QUALITY OF LIFE AMONG THE LOWER BACK PAIN PATIