculoskeletal unit in CRP. *Objectives:* To explore the quality of life of women with low back pain attended at CRP, to find out the socio-demographic (age, residential area, marital status, occupation, etc.) information, to survey the percentage of physical and social functioning of women with LBP, to evaluate the percentage of role physical and role emotional problem, to measure the percentage of vitality, to determine the percentage of pain or discomfort, to identify the percentage of mental health and general health during LBP and to mention the health status of women with LBP according to SF-36 score range. *Methodology:* A cross sectional study was conducted with a semi structured questionnaire to collect data from 60 participants, age range was from 25-50 years. Data was numerically coded and captured in Microsoft Excel 2010, using an SPSS 20 version software program. *Results:* In this research minimum age of the participants was 25 years and maximum age was 50 years. Among that the mean age of the participant's was 39.30 and SD was 7.266. Among 60 participants, most of them (31.7%) were completed primary education level. Among the participants most of them were married (88.3%) and 91.7% was housewife. Quality of life of women with LBP was detected by a questionnaire SF36 and there was 8 dimensions, from these dimensions the mean score of physical functioning was 30.56%, Role limitation due to physical health was 38.12%, Role limitation due to emotional problem was 32.36%, Energy or fatigue was 58.50%, Emotional well-being was 59.40%, Social functioning was 45.00%, Pain was 39.03%, and lastly general health was 51.03%. According to SF-36 score range there physical health was poor and mental health was fair. There was no correlation between age and physical functioning ( $p=0.58$ ) which indicated that LBP might be main contributor for limiting physical functioning. *Conclusion:* The researcher found in this study by exploring it, was showed that LBP hampered the QOL. Awareness should be raised in functional activity. As women are more affected because of their life style and our culture so should give more emphasis on them to raised awareness.

*Key words:* Quality of life, Low back pain, SF-36.

**1.1 Background**

Low back pain is a remarkable regular issue that a great many people encounter some point in their life (Hoy et al., 2010). It is a typical condition that influences an expected 70% to 80% of grown-ups at a few focuses amid their lifetimes (Tavafian et al., 2005). The announced Low back pain is a to a great degree normal issue that the vast majority involvement with some lifetime pervasiveness ranges from 54% to over 80%, and the point commonness rate is around 20% in the overall public, making it the most widely recognized musculoskeletal indication (Barrero et al.,2006). Since both populace maturing and financial development have happened at a substantially speedier pace in Asian nations, for example, South Korea, LBP is relied upon to end up plainly a noteworthy general medical issue around there. Some pervasiveness information have as of late been accounted for country Asian people group, for example, those in Bangladesh, China, India, The Philippines, Indonesia, and Pakistan, with announced commonness running from 4% to 35 % ( Cho et al., 2012).

The point pervasiveness of LBP is 28.5% found in an Asian nation (Tomita et al., 2010). The lifetime pervasiveness of low back pain is accounted for to be more than 70%. Be that as it may, all around, the yearly pervasiveness of LBP has been evaluated at 38%. When all is said in done, LBP settle inside weeks, however may repeat in 24-50% of cases inside 1 year. Along these lines, the identification of hazard factors for LBP is essential in the aversion of intermittent and perhaps incessant LBP (Sterud &Teyrus, 2013). The predominance of LBP in youngsters is low (1%-6%) however increments quickly (18% half) in the immature populace (Khan et al; 2014). The predominance of LBP tops around the finish of the sixth decade of life (Papageorgiou et al., 1995).

In India, Many scenes of LBP are handicapping, in this way making it one of the exorbitant word related medical issue. The best possible arrangement and lifting operations amid penetrating procedure much of the time uncovered the oil-boring specialists to surprising strain on the spine and consequently make them powerless for growing low back pain (Tiwari & Saha,2014). In an orderly audit of rate, 12

contemplates met the incorporation criteria and experienced information extraction. Of these, four were considered to have a generally safe of predisposition; four a direct danger of inclination and four a high danger of inclination. Case definitions shifted between these examinations. Most measured agony in the 'low back' and three concentrated the 'back'. Most did not determine a base scene length that was required for a case to be tallied; four required a base scene term of one day (Hoy et al; 2010).

Also, one examination required a time of a half year (Kopeck et al., 2004). Frequency was most ordinarily measured more than 1 year. Other follow-up periods included a half year (George 2002), 2 years (Hoy et al; 2010), 3 years (Waxman, R et al; 2000) and 5 years (Hestbaek et al., 2003). Four of the examinations constrained their concentration to first historically speaking scenes of low back pain (Mustard et al., 2005), while the Disability (Koley et al., 2010). In India, the vast majority of the low-wage aggregate individuals are occupied with physically requesting occupations which may expand the danger of low back torment and incapacity. Low back agony additionally influences the personal satisfaction (QOL) of the ladies themselves, as well as their families as well (Suthar & Kaushik, 2013).

In Indian, not very many examinations have been finished with respect to this. With this foundation, the present examination intended to survey the pervasiveness rest of studies measure all scenes (i.e., first-historically speaking and intermittent). The greater part of the examinations tallied the quantity of individuals with a scene of low back pain instead of the quantity of scenes. The 1 year frequency of individuals who have a first-historically speaking scene of low back pain extended from 6.3% to 15.4%, and the 1 year occurrence of individuals who have any scene of low back pain (i.e., first-since forever or intermittent) went from 1.5% to 36%. As these examinations did exclude rehash scenes in the time of intrigue, they are probably going to think little of scene occurrence; (Airaksinen et al., 2006).

Low back torment is torment, muscle strain, or solidness, confined underneath the costal edge or more the second rate gluteal folds, with or without alluded or radicular leg torment (sciatica). Low back torment is commonly named 'particular' and 'non-particular'. Particular LBP is caused by particular pathophysiological system though nonspecific

LBP is characterized as indications due to non-particular reason, i.e. LBP of obscure root. LBP is characterized as intense when continues under a month and a half, sub-intense between a month and a half and three months and constant when keeps going longer than 3 months. Roughly 90% of all LBP patients have non-particular causes (Airaksinen et al., 2006).

After a period in which low back pain (LBP) was considered absolutely a mechanical pain, all things considered a bio psychosocial graph for back pain has been submitted. Sociocultural, financial and work related variables are incorporated into imperative psychosocial factors. Issues in the individual are identified with work for instance, poor occupation fulfillment or the report of mental worry at work, are identified with questioning and depiction of low back pain have established by various specialists. Probability of detailing and view of LBP may likewise influenced by culture (Skovron et al., 1994).

Promote investigation of these inquiries requires a socially and monetarily various populace. Back pain amid pregnancy is a typical condition frequently viewed as an unavoidable disadvantage of an ordinary pregnancy. A few examinations have demonstrated that no less than half of ladies encounter some sort of back pain amid some time of pregnancy. Every single pregnant lady from an all-around characterized area (the focal region of the nation of Oster Gotland, Sweden) going to antenatal centers over a time of seven months were met with respect to low back pain amid pregnancy. Of 862 ladies who addressed the polls, about half built up some level of low back pain. Seventy-nine ladies who were not able proceed with their work in view of serious low back pain were alluded to an orthopedic specialist for an orthoneurologic examination. The most widely recognized explanation behind extreme low back pain was brokenness of sacroiliac joints. Physically strenuous work and past low back pain were factors related with an expanded danger of growing low back pain and sacroiliac brokenness amid pregnancy. Studies have demonstrated that lumbar spine malady can contrarily influences the QOL and it can majorly affect every day capacities, for example, dressing oneself, standing, sitting, strolling, and lifting which can extremely meddle with an extensive variety of life's exercises (Clariborn et al., 2002 & Liddle et al., 2004).

Actually, pain and the degree, to which the patients trust that they are crippled by it, is an effective factor in the degree of their QOL disabilities (Turner et al., 2000). Biomechanical factors impact pain, however psychosocial factors have a greater amount of an effect on the improvement and length of handicap (Kovacs et al., 2004). Low back pain likewise limits versatility, meddles with ordinary working and results in long lasting pain and perpetual of low back pain, and handicap and QOL among ladies with low back pain in country Puducherry, India.

Despite many studies in different countries however, little will try to know about the quality of life and its relationship to LBP patient's attended at CRP Musculoskeletal unit. This study aimed to investigate on quality of life in LBP patients and examine whether there will any difference in quality of life in patients with different intensity of low back pain.

## **1.2 Rationale**

LBP is a most common musculoskeletal disorder which is affected by the QOL of an individual. In CRP musculoskeletal unit, a large number of people attend to get treatment of LBP. Among them major percentage of patients are women, but the aim of treatment does not succeed always due to patients quality of life. As a physiotherapy final year student my concentration centered to evaluate the quality of life of women with LBP.

The word Quality of life need to be explained here because the low back pain largely depends on the patients day to day life activities. Specially women, who are mostly suffered from LBP due to their daily abnormal postural activities. LBP affects patients physical functioning, social functioning, general health as well as mental health also. Mostly these things can change the course of treatment positively. After this study physiotherapist get an idea which level of QOL patients of women will have LBP. This idea helps to set up treatment plan according to patient's needs. We can provide better treatment as well as essential advice to the patients of women. As a health professional it improves our knowledge. By this study patients also benefited by gaining knowledge about her condition and gain some information about their life style which are responsible or not for their physical functioning, social functioning, general health, and mental health.

There is no alternative to do research as a professional in order to develop the profession. However, for fulfillment the 4th year of B.Sc. in Physiotherapy I have to carry out a research of my interest which accomplish the professional body of interest.

### **1.3 Research Question**

What is the quality of life of women with low back pain attending at musculoskeletal unit in CRP?



## **1.4 Objectives**

### **1.4.1 General objective**

To determine the quality of life of women with low back pain attending at CRP musculoskeletal unit.

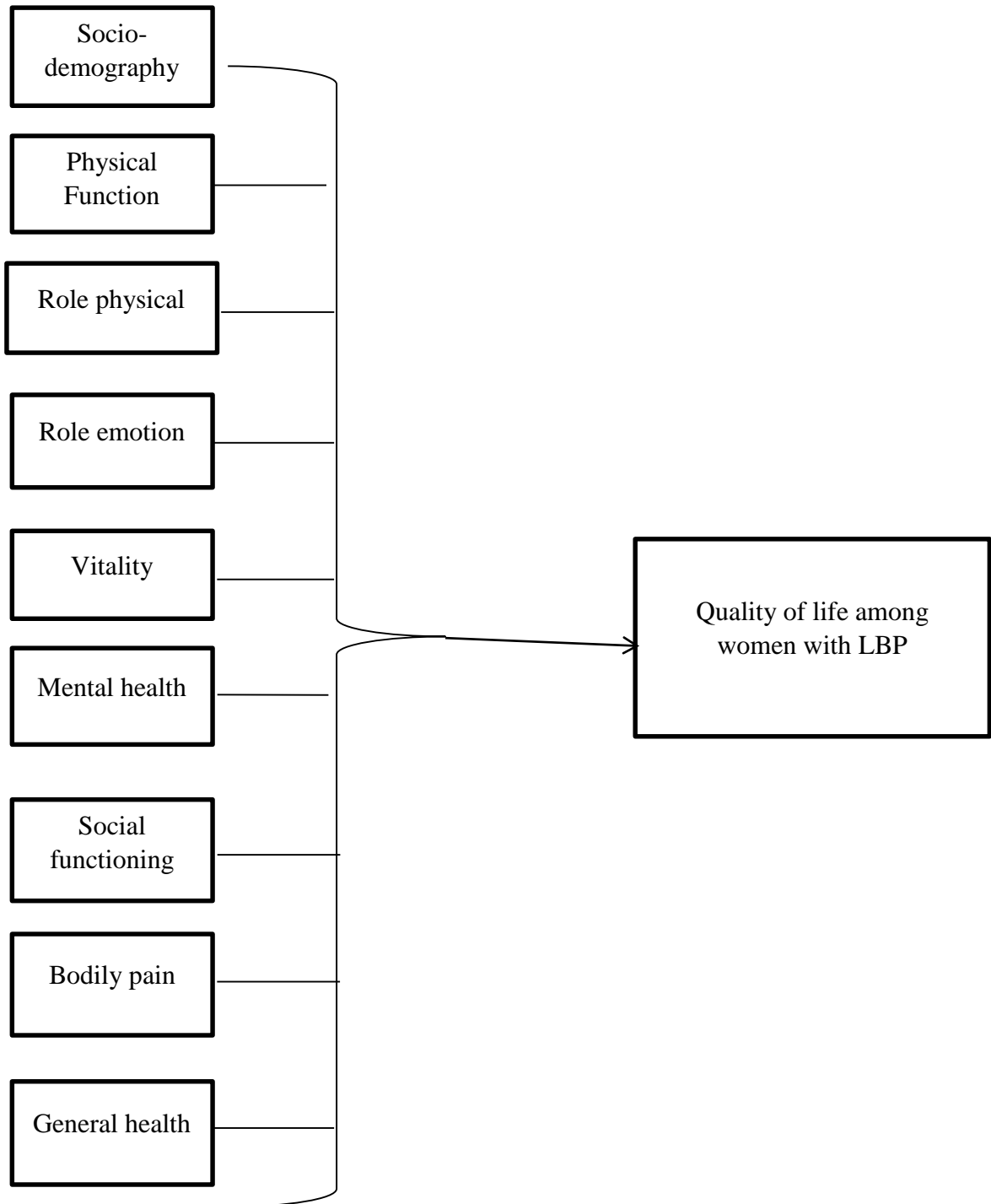
### **1.4.2 Specific objectives**

- To find out the socio-demographic (age, residential area and occupation etc.) information of women.
- To identify the level of physical functioning, physical role, bodily pain, general health, vitality, social functioning, role emotional, mental health of women with LBP.

## 1.5 Conceptual framework:

### Independent variables

### Dependent variable



## **1.6 Operational definition**

**Quality of life:** The general well-being of women in individuals and societies.

**Low back pain:** Feeling of pain in the lumber region with or without radiation to the lower limb.

Low back pain stands to be the absolute most basic explanation behind a visit to a general specialist and is likewise the best reason for work related inability. It is from mechanical inception is distinguished by the nearness or nonappearance of indications and signs with various stances or developments. Mechanical LBP is regularly treated moderately with exercise based recuperation (Kumar, 2011). LBP is a noteworthy medical problem with critical financial ramifications in most Western nations. Many types of treatment have been proposed and examined previously, with practice being a usually endorsed mediation. Inside partnered wellbeing, specifically physiotherapy, there has been a developing development that perceives the part of the McKenzie strategy in treating LBP (Duns portage et al., 2011). It is a typical and incapacitating issue in western culture. The administration of LBP contains a scope of various mediation procedures including surgery, sedate treatment, and non-restorative intercessions (Middelkoop et al., 2011).

Low back pain is pain, muscle strain, or solidness, restricted underneath the costal edge or more the mediocre gluteal folds, with or without alluded or radicular leg pain (sciatica). For this outline, intense low back pain is characterized as pain that holds on for under 12 weeks. Non-particular low back pain is a unimportant term however is utilized by a few people to name back pain that isn't inferable from an unmistakable pathology or side effect design, (for example, contamination, tumor, osteoporosis, rheumatoid joint pain, break, or irritation). This outline avoids intense low back pain with indications or signs at introduction that recommend a particular fundamental patho-anatomical condition. Concentrates exclusively of sciatica (lumbosacral radicular disorder), herniated circles, or both were likewise avoided. Unless generally expressed, individuals incorporated into this outline had another scene of intense low back pain (i.e., of <12 weeks' length). Some included RCTs additionally subdivided intense low back pain of under 12 weeks' length into intense (<6 weeks' term) or sub-intense, 6– 12 weeks' span (McIntosh and Hall, 2015).

Intense low back pain might act naturally restricting, albeit intense low back pain has a high repeat rate with manifestations repeating in half to 80% of individuals inside 1 year; 1 year after the underlying scene, upwards of 33% of individuals still persevere through direct force torment and 15% experience extreme pain. The more extended the time of wiped out leave, the more improbable come back to work moves toward becoming (Jarvik et al., 2002).

The low back design comprises of vertebral bodies (the bones of the spine), vertebral plates (pads between the bones), ligament (lines the bones that interface with different bones), strong structures encompassing the spine, for example, muscles, ligaments (associating muscle to bone), tendons (associating unresolved issue) (Integrative torment medication, 2012). Various alternatives exist for patients with recalcitrant back torment and degenerative disc disease (DDD). Entomb body combination procedures misuse the mechanical points of interest of the circle space anteriorly, including an extensive combination bed, amazing blood supply and unite pressure (Truumees et al., 2008).

The event of LBP has been connected with different variations from the norm of the spine on MRI, confirm being most grounded for circle herniation (projection or more terrible), nerve root deviation/pressure, plate degeneration and high intensity zone (HIZ). In any case, each of these irregularities can be found without indications, and numerous patients with back protests don't show any self-evident pathology on MRI (Sham stream et al., 2011).

Low back pain (LBP) is a noteworthy medical problem with critical financial ramifications in numerous Western nations. Predominance reports differ impressively, yet it has been evaluated that 60%– 80% of individuals will encounter a scene of LBP amid their lives. With expanding costs, both as far as medicinal services and misfortune in efficiency, there is a reasonable requirement for powerful and opportune administration which will guarantee recuperation and keep away from chronicity. A few treatment systems, for example, joint activation and control, delicate tissue rub methods, electrotherapy, needle therapy, and footing, are as of now used in clinical practice by a scope of professionals, with shifting degrees of viability. Activities are regularly recommended for LBP by physiotherapists, however just appear to be upheld as a

mediation by confirm for patients with ceaseless LBP. While current confirmation bolsters the part of activity for LBP, clinical use of this mediation is shifted, particularly regarding exercise medicine. Center steadiness practices are especially well known in the clinical setting and have been broadly explored. Generally, arrangement of LBP, especially for investigate purposes, has been dictated by the chronicity of the condition, e.g., "intense", "sub-intense", and "unending". While this grouping considers side effect length, it neglects to catch the complexities related with a patient's genuine manifestations and the reaction of their indications to development. Around the world, best practice clinical rules for the administration of LBP collectively distinguish practice as a key treatment choice, especially for incessant LBP. In spite of this, LBP keeps on being ineffectively overseen over the social insurance range (Duns portage et al., 2011).

Late methodical audits neglected to set up causality between numerous word related exercises, for example, standing, strolling, lifting, pushing/pulling, and conveying, and LBP. Among chance variables, we were especially inspired by those exercises natural in the Asian way of life, for example, crouching and sitting on the floor without back help, which have not been already inspected. It is seen that the hours committed to profound crouching and sitting on the floor without back help at a youthful age were significantly connected with LBP (Cho et al., 2012).

Notably, hunching down and sitting on the floor were related with LBP as well as with the nearness of radio graphical degenerative change in the timber spine. Among radio graphical highlights broke down, joint space narrowing and osteophytes were altogether connected with LBP and the quality of the affiliation expanded with expanding seriousness of plate space narrowing. Numerous past examinations proposed a relationship between plate space narrowing and LBP (de schepper et al., 2010).

The component connecting circle space narrowing with LBP might be identified with the expulsion of circle material, bringing about expanded weight on spinal nerve roots, lessening in physical space between the vertebra, change in spine biomechanics, and expanding weight on the influenced nociception (Pye et al., 2004). In this examination the emphasis was on the connection between personal satisfaction and LBP. The discoveries demonstrated that there were solid contrasts between two gatherings as to the

physical working. This shows low back agony can cause handicap and numerous restrictions for patients who experience the ill effects of extreme LBP. Additionally there were astounding contrasts between two gatherings in different measurements of personal satisfaction, for example, part physical, essentialness, emotional well-being and general wellbeing. Maybe this implies LBP can fundamentally influence these measurements of personal satisfaction. To have a superior comprehension of the connection between personal satisfaction and LBP there is have to do ponders that look at this relationship while considering patients' qualities and wellbeing practices (Tavafian et al., 2005).

Mechanical low back pain (MLBP) is a noteworthy general medical issue (Phaner et al., 2009). The present standard care procedure includes a mix of medication based and non-sedate treatment. The utilization of traditionalist orthopedic prop treatment is liable to wrangle about (Phaner et al., 2009). Patients torment was appointed an instruments construct grouping situated in light of experienced clinical judgment and Clinicians at that point finished a clinical criteria agenda indicating the nearness or nonappearance of different clinical criteria. A twofold strategic relapse examination with Bayesian model averaging distinguished a group of two side effects and one sign, including: Pain alluded in a dermatome or cutaneous appropriation, History of nerve damage, pathology or mechanical trade off and 'Torment/side effect incitement with mechanical/development tests (Smart et al., 2012).

A relapse examination distinguished a bunch of seven clinical criteria, including: 'Agony confined to the range of damage or brokenness, Clear, proportionate mechanical or anatomical nature to irritating and facilitating factors, Usually irregular and sharp with development or mechanical incitement; might be a more steady dull hurt or throb very still, and the nonattendance of Pain in relationship with different dysesthesias, Night torment or aggravated rest, Antalgic stances or development examples and Pain differently portrayed as copying, shooting, sharp or electric-stun like (Smart et al., 2012). Consistent torment, torment that wakes, and solidness subsequent to resting were by and large considered as direct markers of MLBP, while irregular agony amid the day, torment that grows later in the day, torment on remaining for some time, with lifting, twisting forward a bit, on trunk flexion or augmentation, doing a sit up, when driving long

separations, escaping a seat, and torment on monotonous bowing, running, hacking or wheezing were all for the most part considered as direct pointers of MLBP (Walker et al., 2009).

Indications of low back pain rely upon the reason. If there should be an occurrence of back sprain or strain Muscle fits, cramping, and firmness, Pain in the back and posterior. Certain developments exacerbate it, and resting improves it feel. The most exceedingly bad pain normally keeps going 48 to 72 hours and might be trailed by days or long stretches of less serious pain. If there should arise an occurrence of Nerve-root weight if leg torment stretches out beneath the knee, it will probably be because of weight on a nerve than to a muscle issue. Most generally, it's a torment that begins in the butt cheek and goes down the back of the leg to the extent the lower leg or foot. If there should be an occurrence of nerve-related issues, for example, shivering, deadness, or shortcoming in one leg or in the foot, bring down leg, or the two legs. Shivering may start in the butt cheek and stretch out to the lower leg or foot. Shortcoming or deadness in the two legs, and loss of bladder as well as gut control, are side effects of cauda-equina disorder, which requires quick restorative consideration (Back Pain Health Center, 2005).Diagnosis comprises of physical examination and research facility examination. The physical examination incorporates perception and estimations, palpation for delicacy and joint arrangement and check beats in the legs, profound ligament reflex tests, sensation tests, development tests, straight leg test, muscle quality tests (neurologic testing), general stomach, pelvic, rectal, and leg exams (Back Pain Health Center, 2010).

The present examination uncovered that huge relationships were found among the low back pain, QOL, and incapacity. These discoveries were bolstered by an investigation led by (Darzinaghibi et al., 2012)] which exhibited that there was a huge connection between's all parts of QOL and practical incapacity aside from condition wellbeing. Connection between's utilitarian incapacity and all parts of QOL was negative. The investigation inferred that higher utilitarian inability can prompt lower QOL and the other way around. The power of the low back pain may have impacted by the review inclination of ladies. Also, there might be subjective predisposition while surveying the inability and QOL. It was reasoned that commonness was similarly more than different



investigations in India. Albeit direct incapacity was more among those with low back pain, general QOL was great. Handicap mediation measures may help in decreasing the effect of low back pain and enhancing the QOL among ladies with low back pain (Ahdhi et al., 2016).

The vast majority of the social and socio-word related elements have been generally considered and were found not to influence the result of LBP autonomously in essential care settings. Just remuneration issues have in some cases been observed to be connected with LBP result, yet the physical requests of employments were once in a while considered and could be a noteworthy frustrating component. A couple of concentrates presumed that despondency and mental pain affect on LBP advancement, however this may include just a couple of individuals and would require expansive companions to be illustrated. The other mental variables considered (nervousness and somatization) appear not to be prognostic elements. Inactive adapting methodologies and dread shirking convictions were observed to be prescient of persevering handicap as opposed to of torment advancement in half of the investigations, particularly at the beginning periods of development (first couple of months). Self-saw general wellbeing has regularly been connected to LBP result, yet such a scale consolidates substantial and psychosocial components, and co-morbidities may go about as frustrating factors. At last, patients' and think suppliers' judgments about the imaginable advancement of a scene of LBP appeared to have the most effective and autonomous prescient power (Ramond et al., 2011).

Low back pain is once in a while deadly however significantly influences working, so there are critical ramifications for the personal satisfaction of these patients. Past reports have just demonstrated the significance of both physical action impediment and mental worry in patients with LBP. The patients with low back pain (LBP) experience the ill effects of physical uneasiness, as well as useful confinement that may cause incapacity and meddle with their personal satisfaction. This issue can't be overemphasized due to the expanding number and cost of the repaid cases with LBP as of late, and its financial effect is considerable as far as its commitment to add up to wellbeing costs and back-related inability costs forced on managers and government protection programs. Therefore, it is vital to survey the handicap status and personal satisfaction in people with

LBP to portray the characteristic history of such condition, evaluate treatment adequacy, and create suitable wellbeing and incapacity strategy. Wellbeing related personal satisfaction measures may likewise be utilized to separate among respondents at a point in time, anticipate future results or occasions, and measure changes after some time (Horng et al., 2005).

Low back pain (LBP) is a to a great degree basic medical issue. Until 10 years prior, it was to a great extent thought of as an issue restricted to Western nations; be that as it may, since that time an expanding measure of research has exhibited that low back agony is additionally a noteworthy issue in low-and center wage nations. Low back pain is the main source of movement confinement and work nonappearance all through a significant part of the world, and it causes an incredible monetary weight on people, groups and governments. Low back pain is one of the real reasons for action confinement and work nonappearance all through a significant part of the world. It is the second most basic purpose behind visits to doctors. Relationship amongst LBP and 'bowing and winding development' was factually huge .The examination uncovered a high predominance of back pain in country territory. Females were impressively more sufferers from back torment. Spinal pain was discovered more dominating in center and more established age gathering. Multi-fixated think about in future on bigger populace may be required in future to clarify the discoveries. (Khan et al., 2014).

Low-back pain is a noteworthy wellbeing and practical issue which influences expansive populaces around the globe. Specifically, unending low-back pain (CLBP) is a noteworthy reason for medicinal costs, work truancy, and handicap. Current administration of CLBP incorporates a scope of various mediation methodologies, for example, prescription, work out, and behavioral pain. The principle supposition fundamental a behavioral treatment approach is that pain and its subsequent incapacity are influenced by substantial pathology, as well as by mental and social factors also. Along these lines, CLBP isn't just a physical issue, however may likewise be influenced by the patient's states of mind and convictions, mental trouble, and sickness conduct. Subsequently, the objective of behavioral treatment is to modify maladaptive musings, sentiments and practices and also useless tangible wonders, and there by the experience

of pain. By and large, three behavioral treatment methodologies can be recognized: operant, intellectual, and respondent. Each of these spotlights on altering one of the three reaction frameworks which describe passionate encounters: conduct, discernment, and physiological reactivity. Subjective treatment expects to recognize and change destructive comprehensions which patients may have with respect to their torment and incapacity. Patients with CLBP regularly have maladaptive musings, emotions, and convictions, which have a vital part as far as they can tell of low-back agony. It is recommended that convictions about the significance of torment and assumptions with respect to control over torment can be straightforwardly modified utilizing psychological rebuilding strategy, for example, symbolism and consideration redirection. Perceptions can likewise be by implication modified through training and different medications, so psychological treatment is regularly utilized as a major aspect of a 'bundle' approach of behavioral treatment. Respondent treatment intends to change the physiological reaction framework to torment, through decrease of solid pressure. The hypothetical premise of this approach is the supposition of a torment strain cycle, where torment is seen as both a reason and a consequence of strong pressure. Respondent treatment endeavors to interfere with this cycle by utilizing a strain incongruent response, for example, unwinding. Electromyography (EMG) biofeedback, dynamic unwinding, and connected unwinding are every now and again used to diminish the expected solid pressure, mitigate tension, and thusly torment (Henscheke et al., 2010).

Low back pain influences numerous people. It effectsly affects prosperity and is regularly the reason for noteworthy physical and mental wellbeing hindrances. Low back pain additionally influences work execution and social duties, for example, family life, and is progressively a central point in raising medicinal services costs. A worldwide audit of the predominance of low back pain in the grown-up all inclusive community has demonstrated its pervasiveness to be roughly 12%, with a one month commonness of 23%, a one year predominance of 38%, and life time commonness of around 40%. Moreover as the populace ages over the coming decades, the quantity of people with low back pain resembles to increment significantly ;( Manchikanti et al., 2014). This thorough audit is under taken to evaluate the expanding predominance of low back pain and the impact of comorbid factors, alongside heightening expenses. In view of the accessible

writing, it creates the impression that the pervasiveness of low back torment keeps on expanding, alongside various modalities and their application in overseeing low back pain. Comorbid factors with mental disarranges and the numerous restorative issues, including heftiness, smoking, absence of activity, expanding age, and way of life factors are considered as hazard factors for low back pain. Despite the fact that it has been affirmed that low back pain settle in around 80% to 90% of patients in around a month and a half, regardless of the organization or sort of treatment, with just 5% to 10% of patients creating tireless back pain, this idea has been often addressed as the condition tends to backslide and most patients encounter different scenes yeas after the underlying assault (Manchikanti et al., 2014).

Personal satisfaction is a model of incorporated goal and subjective markers. It is an expansive scope of life spaces, and individual esteems. It assesses worries that remotely inferred standards ought not to be connected without reference to singular contrasts. Elements that assume a part in personal satisfaction change as indicated by individual inclinations, however they regularly incorporate monetary security, work fulfillment, family life, wellbeing and security (WHO, 2013).

The personal satisfaction incorporates the accompanying measurement: wellbeing (physical, passionate, intellectual), social (people impression of the relational connections and social part in their life), individual attributes (confidence, coping style, feeling of control (potential right, human right, condition) and financial status (Soh et al., 2011).the investigation of personal satisfaction is an examination of impacts upon the decency and importance of life and also individuals joy and prosperity.

The abbreviated From-36 wellbeing overview (SF-36) is a multipurpose wellbeing review which contains 36 questions. The SF-36 is nonexclusive measure of wellbeing status that objective's the particular age, malady or treatment gathering. It is intended to give a worldwide estimation of wellbeing related personal satisfaction. It contains eight scales (Caliborne et al., 2002). The eight enter related wellbeing measurements are: physical working, part confinements, substantial agony, general wellbeing, essentialness (vitality/weakness), social working, part enthusiastic, psychological well-being (Carrone et al., 2010).

SF-36 physical segment outline: the physical segment summery measure of SF36 four measurement: physical working, part restriction physical, body torment and general wellbeing. These four individuals“ spaces reflect physical capacity and prosperity. A low score demonstrate poor general wellbeing, extreme body torment and incessant delicacy and impediment of self-mind, physical versatility, and social connection and part exercises. A high score shows that general wellbeing is incredible, no physical confinement, inabilities, or diminishment in part exercises (Sohey et al., 2011).

### **3.1 Study design**

The purpose of the study was to find out the quality of life of women with low back pain attended at CRP musculoskeletal unit. To fulfill the aims and objectives of this research the researcher had chosen the cross sectional study.

### **3.2 Study area**

To complete this research the researcher had selected the study area at the Physiotherapy Department of Musculoskeletal Unit in the Centre for the Rehabilitation of the Paralyzed (CRP), Savar for data collection.

### **3.3 Study population**

All the women with low back pain according to inclusion & exclusion criteria, who were attending at physiotherapy department of musculoskeletal unit in CRP during research period was considered as the study population.

### **3.4 Sampling procedure**

Purposive sampling is a type of non-probability sampling in which the researcher consciously selects specific elements or subjects for inclusion in a study in order to ensure that the elements were certain characteristics relevant to the study. It was selected some criteria and according to those criteria participants were selected.

### 3.4.1 Inclusion criteria of the study

- Only female were included.
- Voluntary participation.
- First conducting patients.
- Age between 25-50 years old.

### 3.4.2 Exclusion criteria of the study

- Physically and psychologically unstable patient.
- Pregnant women with low back pain.
- Patients who were not-interested.

### 3.5 Sample size

According to inclusion and exclusion criteria the researcher had selected 60 probable samples for this research.

The equation of sample size calculation are given below-

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

Here,

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

$$p = 0.42 \text{ (Here, } p = \text{Prevalence and } p = 42\%)$$

$$q = 1-p$$

$$= 1-0.42$$

$$= 0.58$$

$$d = 0.05$$

The actual sample size for this study was calculated as 374, but as the study performed as a part of academic research project and there were some limitations. So that 60 low back pain women patients were taken as the sample for this study.

### **3.6 Data collection tools**

The researcher established aims and objectives of this research using measurement tools, consent paper, socio-demographic informative questionnaire and specific questionnaire SF-36 for collection of data.

#### **3.6.1 Measurement tools**

A socio-demographical informative questionnaire will develop by researcher to collect data. A Standardized questionnaire/tool named the Short Form-36 (SF-36) is a 36 item questionnaire which measures Quality of Life (QOL) across eight domains.

#### **3.6.2 SF-36**

The Short Form-36 (SF-36) is a 36 item questionnaire which measures Quality of Life (QOL) across eight domains, which are both physically and emotionally based and it is a structured, self-report questionnaire (Jenkinson et al., 2014).The eight domains that the SF36 measures are as follows: physical functioning; role limitations due to physical health; role limitations due to emotional problems; energy/fatigue; emotional well-being; social functioning; pain; general health. It is the most widely used measures to predict health-related quality of life and it also help in showing the difference between subjects with variety of chronic conditions and between subjects with different level of severity of the same disease.

### **3.7 Data collection procedure**

Data was collected through face to face interview with women participants using SF-36 V2 questionnaire.

### **3.8 Data Analysis**

Data was analyzed by Microsoft office Excel 2010 using a SPSS 20 version software program. Data was represented by descriptive statistics and inferential statistics. Descriptive statistics had fulfilled the research project with Bar chart, Pie chart and Percentage document. In inferential statistics Chi Square test used to show association between variables.



### 3.8.1 Chi Square test

Chi square  $\chi^2$  test is a nonparametric test of statistical significance for bivariate tabular analysis with a contingency table. Chi square helps us analyze data that come in the form of counts. This test can be applied to nominal or categorical data. The most common application for chi square is to determine whether or not a significant difference exists between the observed counts of cases falling into each category and the expected counts based on the null hypothesis. It is often used to compare two proportions.

### 3.8.2 Situations for Chi Square test

- Test of association between two events in binomial samples.
- Test of association between two events in multinomial samples.

### 3.8.3 Assumptions for Chi Square test

- The data must be in the form of frequencies counted in each of a set of categories.
- The total numbers observed must exceed 20.
- The expected frequency in any one fraction must not normally be less than 5.

All the observations must be independent of each other. In other words, one observation must not have an influence upon another observations

### 3.8.4 Calculation of ( $\chi^2$ ) Statistic

Chi square is the sum of the squared differences between observed (O) and the expected (E) data divided by the expected (E) data in all possible categories.

In contingency table problems, writer creates an index that computes for each outcome cell,

$$\frac{(\text{Observed count} - \text{Expected count})^2}{\text{Expected count}}$$

If O stands for observed count and E for expected count, the mathematical notation the formula looks like this:

$$\chi^2 = \sum_{i=1}^k \frac{(O-E)^2}{E}$$

## **Validity**

Validity encompasses the entire experimental concept and establishes whether the results obtained meet all of the requirements of the scientific research method. In addition, validity is the extent to which a test measures what it claims to measure. It is vital for a test to be valid in order for the results to be accurately applied and interpreted. Validity is concerned with the accuracy of scientific findings.

## **Reliability**

The idea behind reliability is that any significant results must be more than a one-off finding and be inherently repeatable. Reliability refers to the consistency of a measure. A test is considered reliable if we get the same result repeatedly.

## **Reliability and Validity of SF-36**

SF-36 is the most useful scale for measurement of Quality of life or health status and wellbeing of a person. This is also translated in Bangla by linguistic for better understanding of a person. The SF-36 was best correlated with the Expanded Disability Status Scale (EDSS) and the Ambulation Index as a physical functioning scale. Quality of life of survivors also detected by this Questionnaire Quality of life of mothers of children with cerebral palsy and this study also use this Questionnaire.

### **3.9 Ethical Consideration**

A research proposal was submitted to local ethical Institutional Review Board (IRB) of Bangladesh Health Professions Institute (BHPI) for being approval. At first was applying for official permission for the study from the head of the Physiotherapy Department of CRP. Then the head of the Physiotherapy Department of CRP permitted to collect data at musculoskeletal department of CRP, Savar. World Health Organization (WHO) and Bangladesh Medical Research Council (BMRC) guideline were followed. The IRB checked the proposal and granted the proposal then the investigator started the study.

The ethical consideration was making sure by an informed consent letter to the participant. Consent was obtained by providing each participant a clear description of the study purpose, the procedure involves in the study and also informing them that if they wish they can withdraw themselves any time from the study. Participants were explained about her role in the study and it was explained that there is no direct benefit from the study but in future, cases like these may be benefited from it. Participants were also advised that they are free to decline answering any questions during interview. The necessary information had been kept secure place to also ensure confidentiality. They were also assured that it would not cause any harm. Then they signed the consent form.

The aims and objectives of this study was informed to the subjects verbally. The consent form was given to the subject and explained them. The subjects had the rights to withdraw themselves from the research at any times. It should be assured the participant that her name or address was not be used. The information of the subjects might be published in any normal presentation or seminar or writing but they would not be identified. The participant was informed or given notice that the research result will not be harmful for them. It will be kept confidential. Every participant has the right to discuss about her problem with senior authority.

In this study cross sectional study design was used to explore the quality of life among low back pain patients attended at CRP using SF-36 V2 questionnaire. Total number of participants was sixty.

#### 4.1: Age range

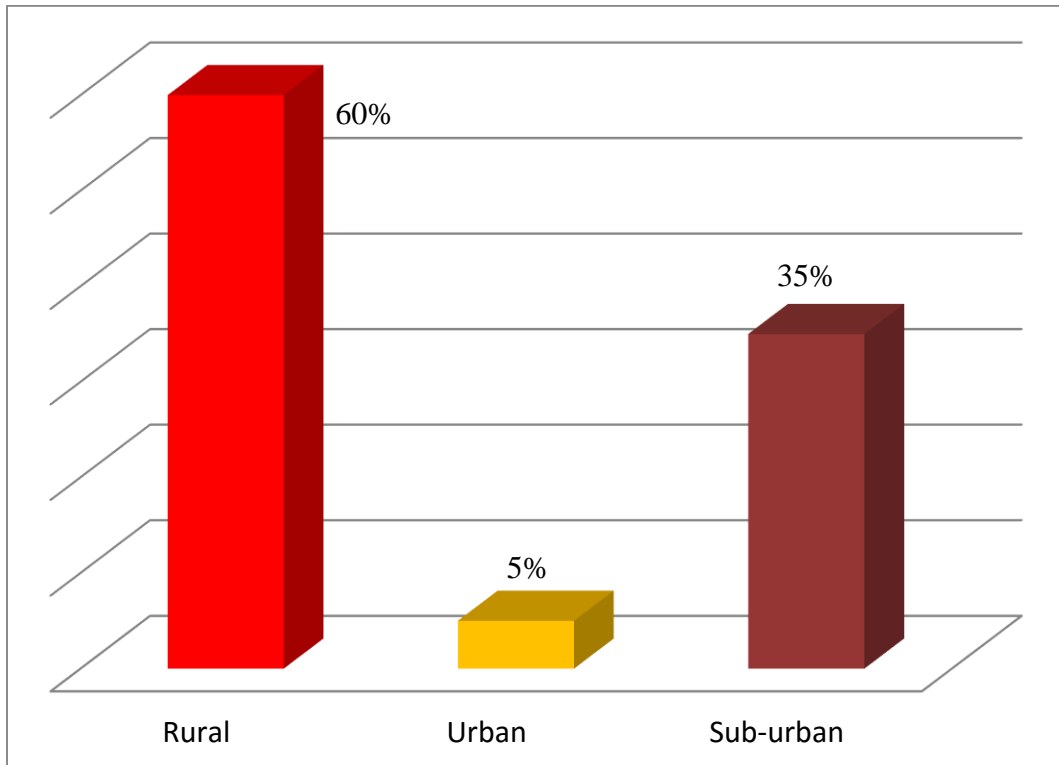
The study was conducted on 60 participants. Among the participants mean age of LBP patients was 39.30 years. Range is 25 with minimum age 25 years and maximum age 50 years. The standard deviation was 7.26.

**Table-4.1: Age range of the LBP participants**

	Total number	Range	Minimum age	Maximum age	Mean	Std. Deviation
Age of the participants	60	25	25	50	39.30	7.266

## 4.2 Residential area

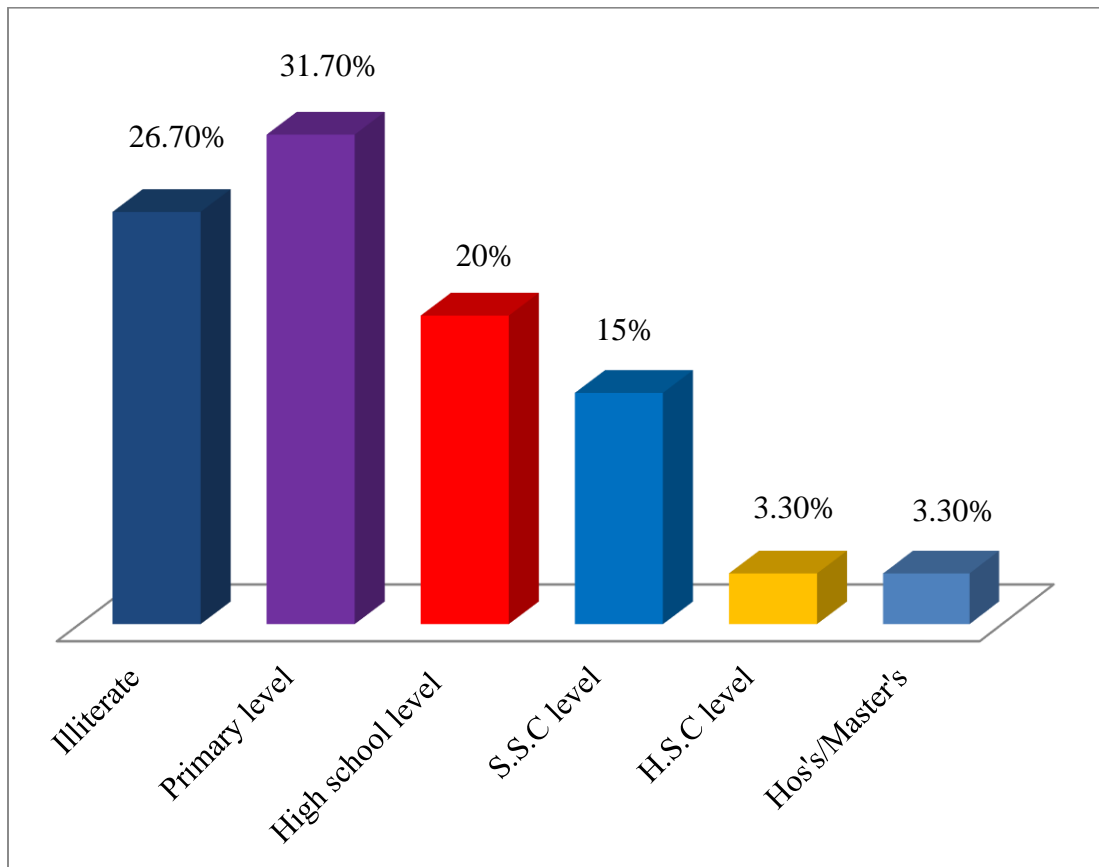
Among the participants, 60% (n=36) participants were living in rural, 5% (n=3) participants were living in urban area and 35% (n=21) participants were living in sub urban area.



**Figure-4.2: Residential area of the participants**

### 4.3 Educational level

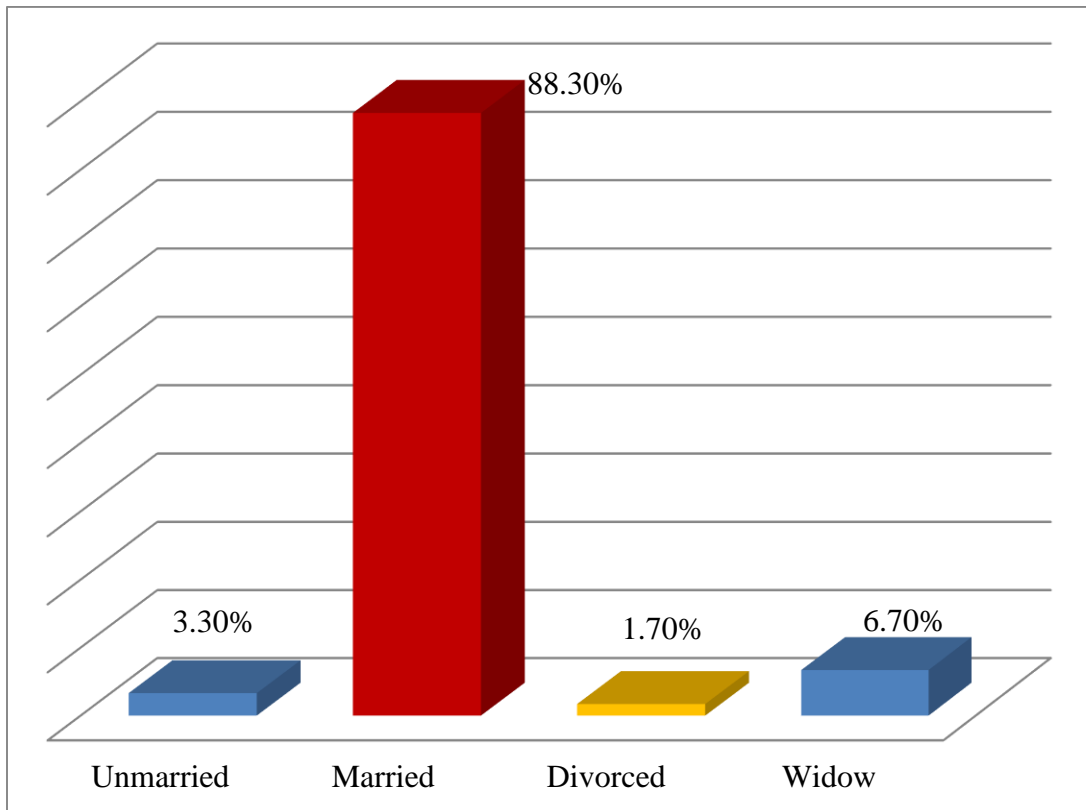
Out of 60 participants, about 26.7% (n=16) participants were illiterate, 31.7% (n=19) participants were primary level, 20% (n=12) participants were High school level, 15% (n=9) participants were S.S.C level, 3.3% (n=2) participants were H.S.C level, 3.3% (n=2) participants were Hon's/Masters.



**Figure-4.3: Educational level of the participants**

#### 4.4 Marital status

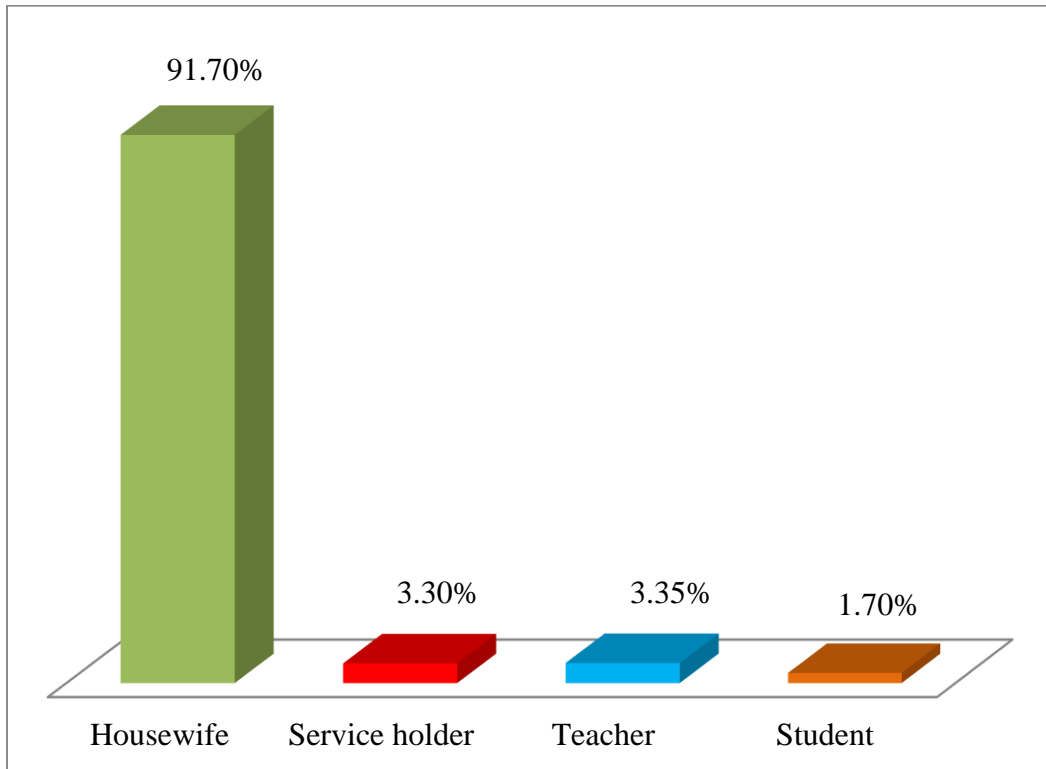
From this study among the participants, 3.3% (n=2) participants were unmarried, 88.3% (n=53) participants were married, 1.7% (n=1) participant was divorced and 6.7% (n=4) participants were widow.



**Figure-4.4: Marital status of the participants**

## 4.5 Occupation

In this research about 91.7% (n=55) participants were housewife, 3.3% (n=2) participants were service holder, 3.35% (n=2) participants were teacher and 1.7% (n=1) participant was student.



**Figure 4.5: Occupation of the participants**



#### 4.6: Economical status (yearly income)

In this study mean yearly income was 190733.33 Tk. Range was 780000 with minimum yearly income 70000 Tk. and maximum income was 850000 Tk. The standard deviation was  $\pm 124591.790$ .

**Table-4.6: Economical status (yearly income) of the participants**

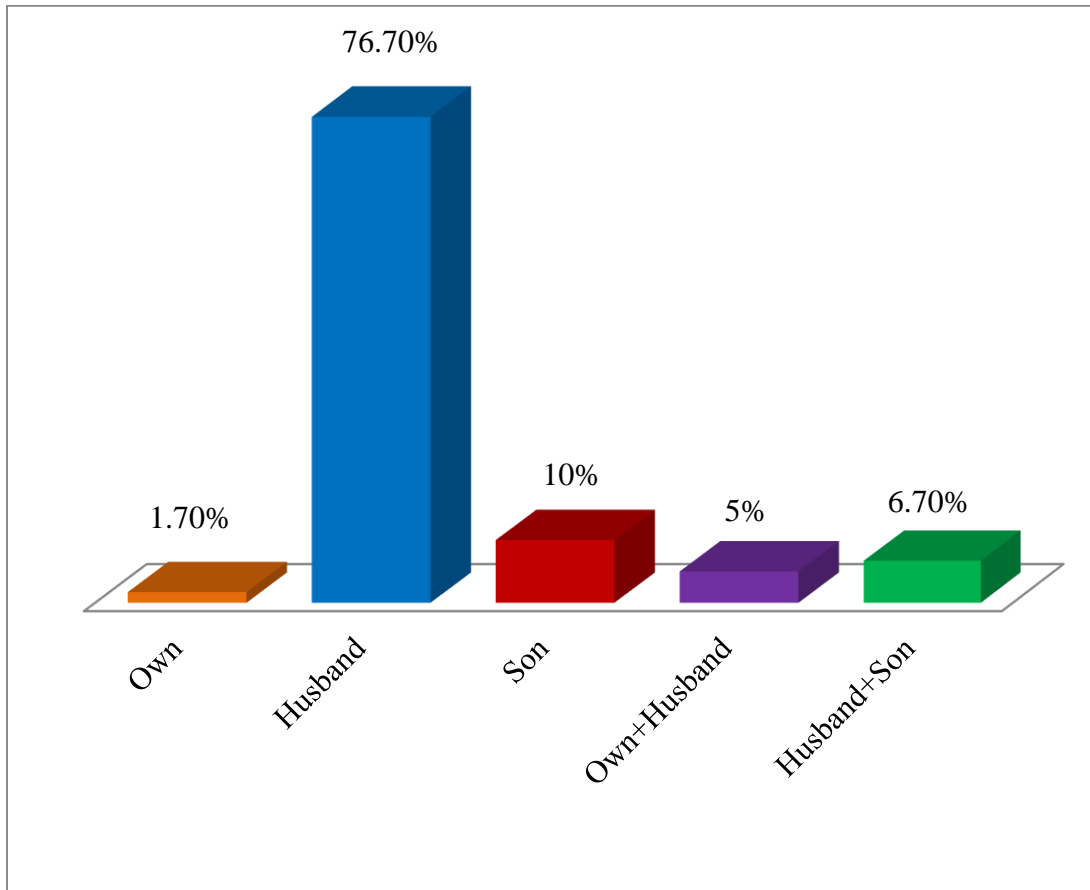
---

	No.	Range	Minimu m	Maximu m	Mean	Std. Deviation
Economic status( yearly income)	60	780000	70000	850000	190733.33	124591.790

---

#### 4.7 Income source

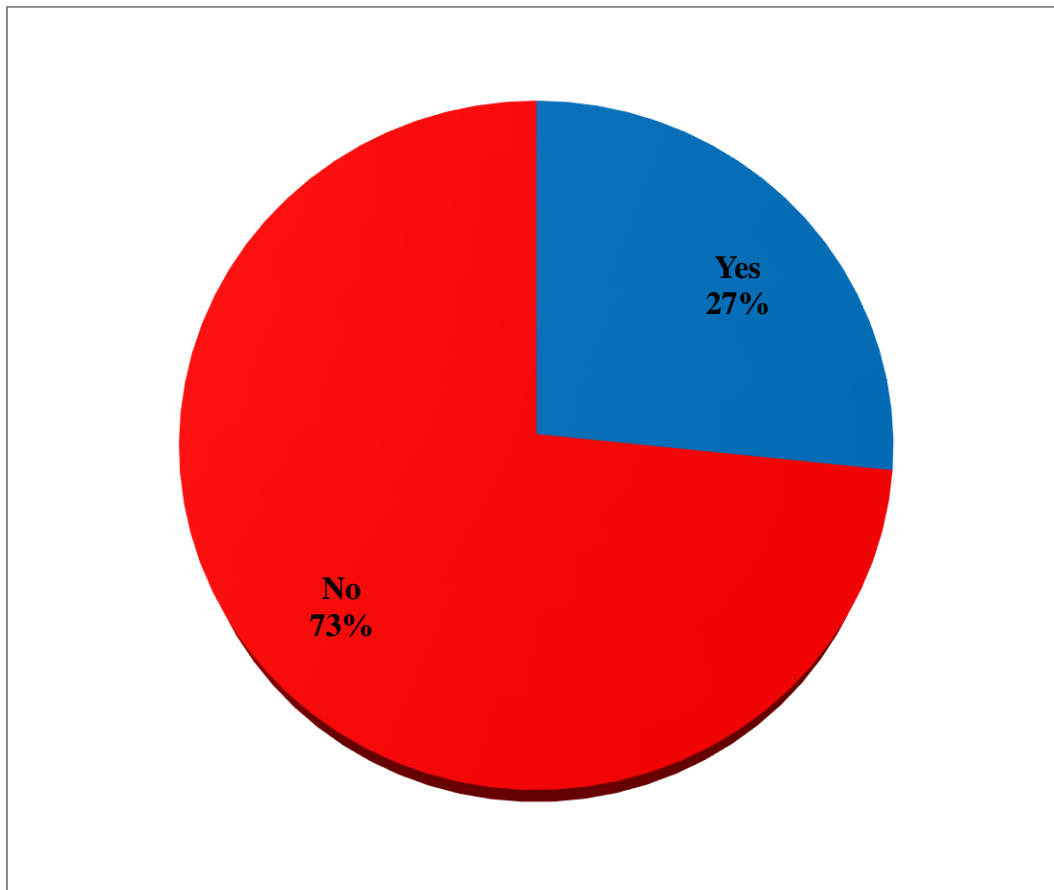
In this study 1.7% (n=1) participants income source was by own self, 76.7% (n=46) participants income source was Husband, 10% (n=6) participants income source was son, 5% (n=3) participants income source was own+ Husband, 6.7% (n=4) participants income source was Husband + Son.



**Figure-4.7: Income source of the participants**

#### 4.8 Any kind of physical trauma

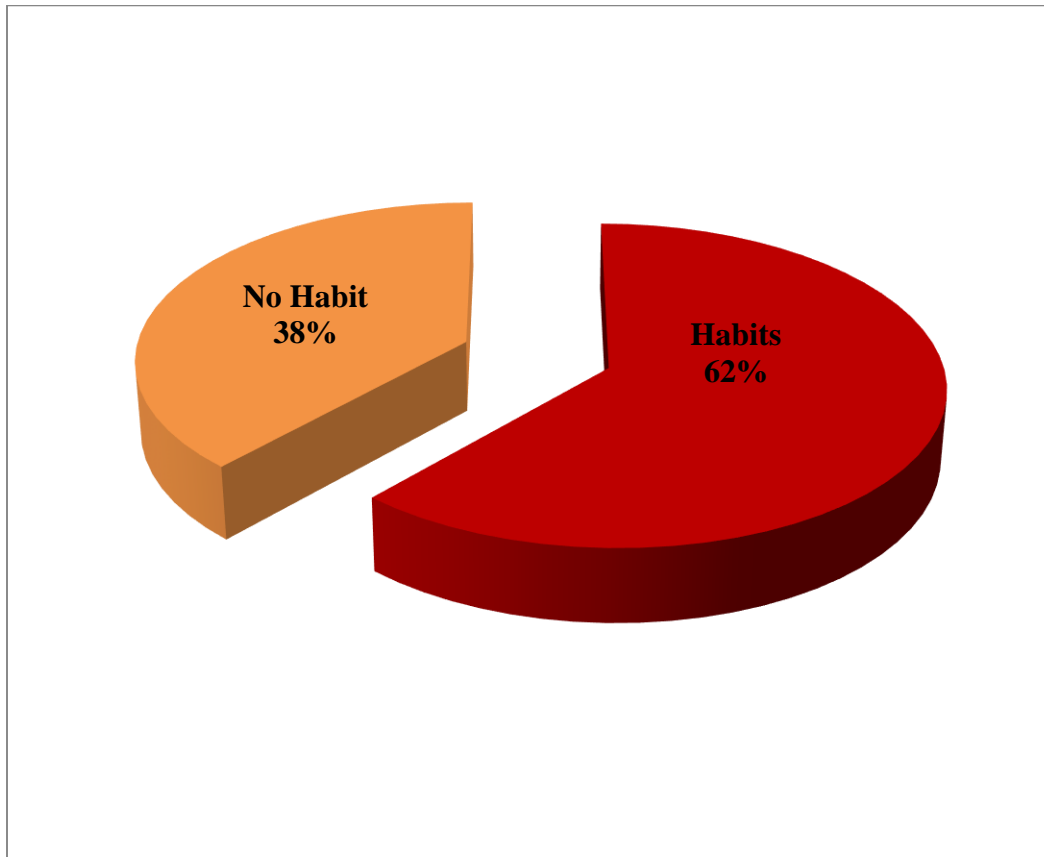
About 73.33% participants had no physical trauma and 26.67% participants had physical trauma.



**Figure-4.8: Physical trauma of the participants**

#### 4.9 Habits (Smoking, betel)

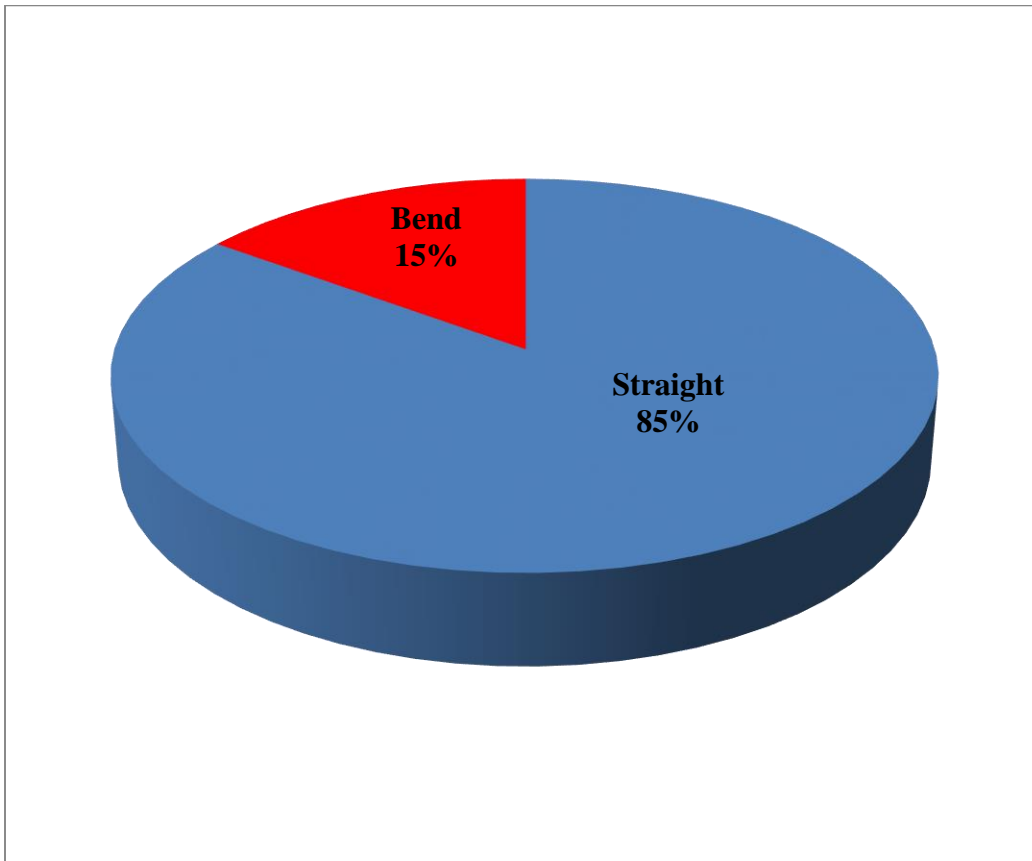
Among the participants 61.67% had no habits of smoking or betel and 38.33% participants had habits of smoking or betel.



**Figure-4.9: Habits of the participants**

#### 4.10 Walking Nature

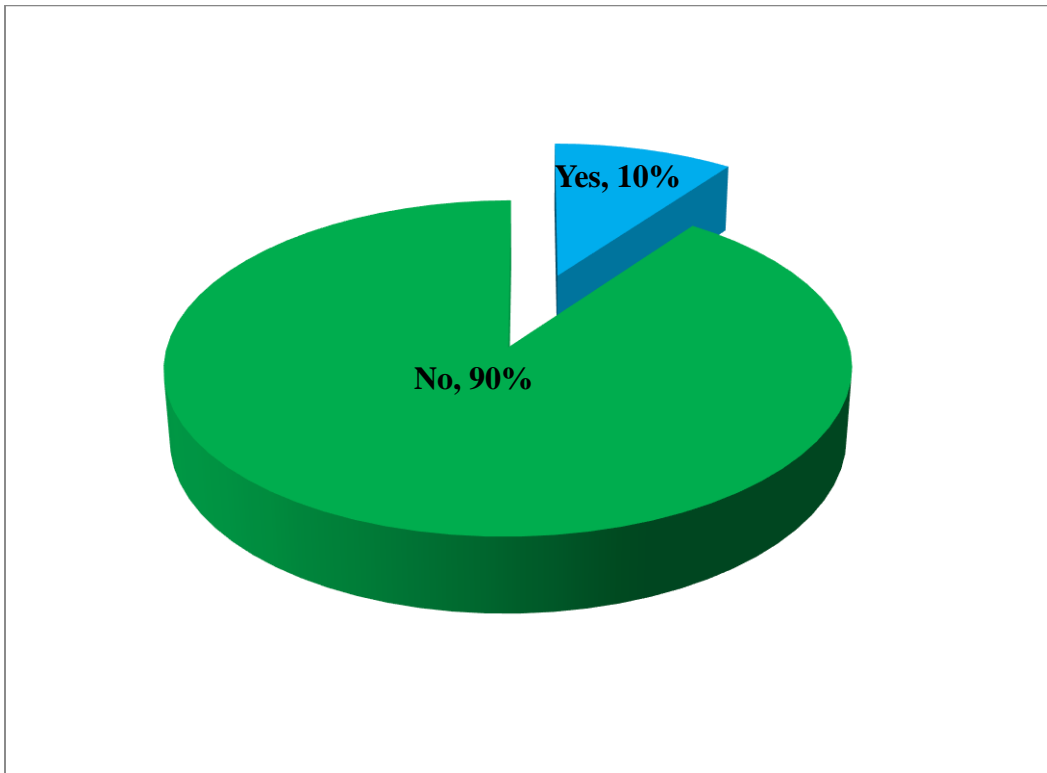
In this study 51% participants walking nature was straight and 9% participants walking nature was bend.



**Figure-4.10: Walking nature of the participants**

#### 4.11 Unusual posture

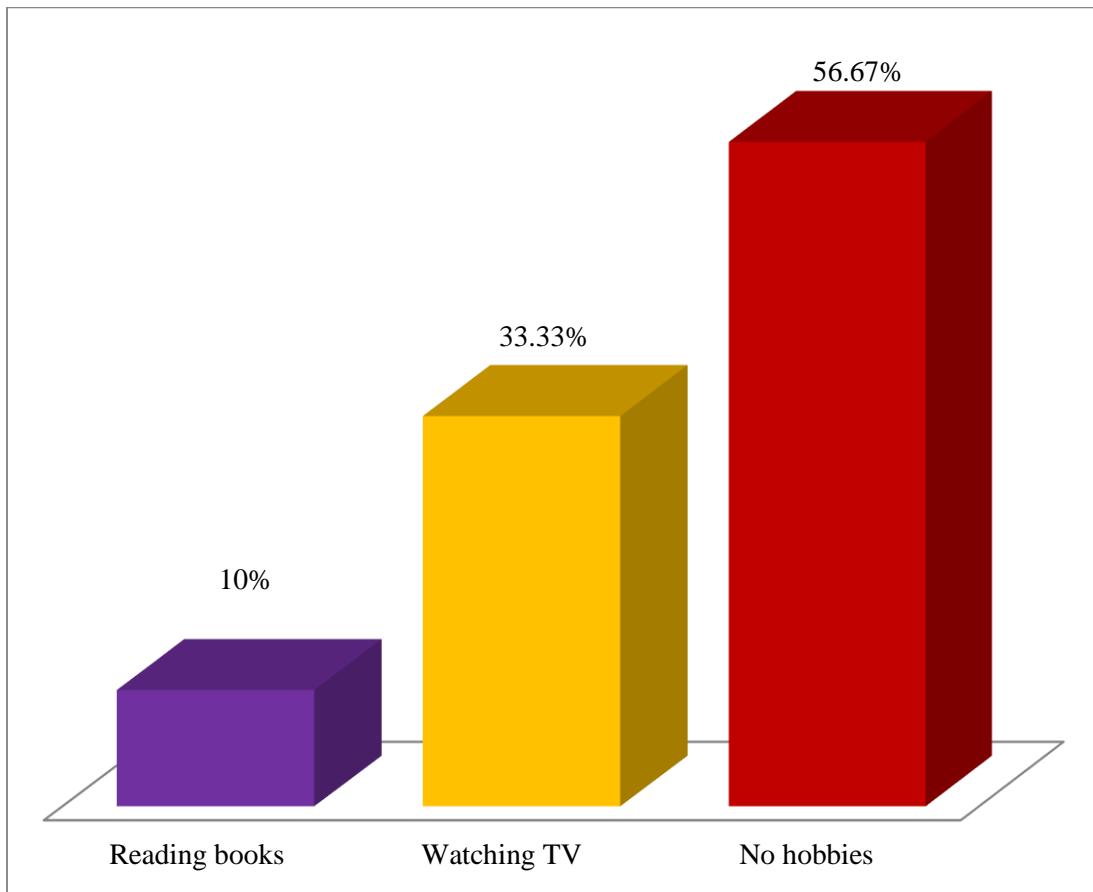
From this study 90% participants had no unusual posture and 10% participants had unusual posture.



**Figure-4.11: Unusual posture of the participants**

## 4.12 Hobbies

In this study about 10% participants had hobbies of reading books, 33.33% participants had hobbies of watching TV and 56.67% participants had no hobbies.



**Figure-4.12: Hobbies of the participants**

### **4.13 Physical functioning**

In this study total participant was 60, among the participants 81.7% (n=49) had a lot of limitation in vigorous activities, 18.3% (n=11) had little limitation in vigorous activities and 0% had no limitation in vigorous activities. The study also shows that 18.3% (n=11) had lot of, 81.7% (n=49) had little, 0% had no limitation in moderate activities. 26.7% (n= 16) had lot of, 73.3% (n=44) had little, 0% had no limitation on carrying heavy objective. 76.7% (n=46) had lot of, 21.7% (n=13) had little and 1.7% (n=1) had no limitation on climbing several flights stairs, 20% (n=12) had lot of, 78.3% (n=47) had little, 1.7% (n=1) had no limitation on climbing one flights stairs. 86.7% (n=52) had lot of, 13.3% (n=8) had little, 0% no limitation on forward bending, 25% (n=15) had lot of, 70% (n=42) had little and 5% (n=3) had no limitation on walking several hundred meters. 1.7% (n=1) had lot of, 83.3% (n=50) had little and 15% (n=9) had no limitation on bathing or dressing by own.



**Table- 4.13: Physical functioning of the participants**

Variables	Yes, limited a lot		Yes, limited a little		No, not limited at all	
	Number	(%)	Number	(%)	Number	(%)
Vigorous activities	49	(81.7)	11	(18.3)	-	-
Moderate activities	11	(18.3)	49	(81.7)	-	-
Carrying heavy object	16	(26.7)	44	(73.3)	-	-
Climb several stair	46	(76.7)	13	(21.7)	1	(1.7)
Climb one stair	12	(20)	47	(78.3)	1	(1.7)
Forward bending	52	(86.7)	8	(13.3)	-	-
Walking more than a kilometer	49	(81.7)	11	(18.3)	-	-
Walking several hundred meters	15	(25)	42	(70)	3	(5)
Walking one hundred meters	2	(3.3)	51	(85)	6	(10)
Personal care	1	(1.7)	50	(83.3)	9	(15)

#### 4.14: Physical Role

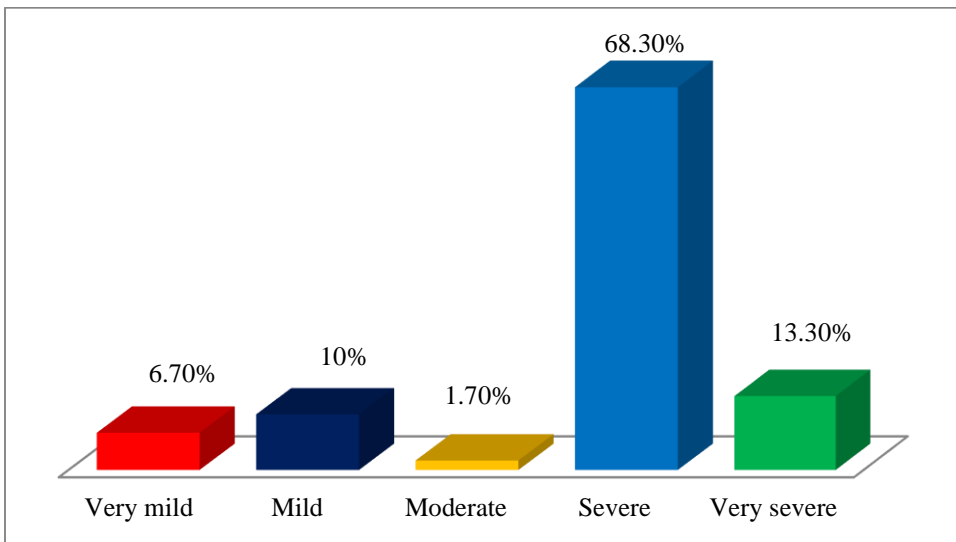
Among the 60 participants, 6.7% (n=4) spent all of the time, 81.7% (n=49) most of the time, 8.3% (n=5) some of the time, 3.3% (n=2) a little of time to do their work or other activities, 3.3% (n=2) all of the time, 68.3% (n=41) most of the time, 3.3% (n=2) some of the time, 25% (n=15) a little time were given to accomplished less than they would like to do. This study also showed that, 2% (n=1) all of the time, 18.3% (n=11) most of the time, 13.3% (n=8) some of time, 68.3% (n=41) a little of time were limited in the kind of work or other activities.

**Table-4.14: Physical Role of the participants**

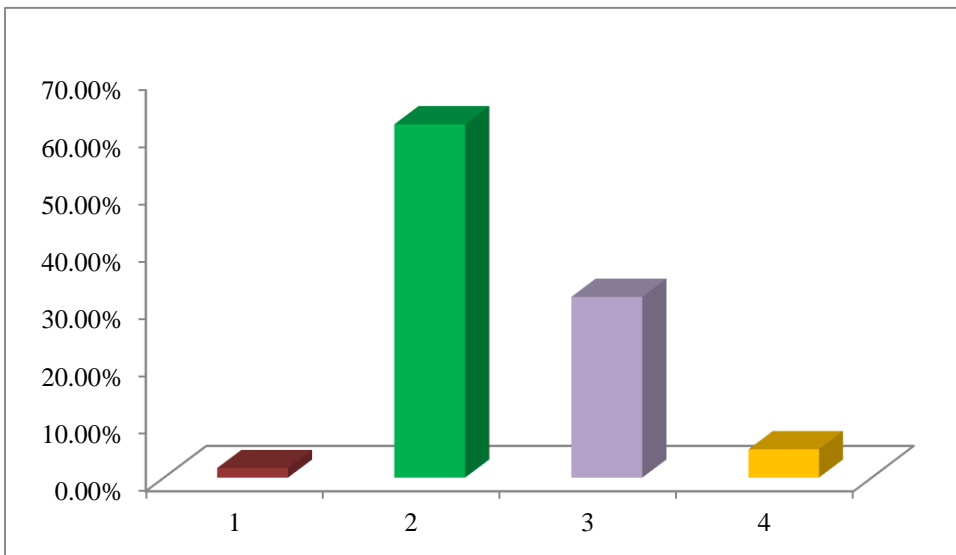
Variables	All of the time	Most of the time	Some of the time	A little of time	None of the time
	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Cut down time	4 (6.7)	49 (81.7)	5 (8.3)	2 (3.3)	- -
Accompli Shed less	2 (3.3)	41 (68.3)	2 (3.3)	15 (25)	- -
Activity Limited	1 (2)	11 (18.3)	8 (13.3)	41 (68.3)	- -
Activity Difficulty	4 (6.7)	52 (86.7)	3 (5)	1 (1.7)	- -

### 4.15 Bodily Pain

Among the 60 participants, 6.7% (n=5) had very mild, 10% (n=5) had mild, 1.7% (n=4) moderate, 68.3% (n=41) had severe, 13.3% (n=8) had very severe pain felt (fig:4.9a) and pain interfere their indoor and outdoor activities 1.7% (n=1) had not at all, 61.7% (n=37) had a little bit, 31.7% (n=19) had moderately, 5% (n=3) had quite a bit during the past four weeks (fig:4.7b).



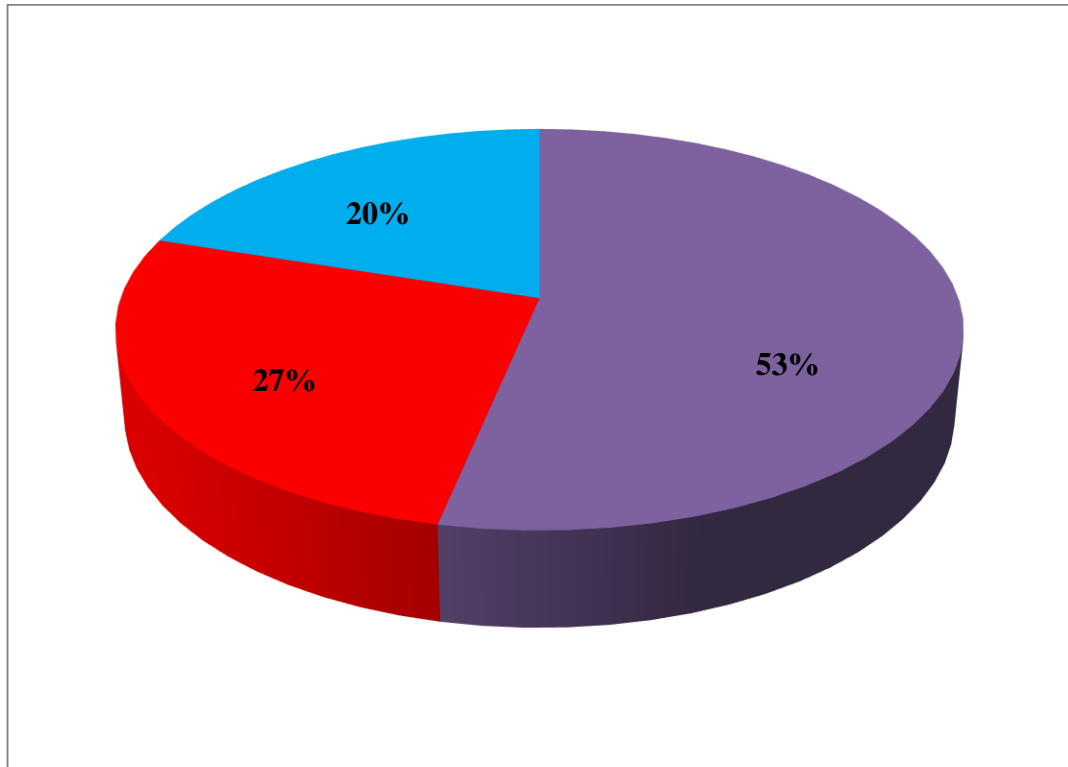
**Figure- 4.15a: Pain intensity during last four week**



**Figure- 4.15b: Pain interfere their indoor and outdoor activities**

#### 4.16 General Health

This study showed that among the 60 participants, 20% (n= 12) had very good health, 53.30%% (n=32) had good health, 26.7% (n=16) had fair health status.



**Figure- 4.16: General Health of the participants**

#### 4.17: Vitality

Among the 60 participants, they were pep life for most of the time 75% (n=45), some of the time 6.7% (n=4), a little of the 1.7% (n=1) and energetic for most of the time 20% (n=12), some of the time 75% (n=45), a little of the time 1.7% (n=1). Worn out of the participants for most of the time 78.3% (n=47), some of the time 8.3% (n=5), a little of the time 1.7% (n=1). Among the participants 15% (n=9) most of the time, 70% (n=42) some of the time, 13.3% (n=8) a little of the time had been tired.

**Table-4.17: Vitality of the participants**

Variable	All of the time		Most of the time		Some of the time		A little of the time	
	Number	Percent	Number	Percent	Number	Percent	Number	percent
Pep Life	10	16.7%	45	75%	4	6.7%	1	1.7%
Energy	2	3.3%	12	20%	45	75%	1	1.7%
Worn out	7	11.7%	47	78.3%	5	8.3%	1	1.7%
Tired	1	1.7%	9	15%	42	70%	8	13.3%

#### 4.18: Social functioning

Out of total 60 participants, about 51.7% (n=31) have no problem in social functioning, 40% (n=24) have slightly social participants, 5% (n=3) had moderately and 3.3% (n=2) had quite a bit problem in social participation. In social time about 15% (n=9) had most of the problem, 70% (n=42) had some of the problem, 15% (n=9) had a little of the time, 0% had none of the time.

**Table-4.18: Social functioning of the participants**

Variable		Number	Percent
Social extent	Not at all	31	51.7%
	Slightly	24	40%
	Moderately	3	5%
	Quite a bit	2	3.3%
Social time	Most of the time	9	15%
	Some of the time	42	70%
	A little of the time	9	15%
	None of the time	0	0

#### 4.19: Emotional Role

Among the participants 6.7% (n=4) all of the time, 78.3% (n=47) most of the time, 13.3% (n=8) some of the time, 1.7% (n=1) had cut down the most of on their activities. 1.7% (n=1) all of the time, 76.7% (n=46) most of the time, 16.7% (n=10) some of the time, 5% (n=3) had accomplish less activities. 3.3% (n=2) all of the time, 51.7% (n=31) most of the time, 33.3% (n=20) some of the time, 11.7% (n=7) had cut down the most of on their activities.

**Table-4.19: Emotional Role of the participants**

Variable	All of the time		Most of the time		Some of the time		A little of the time	
	Number	Percent	Number	Percent	Number percent	Number	Percent	
Cut down time	4	6.7%	47	78.3%	8	13.3%	1	1.7%
Accomplish less	1	1.7%	46	76.7%	10	16.7%	3	5%
Not careful	2	3.3%	31	51.7%	20	33.3%	7	11.7%

#### 4.20: Mental health

The study showed that among the participants feel nervousness for most of the time 13.3% (n=8), some of the time 78.3% (n=42), a little of the time 8.3% (n=5). The participants feel down in dumps for most of the time 11.7% (n=7), some of the time 70% (n=42), a little of the time 18.3% (n=11). Peaceful for most of the time 6% (n=10), some of the time 78.3% (n=7), a little of the time 11.7% (n=7). Downhearted or depressed for most of the time 15% (n=10), some of the time 75% (n=45), a little of the time 8.3% (n=5). Happy for most of the time 13.3% (n=8), some of the time 81.7% (n=49), a little of the time 5% (n=3).

**Table-4.20: Mental health of the participants**

Variable	Most of time		Some of the time		A little of the time	
	Number	Percent	Number	Percent	Number	Percent
Nervous	8	13.3%	47	78.3%	5	8.3%
Down in	7	11.7%	42	70%	11	18.3%
Peaceful	6	10%	47	78.3%	7	11.7%
Depressed	10	15%	45	75%	5	8.3%
Happy	8	13.3%	49	81.7%	3	5%



## **SF-36 scoring**

The SF 36 consists of eight scaled scores, which are the sums of the questions in their section. This data was also analyzed by using SPSS version 20. From 60 participants the minimum & maximum percentage of physical functioning was 5.00 % & 75.00%, role limitation due to physical health was 18.75% & 62.50%, role limitation due to emotional problem was .00% & 66.67%, energy or fatigue was 40.00% & 75.00%, emotional wellbeing was 44.00% & 76.00%, social functioning was 25.00% & 87.50%, pain was 32.00% & 77.50%, general health was 30.00% & 70.00%. And from these section, the mean score of physical functioning was 30.56%, role limitation due to physical health was 38.12%, role limitation due to emotional problem was 32.36%, energy or fatigue was 58.50%, emotional well-being was 59.40%, social functioning was 45.00%, pain was 39.03%, and lastly general health was 51.03%. And standard deviation of PF was 10.74%, RP was 6.87%, RE was 12.08%, VT was 5.84%, MH was 5.40%, SF was 12.83%, BP was 9.46%, and GH was 9.93%. When the score is near about 100, like 70, 80, 90, it means the quality of life of Survivors is good & when the score is poor like 30, 40, it means the quality of life of Survivors is poor.

Among the participants mean of the role emotion was 32.36 according to SF-36 this range was poor and the mean physical functioning was 30.56, vitality was 58.50, mental health was 59.40, social functioning was 45.00 according to SF-36 this range was moderate score and the general health of participants mean was 51.03, role physical 38.12 and bodily pain was 39.03 according to SF-36 this range was poor. So among the participants their physical health quality of life was poor and mental health quality of life was fair.

**Table- 4.21: SF 36 scoring among the participants**

Scale	Minimum	Maximum	Mean	Std.Deviation
Physical Function	5.00	75.00	30.5667	10.74
Role physical health	18.75	62.50	38.1250	6.87
Role emotional	.00	66.67	32.3611	12.08
Vitality	40.00	75.00	58.5000	5.84
Mental health	44.00	76.00	59.4000	5.40
Social functioning	25.00	87.50	45.0000	12.83
Bodily pain	32.00	77.50	39.0333	9.46
General health	30.00	70.00	51.0300	9.93

**Table-4.22.1: Distribution of respondents with Age of the participants Vs Physical functioning:**

Age Groups (Years)	Physical functioning		
	0-25	26-50	51-75
25-29	1	4	1
30-34	3	5	0
35-39	3	10	0
40-44	3	12	0
45-49	1	8	0
50-54	2	6	1

Among 60 participants, one participant had age range between 25-29 years; 13 participants had age range between 26-50; 2 participants had age range between 51-75. Eight participants their age range between 30-34 years; 45 participants between 26-50 and 0 participant range between 51-75. Three participants their age range between 35-39 years, fifteen participants their age range 40-44 years, nine participant age range 45-49 years, nine participants their age range between 50-54 years said that physical function was limited 0-25. Here higher score indicates better physical function.

**Table-4.22.2: Association between Age and physical functioning of the participants:**

	Chi-Square	P-value
Age and Physical functioning	8.41	0.58

The observed chi-square value was 8.41 and 5% level of significant state chi-square was 1.96 which is less than the observed chi-square value. Null-hypothesis was neglected and alternative hypothesis was accepted. P value was 0.58 which is not significant. So there was no strong association between age of the participants and physical functioning.

**Table-4.23.1: Distribution of respondents with Occupation of the participants Vs Role limitation due to physical health:**

Occupation	Physical Role		
	0-25	26-50	51-75
Housewife	7	42	6
Service holder Teacher	0	2	2
Student	0	1	0

Among total 60 participants a large number of participants were housewife than other occupation. Seven participant of housewife role limitation due to physical health range was 0-25, forty two participants range was 26-50 and six participants range was 51-75. Two participants of service holder role limitation due to physical health range was 26-50 and two participants 51-75. Two participants of teacher physical role range was 26-50 and one student had 26-50.

**Table-4.23.2: Association between occupation of the participants and role limitation due to physical health:**

Occupation and role physical	Chi-Square	P-value
	1.50	0.95

This observed Chi-square value was 1.50 and 5% level of significant state chi-square was 1.96 which is less than the observed chi-square value. Null-hypothesis was neglected and alternative hypothesis was accepted. P value was 0.95 which was not significant. So there was no strong association between occupation of the participants and role limitation due to physical health.

Sixty women patients of LBP were studied. The mean age of LBP patients of this study were about 39.30 years. Range was 25 years with minimum age 25 years and maximum age 50 years. In an Indian study the age group of women was 30-40 years (Andhi et al; 2016). Most of the participants was from rural area. About 60% participants were from rural area, 5% from urban area and 35% were from sub urban area.

Among the 60 participants, 26.7% participants were illiterate, 31.7% participants were primary level, 20% participants were High school level, 15% participants were S.S.C level, 3.3% participants were H.S.C level, 3.3% participants were Hon's/Masters. Most of the participants were in primary level. In this study among the participants, 3.3% were unmarried, 88.3% were married, 1.7% was divorced and 6.7% were widow.

Most of the participants were housewife, about 91.7%. Others occupations were 3.3% participants were service holder, 3.35% participants were day teacher, and 1.7% was student. By this study it was ensured that housewives are more vulnerable for LBP. A complex interrelationship between pain, usual activities and mental states may influence activities of recipient's different occupation (Claiborne et al; 2002).

Among the 60 participants in this study, 1.7% participants income source was by own self, 76.7% participants income source was Husband, 10% participants income source was son, 5% participants income source was own+ Husband, 6.7% participants income source was Husband + Son.

By this study we also could see that 73.33% participants had no physical trauma, 26.67% participants had physical trauma. And also 51% participants had straight walking nature, 9% participants had bending type of walking nature. It also included that 90% participants had no unusual posture and 10% participants had unusual posture.

In this study, for the eight subscales, total scores may range from 0 to 100. Each scales ranging from 0 (presence all problems) to 100(no problems at all) with in the dimension

(Roux et al., 2004). The physical component summary scores mean of physical functioning (30.56), Role of physical (38.12), Bodily pain (39.03), General health (51.03) and the mental component summary score is vitality (58.50), social functioning (45.00), Role emotional (32.36) and mental health (59.40). The lowest score indicate the poor quality of life and highest score indicate the good quality of life.

The score was lowest for the Physical function subscale and highest for the mental health subscale. The score for all subscales for participants with survivors were significantly different from age and sex of the individual. The three most affected subscales were physical function (30.56), role emotional (32.36), role physical health (38.12) and the highest score for the role of mental health (59.40) subscale. (Lin et al., 2009) found their studies among the eight subscale the score is lowest for the physical subscale and highest for the physical functioning subscale.

In this study total participant was 60, among the participants 81.7% (n=49) had a lot of limitation in vigorous activities, 18.3% (n=11) had little limitation in vigorous activities and 0% (n=0) had no limitation in vigorous activities. The study also shows that 18.3% (n=11) had lot of, 81.7% (n=49) had little, 0% (n=0) had no limitation in moderate activities. 26.7% (n=16) had lot of, 73.3% (n=44) had little, 0% (n=0) had no limitation on carrying heavy objective. 76.7% (n=46) had lot of, 21.7% (n=13) had little and 1.7% (n=1) had no limitation on climbing one flights stairs, 20% (n=12) had lot of, 78.3% (n=47) had little, 1.7% (n=1) had no limitation on climbing several flights stairs. 86.7% (n=52) had lot of, 13.3% (n=8) had little, 0% (n=0) no limitation on forward bending, 81.7% (n=49) had lot of, 18.3% (n=11) had little and 0% (n=0) had no limitation on walking more than one kilometer. 1.7% (n=1) had lot of, 83.3% (n=50) had little and 15% (n=9) had no limitation on bathing or dressing by own. Here maximum physical functioning is 75.00% and minimum physical functioning is 5.00% and mean and standard deviation is 30.56 and 10.74.

Among the 60 participants, 6.7% (n=4) spent all of the time, 81.7% (n=49) most of the time, 8.3% (n=5) some of the time, 3.3% (n=2) a little of time to do their work or other activities, 3.3% (n=2) all of the time, 68.3% (n=41) most of the time, 3.3% (n=2) some of



the time, 25% (n=15) a little time were given to accomplished less than they would like to do. This study also showed that, 2% (n=1) all of the time, 18.3% (n=11) most of the time, 13.3% (n=8) some of time, 68.3% (n=41) a little of time were limited in the kind of work or other activities. Here maximum role physical health is 62.50 and mean and standard deviation is 38.12 and 6.87.

Among the 60 participants 6.7% (n=4) all of the time, 78.3% (n=47) most of the time, 13.3% (n=8) some of the time, 1.7% (n=1) had cut down the most of on their activities. 1.7% (n=1) all of the time, 76.7% (n=46) most of the time, 16.7% (n=10) some of the time, 5% (n=3) had accomplish less activities. 3.3% (n=2) all of the time, 51.7% (n=31) most of the time, 33.3% (n=20) some of the time, 11.7% (n=7) had cut down the most of on their activities. Here maximum role of emotion 66.67% and minimum .00% and mean and standard deviation 32.36 and 12.08.

Among the 60 participants, they were pep life for most of the time 75% (n=45), some of the time 6.7% (n=4), a little of the 1.7% (n=1) and energetic for most of the time 20% (n=12), some of the time 75% (n=45), a little of the time 1.7% (n=1). Worn out of the participants for most of the time 78.3% (n=47), some of the time 8.3% (n=5), a little of the time 1.7% (n=1). Among the participants 15% (n=9) most of the time, 70% (n=42) some of the time, 13.3% (n=8) a little of the time had been tired. Here maximum vitality 70.00%, minimum vitality 40%, mean and standard deviation 58.50 and 5.84.

The study shows that among the participants feel nervousness for most of the time 13.3% (n=8), some of the time 78.3% (n=42), a little of the time 8.3% (n=5). The participants feel down in dumps for most of the time 11.7% (n=7), some of the time 70% (n=42), a little of the time 18.3% (n=11). Peaceful for most of the time 6% (n=10), some of the time 78.3% (n=7), a little of the time 11.7% (n=7). Downhearted or depressed for most of the time 15% (n=10), some of the time 75% (n=45), a little of the time 8.3% (n=5). Happy for most of the time 13.3% (n=8), some of the time 81.7% (n=49), a little of the time 5% (n=3). Here maximum mental health 76.00% and minimum 44.00% and mean and standard deviation 59.40 and 5.40.

Among the 50 participants 51.7% (n=31) have no problem in social functioning, 40% (n=24) have slightly social participants, 5% (n=3) had moderately and 3.3% (n=2) had quite a bit problem in social participation. In social time about 15% (n=9) had most of the problem, 70% (n=42) had some of the problem, 15% (n=9) had a little of the time, 0% had none of the time. This study shows that maximum social functioning 87.50% and minimum social functioning 25.00% and mean and standard deviation 45.00 and 12.83.

Among the 60 participants, 6.7% (n=5) had very mild, 10% (n=5) had mild, 1.7%(n=4) moderate, 68.3% (n=41) had severe, 13.3% (n=8) had very severe pain felt and pain interfere their indoor and outdoor activities 1.7%(n=1) had not at all, 61.7% (n=37) had a little bit, 31.7% (n=19) had moderately, 5% (n=3) had quite a bit during the past four weeks. Here maximum range of bodily pain 77.50% and minimum 32.00% and mean and standard deviation 39.03 and 9.46.

This study showed that among the 60 participants, 20% (n= 12) had very good health, 53.30%% (n=32) had good health, 26.7% (n=16) had fair health status. Here maximum general health 70.00% and minimum 30.00% and mean and standard deviation 51.03 and 9.93.

Among the participants mean of the role emotion was 32.36 according to SF-36 this range was poor and the mean physical functioning was 30.56 according to SF-36 this range was also poor, vitality was 58.50, mental health was 59.40, general health was 51.03 according to SF-36 this range was moderate score and the social functioning of participants mean was 45.00, role physical 38.12, bodily pain was 39.03 according to SF-36 this range was poor. So among the participants their physical health quality of life was poor and mental health quality of life was fair.

In present study, age was not found to be a predictor for declining of physical function. There was no significant correlation was found between age and physical functioning (P = 0.58).

In present study, occupation was not found to be a predictor for decline role limitation due to physical health. There was no correlation was found between occupation and role limitation due to physical health (P = 0.95).

### **Limitation of the study**

Though the expected sample size was 354 for this study but due to resource constrain researcher could manage just 60 samples which is very small to generalize the result for the wider population of LBP. There are a few literatures about QOL of women with LBP in the perspective of Bangladesh so it is difficult to compare the study with the other research. The data only collected from CRP for a short period of time which affects the result of the study to generalize for wider population.

**6.1: Conclusion**

From the study it can be concluded that women are more affected with LBP for many reasons. Household, weight lifting and bending activities are aggravating factors to develop LBP and housewife are more affected group among all occupation. These data indicate that a combination mind-body intervention for low back pain patients using physical function, role physical, role emotion, bodily pain, energy, social functioning, mental health and general health. Due to LBP there have a lot of problem in physical function and role emotion. According to participants statement there had also problem in role physical, bodily pain and social functioning and there had a little problem in vitality, mental health, and general health. Most of the participants were worried about their pain. Awareness should be raised in functional activity. As women are more affected because of their life style and our culture so should give more emphasis on them to raised awareness.

## **6.2: Recommendation**

The results of the study explore the QOL of women patient with LBP attended at CRP. But further research would need to be carried out considering proof of experimental hypothesis in between acute and chronic LBP or between without taking physiotherapy for LBP and after taking physiotherapy etc. can further be included in such type of research.

## REFERENCES

Ahdhi, G. S., Subramanian, R., Saya, G. K., and Yamuna, T. V., (2016). Prevalence of low back pain and its relation to quality of life and disability among women in rural area of Puducherry, India. *Indian Journal of Pain*, 30(2):111.

Airaksinen, O., Brox, J. I., Cedraschi, C., Hildebrandt, J., Klüber-Moffett, J., Kovacs, F. & Zanoli, G., (2006). Chapter 4 European guidelines for the management of chronic nonspecific low back pain. *European Spine Journal*, 15: 192-300.

Barrero, L. H., Hsu, Y. H., Terwedow, H., Perry, M. J., Dennerlein, J. T., Brain, J. D., & Xu, X., (2006). Prevalence and physical determinants of low back pain in a rural Chinese population. *The Spine Journal*, 31(23): 2728-2734.

Back Pain Health Center., (2005), Low Back Pain Symptoms [online], available: <http://www.webmd.com/back-pain/tc/low-back-pain-symptoms> [accessed on 17th October, 2012].

Back Pain Health Center., (2010), Low History and physical exam for low back pain [online], available: <http://www.webmd.com/back-pain/history-andphysical-exam-for-low-back-pain> [accessed on 17th October, 2012].

Cho, N. H., Jung, Y. O., Lim, S. H., Chung, C. K., & Kim, H. A., (2012). The prevalence and risk factors of low back pain in rural community residents of Korea. *The Spine Journal*, 37(24):2001-2010.

Carreon, L.Y., Glassman, S.D., Campbell, M.J., and Anderson, P.A., (2010). Neck disability index, short form -36 physical component summary and pain scales for the neck and arm pain the minimum clinically important difference and

substantial clinical benefit after cervical spine fusion. *The Spine Journal*, 10(6): 469-474.

Claiborne, N., Vandenburg, H., Keause, T.M., and Leung, P., (2002). Measuring quality of life changes in individuals with chronic low back pain condition: a back education program evaluation. *The evaluation and program planning*, 25:61-70.

Dunsford, A., Kumar, S., & Clarke, S., (2011). Integrating evidence into practice: use of McKenzie-based treatment for mechanical low back pain. *Journal of Multidisciplinary Healthcare*, 4:393-402.

De Schepper, E. I., Damen, J., van Meurs, J. B., Ginai, A. Z., Popham, M., Hofman, A., and Bierma-Zeinstra, S. M., (2010). The association between lumbar disc degeneration and low back pain: the influence of age, gender, and individual radiographic features. *The Spine Journal*, 35(5): 531-536.

Darzinaghibi, M. T., Samaneh, P., Somayeh, H., and Mahmoud, H.,(2012). Correlation between functional disability and quality of life in non-specific low back pain patients. *Journal of Physiotherapy*, 27: 238-44.

George, C., (2002). The six-month incidence of clinically significant low back pain in the Saskatchewan adult population. *The Spine Journal*, 27(16): 1778-1782.

Horng, Y. S., Hwang, Y. H., Wu, H. C., Liang, H. W., Mhe, Y. J., Twu, F. C., and Wang, J. D., (2005). Predicting health-related quality of life in patients with low back pain. *Spine*, 30(5):551-555.

Henschke, N., Ostelo, R. W., van Tulder, M. W., Vlaeyen, J. W., Morley, S., Assendelft, W. J., and Main, C. J., (2010). Behavioural treatment for chronic low-back pain. *The Cochrane Library*. doi:10.1002/14651858.CD000963.

Hestbaek, L., Leboeuf-Yde, C., Engberg, M., Lauritzen, T., Bruun, N. H., and Manniche, C. (2003). The course of low back pain in a general population. Results from a 5-year prospective study. *Journal of Manipulative and Physiological Therapeutics*, 26(4): 213-219.

Hoy, D., Brooks, P., Blyth, F., and Buchbinder, R., (2010). The epidemiology of low back pain. *Best Practice & Research Clinical Rheumatology*, 24(6): 769-781.

Integrative pain medicine, (2012), *Low Back Pain: Causes* [online], University Hospital and Campus for the Albert Einstein College of Medicine, available <http://www.healingchronicpain.org/content/backpain/causes.asp> [accessed on 17th October, 2012].

Jarvik, J. G., and Deyo, R. A., (2002). Diagnostic evaluation of low back pain with emphasis on imaging. *Annals of Internal Medicine*, 137(7): 586-597.

Jenkinson, C., Lloyd, H., Hadi, M., Gibbons, E., and Fitzpatrick, R., (2014) Patient reports of the outcomes of treatment: a structured review approaches. *Health and Quality of Life Outcomes*, 12(1):5.

Kumar S., (2011). Efficacy of segmental stabilization exercise for lumbar segmental instability in patients with mechanical low back pain: A randomized placebo controlled crossover study, *North American Journal of Medical Sciences*, 3(3): 456-461.

Khan, A. A., Uddin, M. M., Chowdhury, A. H., and Guha, R. K., (2014). Association of low back pain with common risk factors: a community based study. *Indian Journal of Medical Research*, 25(2): 50-55.



Kopec, J. A., Sayre, E. C., and Esdaile, J. M., (2004). Predictors of back pain in a general population cohort. *The Spine Journal*, 29(1): 70-77.

Koley, S., Kaur, J., and Sandhu, J. S., (2010). Biological risk indicators for non-specific low back pain in young adults of Amritsar, Punjab, India. *Journal of Life Science*, 2(1): 43-48.

McIntosh, G., & Hall, H. (2015). Low back pain (acute): non-drug treatments. *British Medical Journal*: 1-25.

Middlekoop, M .V., Rubinstein SM, Kujipers T, Verhage AP, Ostelo R, Koes BW and Tulder MWV., (2011). A systematic review on the effectiveness of physical and rehabilitation interventions for chronic non-specific low back pain, *European Spine Journal*, 20(1):19-39.

Manchikanti, L., Singh, V., Falco, F. J., Benyamin, R. M., & Hirsch, J. A., (2014). Epidemiology of low back pain in adults. *Neuromodulation: Technology at the Neural Interface*, 17(S2):3-10.

Mustard, C. A., Kalceovich, C., Frank, J. W., and Boyle, M., (2005). Childhood and early adult predictors of risk of incident back pain: Ontario Child Health Study 2001 follow-up. *American Journal of Epidemiology*, 162(8):779-786.

Phaner, V., Minon, IF., Lequang, B., Chale,t EV., and Calmels, P., (2009). Are there indications (other than scoliosis) for rigid orthopaedic brace treatment in chronic, mechanical low back pain? *Annals of Physical and Rehabilitation Medicine*, 52(5):382-393.

Pye, S. R., Reid, D. M., Smith, R., Adams, J. E., Nelson, K., Silman, A. J., and O'Neill, T. W., (2004). Radiographic features of lumbar disc degeneration and self-reported back pain. *The Journal of Rheumatology*, 31(4):753-758.

Papageorgiou, A. C., Croft, P. R., Ferry, S., Jayson, M. I., and Silman, A. J., (1995). Estimating the prevalence of low back pain in the general population: evidence from the South Manchester Back Pain Survey. *The Spine Journal*, 20(17): 1889-1894.

Ramond, A., Bouton, C., Richard, I., Roquelaure, Y., Baufreton, C., Legrand, E., & Huez, J. F., (2011). Psychosocial risk factors for chronic low back pain in primary care—a systematic review. *The Journal of Family practice*, 28(1): 12-21.

Smart, KM., Blake, C., Staines, A., Thacker, M., and Doody, C.,(2012), Mechanismsbased classifications of musculoskeletal pain: part 2 of 3: symptoms and signs of peripheral neuropathic pain in patients with low back ( $\pm$  leg) pain, *Manual Therapy*, 17(4):345-351.

Shambrook, J., McNee, P., Harris, CE., Kim, M., Sampson, M., Palmer, K., and Coggon, (2011), Clinical Presentation Of Low Back Pain And Association With Risk Factors According To Findings On Magnetic Resonance Imaging, *Pain*, 152(7):1659 – 1665.

Soh, S.E., McGinely, J., and Morris, M.E., (2011). Measuring quality of life in Parkinson's disease: selection of an appropriate health related quality of life instrument. *Journal of Physiotherapy*, 97:83-89

Sterud, T., and Tynes, T., (2013). Work-related psychosocial and mechanical risk factors for low back pain: a 3-year follow-up study of the general working population in Norway. *Occupational and Environmental Medicine*, 70(5): 296-302.

Skovron, M. L., Szpalski, M., Nordin, M., Melot, C., and Cukier., D.. (1994). Sociocultural Factors and Back Pain: A Population-Based Study in Belgian Adults. *The Spine journal*, 19(2):129-137.

Suthar, N., and Kaushik, V., (2013). Musculoskeletal problems among agricultural female workers. *Studies on Home and Community Science*, 7(3): 145-149.

Truumees E., Majid, K., and Brkaric M., (2008), Anterior lumbar interbody fusion in the treatment of mechanical low back pain, *Seminars in Spine Surgery*, 20(2):113-125.

Tiwari RR and Saha A., (2014), An epidemiological study of low back pain among oil drilling workers in India. *Toxicology and Industrial Health*, 30(1):60-63

Tavafian, S. S., Eftekhari, H., Mohammad, K., Jamshidi, A. R., Montazeri, A., Shojaezadeh, D., and Ghofranipour, F., (2005). Quality of life in women with different intensity of low back pain. *Iranian Journal of Public Health*, 34(2): 36-39.

Tomita, S., Arphorn, S., Muto, T., Koetkhilai, K., Naing, S. S., and Chaikittiporn, C., (2010). Prevalence and risk factors of low back pain among Thai and Myanmar migrant seafood processing factory workers in Samut Sakorn Province, Thailand. *Industrial Health*, 48(3):283-291.

Walker, BR.,and William, OD., (2009), Mechanical or inflammatory low back pain. What are the potential signs and symptoms? *Manual Therapy*, 14(3):314-320.

Waxman, R., Tennant, A., & Helliwell, P., (2000). A prospective follow-up study of low back pain in the community. *The Spine Journal*, 25(16): 2085-2090.

## APPENDIX

### Consent Form

Assalamualaikum/Namaskar,

I am Fajilatun Zannat , 4th year student of Bsc in Physiotherapy in Bangladesh Health Profession Institute. I am conducting a research and the title is-“**Quality of Life of Women with Low Back Pain Attending at Musculoskeletal unit in CRP.**”which is included in my course. For that I'm asking you to answer some questions, which will not take time more than 10-15 minutes. It also ensures that the information you provide will be kept confidential.

Participation here depends on your own will. If you want, you can skip your name from the list of participants at any time. In addition, if you have any questions as a participant in this study or if there is any problem, you can contact with me or Mohammad Anwar Hossain, Associate Professor and Head of The Department of Physiotherapy, CRP, Savar, Dhaka.

Do you have any questions before starting the research?

Can I start this interview with your permission?

Yes.....

No.....

Participant's signature and date \_\_\_\_\_

Researcher's signature and date \_\_\_\_\_

## অনুমোদন পত্ৰ

আসসালামুয়ালাইকুম / নমস্কার ,

আমি ফজিলাতুন জান্নাত, 'বাংলাদেশ হেলথ প্রফেশনস ইন্সটিটিউট' এর চতুর্থ বর্ষের একজন ছাত্রী। আমি আমার স্নাতক ডিগ্রির জন্য একটি গবেষণা করছি যার শিরোনাম হল **“কোমর ব্যথার কারণে সি আর পি তে চিকিৎসা নিতে আসা মহিলা রোগীদের জীবন প্রকৃতি”**, যেটা আমার কোর্সের অন্তর্গত। এই জন্য আমি আপনার কাছে কিছু প্রশ্নের উত্তর জানতে চাচ্ছি, যেটাতে সর্বমোট ১০- ১৫ মিনিট সময় লাগবে। এটাও নিশ্চিত করছি যে আপনি যেসব তথ্য প্রদান করবেন তার গোপনীয়তা বজায় থাকবে।

এখানে অংশগ্রহন আপনার নিজের উপর নির্ভর করে। আপনি চাইলে যে কোন সময় কোন ফলাফল ছাড়াই চলে যেতে পারেন। এ ছাড়াও যদি আপনার এই গবেষণায় অংশগ্রহনকারী হিসেবে কোন প্রশ্ন থাকে তাহলে আপনি আমাকে অথবা মুহাম্মাদ আনোয়ার হোসেন, সহযোগী অধ্যাপক ও বিভাগীয় প্রধান, ফিজিওথেরাপি বিভাগ , সিআরপি, সাভার, ঢাকা, এর সাথে যোগাযোগ করতে পারেন।

সাক্ষাৎকারটি শুরু করার আগে আপনার কোন প্রশ্ন আছে?

আমি কি আপনার অনুমতি পেয়ে এই সাক্ষাৎকারটি আরম্ভ করতে পারি?

হ্যাঁ.....

না .....

রোগীর স্বাক্ষর ও তারিখ .....

গবেষকের স্বাক্ষর ও তারিখ .....

## Questionnaires

**“Quality of Life of Women with Low Back Pain Attending at Musculoskeletal Unit in CRP”.**

### Personal Details

ID number:

Patient’s name:

Address:

Contact number:

    Personal number:

    Relative’s number:

Date of Interview:

Name of Recipient:

**Part: 1 Socio-demographic information**

Ques No.	Questions	Responses	Code
1.1	Age of the patient	..... year	
1.2	Residential area	Rural Urban Sub Urban	01 02 03
1.3	Educational level	Illiterate Primary level High school level S.S.C level H.S.C level Hon's/Masters	01 02 03 04 05 06
1.4	Marital status	Unmarried Married Divorced Widow	01 02 03 04
1.5	Occupation	Housewife Service holder Teacher Student Others	01 02 03 04 05
1.6	Economical status( yearly income)	.....	

1.7	Income source	Own Husband Son Own +Husband Husband +Son	01 02 03 04 05
1.8	Any kind of physical trauma	Yes No	01 02
1.9	Habits (smoking, betel)	Yes No	01 02
1.10	Walking nature	Straight Bend	01 02
1.11	Unusual posture	Yes No	01 02
1.12	hobbies	Sports Reading books Watching TV	01 02 03



**Part: 2 Quality of life scale (SF-36)**

1. In general, would you say your health is

Excellent	Very good	Good	Fair	Poor
▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Compared to one year ago, how would you rate your health in general now?

Much better now than one year ago	Somewhat better now than one year ago	About the same as one year ago	Somewhat worse now than one year ago	Much worse now than one year ago
▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3 The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No,not limited at all
	▼	▼	▼
Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting or carrying groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing several flights of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing one flight of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bending, kneeling, or stooping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking more than a kilometre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking several hundred metres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking one hundred metres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bathing or dressing yourself

4. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

	All of The time	Most of the time	Some of the time	A little of the time	None of the time
	▼	▼	▼	▼	▼
a. Cut down on the amount of time you spent on work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Accomplished less than you would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were limited in the kind of Work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Had difficulty performing the work or other activities (for example, it took extra effort)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

	All of The time	Most of the time	Some of the time	A little of the time	None of the time
a. Cut down on the amount of time you spent on work or other activities	▼	▼	▼	▼	▼
b. Accomplished less than you would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c. Did work or other activities

less carefully than usual

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

6. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups?

Not at all      Slightly      Moderately      Quite a bit      Extremely



7. How much bodily pain have you had during the past 4 weeks?

None      Very mild      Mild      Moderate      Severe      Very severe



8. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all      Slightly      Moderately      Quite a bit      Extremely



<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

9. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks.

	All of The time	Most of the time	Some of the time	A little of the time	None of the time
	▼	▼	▼	▼	▼
Did you feel full of life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been very nervous?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you felt so down in the dumps that nothing could Cheer you up?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you felt calm and Peaceful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you have a lot of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you felt downhearted and depressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you feel worn out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been happy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you feel tired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. How TRUE or FALSE is each of the following statements for you?

	Definitely True	Mostly true	Don't know	Mostly false	Definitely false
	▼	▼	▼	▼	▼
a. I seem to get sick a little easier than other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I am as healthy as anybody I know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I expect my health to get worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. My health is excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## প্রশ্নাবলী:

“কোমর বাথার কারনে সি আর পি তে চিকিৎসা নিতে আসা মহিলা  
রোগীদের জীবন প্রকৃতি”

## ব্যক্তিগত তত্ত্বাবলি:

আইডি নম্বর:

রোগীর নাম:

ঠিকানা:

মোবাইল নম্বর.....

ব্যক্তিগত নম্বর:

আত্মীয়র নম্বর:

সাক্ষাতকারের তারিখ:

সাক্ষাতকার গ্রহনকারীর নাম:

১। প্রথম অংশঃ সামাজিক – জনসংখ্যাতাত্ত্বিক তথ্য

প্রশ্ননম্বর	প্রশ্ন	উত্তর	কোড
১.১	আপনার বয়স	----- বছর	
১.২	আবাসিক এলাকা	গ্রাম শহর উপশহর	০১ ০২ ০৩
১.৩	শিক্ষাগত যোগ্যতা	অশিক্ষিত প্রাইমারী লেভেল হাইস্কুল লেভেল এস .এস .সি লেভেল এইচ. এস. সি লেভেল ম্নাতক অথবা ম্নাতকোত্তর পাশ	০১ ০২ ০৩ ০৪ ০৫ ০৬
১.৪	বৈবাহিক অবস্থা	অবিবাহিত বিবাহিত তালকপ্রাপ্ত বিধবা	০১ ০২ ০৩ ০৪
১.৫	পেশা	গৃহিণী চাকুরিজীবী শিক্ষিকা ছাত্রী অন্যান্য	০১ ০২ ০৩ ০৪ ০৫
১.৬	অর্থনৈতিক অবস্থা ( বাৎসরিক আয়)	-----	
১.৭.	আয়ের উৎস	নিজে নিজেই স্বামী পুত্র	০১ ০২ ০৩



		নিজে নিজে+স্বামী	০৪
		সামি+পুত্র	০৫
১.৮	কোন ধরনের শারীরিক আঘাত	হ্যাঁ	০১
		না	০২
১.৯	অভ্যাস ( ধূমপান ,পান / জর্দা )	হ্যাঁ	০১
		না	০২
১.১০	হাঁটার ধরন	সোজা	০১
		বাঁকা	০২
১.১১	অস্বাভাবিক অঙ্গবিন্যাস	হ্যাঁ	০১
		না	০২
১.১২	শখ	খেলাধুলা	০১
		বই পড়া	০২
		টিভি দেখা	০৩

## এস এফ ৩৬

১। সাধারণভাবে বলতে , আপনার মতে আপনার স্বাস্থ্য হলঃ

চমৎকার    খুব ভাল    ভাল    মোটামুটি    খারাপ



২। গত এক বছর এর সাথে তুলনা করলে আপনার স্বাস্থ্য কেমন ?

গত এক বছরের    গত এক বছরের    প্রায় গত এক    গত বছরের    গত বছরের

তুলনায়    তুলনায় এখন    বছরের    তুলনায়    তুলনায়  
এখন অনেক    খানিকটা ভাল    মতন    এখন কিছুটা    এখন অনেক  
ভাল    খারাপ    খারাপ    খারাপ    খারাপ



৩। নিম্নলিখিত প্রশ্নগুলো আপনি একটি সাধারণ দিনে যেসব কাজকর্ম করে থাকেন সেই সম্পর্কিত। আপনার স্বাস্থ্য কি আপনার কাজকর্ম বাঁধা হয়ে দাঁড়িয়েছে? যদি হয়, তবে কতটুকু?

একেবারেই	হ্যাঁ, অনেকখানি	হ্যাঁ, খানিকটা	না,
	বাঁধা হয়ে দাঁড়িয়েছে	বাঁধা হয়ে দাঁড়িয়েছে	বাঁধা হয় নি
a. খুব পরিশ্রমসাধ্য কাজগুলি, যেমন দৌড়ানো, ভারি জিনিস তোলা, শ্রমসাধ্য খেলাধুলা করা	▼ <input type="checkbox"/>	▼ <input type="checkbox"/>	▼ <input type="checkbox"/>
b. অপেক্ষকৃত কম পরিশ্রমসাধ্য কাজগুলি, যেমন টেবিল সরানো, ঘর ঝারু দেওয়া, বাগানে কাজ করা অথবা সাইকেল চালানো –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. মুদিখানার পন্যদ্রব্য তোলা বহন করা –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. কয়েক তলা সিঁড়ি বেয়ে উঠা-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. একতলা সিঁড়ি বেয়ে উঠা-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. ঝুকে কিছু করা, হাঁটু গেড়ে বসা, নিচু হয়ে কাজ করা-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. এক মাইলের বেশি হাঁটা –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. কয়েকশত মিটার হাঁটা-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. একশো মিটার হাঁটা-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. নিজে নিজে গোসল করা বা জামাকাপড় পড়া-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

৪। বিগত চারসপ্তাহে, প্রাত্যহিক জীবনের কাজগুলো সম্পাদন করতে গিয়ে আপনার সাস্থ্যের জন্য আপনি কি পরিমাণ সমস্যার মুখে পড়েছেন ?

সবসময় বেশির ভাগ মাঝেমধ্যে খুব কম কখনই নয়  
সময় সময়



a. আপনার কর্মস্থলে এবং

অন্যান্য কাজগুলোতে  
আপনি কম সময় দিয়েছেন –

b. আপনি যতটুকু চেয়েছিলেন  
তারচেয়ে কম কাজ করেছেন –

c. আপনার নিজের কাজ বা  
অন্যান্য কাজেই সীমাবদ্ধ ছিলেন –

d। আপনার নিজের কাজ বা  
অন্যান্য কাজ করতে গিয়ে  
অসুবিধা বোধ করেছিলেন –

৫. বিগত চারসপ্তাহে, প্রাত্যহিক জীবনের কাজগুলো সম্পাদন করতে গিয়ে আপনার মানসিক সমস্যার কারণে আপনি নিচের কোনসমস্যাগুলোর মুখে পড়েছেন ? (যেমন – মানসিক চাপ বা দুশ্চিন্তাগ্রস্ত হওয়া)।

সবসময় বেশির ভাগ মাঝেমধ্যে খুব কম কখনই নয়  
সময় সময়



a. আপনার কর্মস্থলে এবং

অন্যান্য কাজগুলোতে  
আপনি কম সময় দিয়েছেন –

- b. আপনি যতটুকু চেয়েছিলেন
- তারচেয়ে কম কাজ করেছেন –
- c. অন্যান্য সময়ের চেয়ে কাজে
- কম মনযোগ দিয়েছেন –

৬। বিগত চারসপ্তাহে আপনার শারীরিক বা মানসিক সমস্যাগুলি আপনার পরিবার, বন্ধুবান্ধব, প্রতিবেশী বা গোষ্ঠীর সাথে সামাজিক কাজকর্মে কতখানি বাঁধা সৃষ্টি করেছে?

একেবারে না    সামান্য রকম    মাঝামাঝি রকম    অনে কখানি    অত্যন্ত বেশির কম

▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

৭। গত চার সপ্তাহে, আপনি কতখানি শারীরিক ব্যাথা অনুভব করেছেন?

একেবারে না    সামান্য রকম    মাঝামাঝি রকম    অনে কখানি    অত্যন্ত বেশির কম

▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

৮। গত চার সপ্তাহে, আপনি কতখানি শারীরিক ব্যাথা আপনার প্রাত্যাহিক কাজে কি পরিমাণ বাঁধা সৃষ্টি করেছে (ঘরে ও বাইরে)।

একেবারে না    সামান্য রকম    মাঝামাঝি রকম    অনেকখানি    অত্যন্ত বেশির কম

▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

৯। বিগত চারসপ্তাহে, আপনার শারীরিক অবস্থায় কেমন ছিল এবং আপনি কেমন অনুভব করেছিলেন নিচের প্রশ্নগুলো সেই সম্পর্কিত। প্রতিটি প্রশ্নের জন্য আপনি যেমন অনুভব করেছিলেন সে অনুযায়ী সবচেয়ে প্রযোজ্য উত্তরটি দিন।

	সবসময়	বেশির ভাগ	মাঝেমাঝে	খুব কম	কখনই নয়
	সময়	সময়	সময়	সময়	সময়
a. আপনি কি খুব স্বাচ্ছন্দবোধ করেছিলেন?	▼ <input type="checkbox"/>	▼ <input type="checkbox"/>	▼ <input type="checkbox"/>	▼ <input type="checkbox"/>	▼ <input type="checkbox"/>
b. আপনি কি খুব বিচলিত ছিলেন?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. আপনি কি এমনই হতাশাগ্রস্থ হয়ে পড়েছিলেন যে কোনকিছুই আপনাকে উদ্দীপিত করতে পারছিল না?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. আপনি কি খুব স্থির ও শান্ত ছিলেন?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. আপনার কি প্রচুর প্রাণশক্তি ছিল?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f. আপনি কি মানসিকভাবে হতাশ ও মনমরা হয়ে পড়েছিলেন ?

g. আপনি কি বিপর্যস্থ বোধ করেছিলেন ?

h. আপনি কি আনন্দে ছিলেন ?

i. আপনি কি ক্লান্ত ছিলেন ?

১০। বিগত চার সপ্তাহে, আপনার শারীরিক এবং মানসিক সমস্যাগুলো আপনাকে সামাজিক কার্যক্রমে কি পরিমাণ বাধার সৃষ্টি করেছে ? (যেমন – বন্ধু-বান্ধব এবং আত্মীয়-স্বজনদের সাথে দেখা করতে যাওয়া)।

সবসময় বেশির ভাগ মাঝেমধ্যে খুব কম কখনই নয়  
সময় সময় সময় সময় সময়

▼	▼	▼	▼	▼
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

১১। নিম্নলিখিত বিবৃতিগুলো প্রত্যেকটি আপনার ক্ষেত্রে কতটুকু সত্য বা মিথ্যা ?

	অবশ্যই সত্য	বেশির ভাগ	জানি না	অবশ্যই মিথ্যা	বেশির ভাগ
		সত্য			মিথ্যা
a. আমার মনে হয় অন্যান্য মানুষের চেয়ে একটু বেশি অসুস্থ হয়ে পড়ি -	▼	▼	▼	▼	▼
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. আমি আমার জানাশোনা মানুষ গুলোর মতই সুস্থ-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. আমি আমার স্বাস্থ্য খারাপ হবার আশংকা করি -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. আমার স্বাস্থ্য অনেক ভাল -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



April 25, 2017

The Head

Department of Physiotherapy  
Center for the Rehabilitation of the paralysed (CRP)  
CRP, Chapain, Savar, Dhaka-1343.

**Through:** Head, Department of Physiotherapy, BHPI.

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

Dear Sir,

With due respect and humble submission to state that I am Fajilatun Zannat, student of 4<sup>th</sup> Professional B.Sc. in Physiotherapy at Bangladesh Health Professions Institute (BHPI). The ethical board of BHPI has approved my research project entitled on **"Quality of Life of Women with Low Back pain Attending at Musculoskeletal unit in CRP"**. To conduct this research, I want to collect data from women with low back pain who are taking treatment at Musculoskeletal unit in CRP. So, I need your permission for data collection from the women with low back pain from your Department. I would like to assure that anything of my study will not be harmful for the participants.

I therefore, pray and hope that you would be kind enough to give me the permission to make this research project successful.

Sincerely

Fajilatun zannat

Fajilatun zannat

4<sup>th</sup> Professional B.Sc. in Physiotherapy  
Class Roll-25, Session: 2012-2013  
Bangladesh Health Professions Institute (BHPI)  
(An academic Institute of CRP)  
CRP, Chapain, Savar, Dhaka-1343.

*Checked*  
*26/04/17*

*Recommended & Forwarded*  
*26/04/17*

**M. Obaidul Haque**  
Associate Professor & Head of the Department  
Department of Physiotherapy  
Bangladesh Health Professions Institute (BHPI)  
CRP, Chapain, Savar, Dhaka-1343

*Approved*

*Please contact with Salauddin, CPT  
as a counterpart of the data collection  
process.*

*26/04/17*  
**Mohammad Arifur Hossain**  
Associate Professor &  
Head of Physiotherapy Dept.  
CRP, Chapain, Savar, Dhaka-1343



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

Ref: CRP-BHPI/IRB/04/17/108

Date: 15/04/2017

To  
Fajilatun Zannat  
B.Sc in Physiotherapy  
Session: 2012-2013, Student ID 112120026  
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

**Subject: "Quality of life of Women with Low Back Pain Attending at Musculoskeletal Unit in CRP."**

Dear Fajilatun Zannat,

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application on 08/08/2016 to conduct the above mentioned thesis, with yourself, as the Principal investigator. The following documents have been reviewed and approved:

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

Since the study involves Western Ontario Macmurie (WOMAC) scale and a self-administered questionnaire that takes 15 to 20 minutes and have no likelihood of any harm to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 09:00 AM on August 17, 2016 at BHPI.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

*Muhammad Millat Hossain*

Muhammad Millat Hossain  
Assistant Professor, Dept. of Rehabilitation Science  
Member Secretary, Institutional Review Board (IRB)  
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

CRP-Chapain, Savar, Dhaka-1343. Tel: 02-7745464-5, 7741404 , Fax: 02-7745069,  
Email: contact@crp-bangladesh.org, www.crp-bangladesh.org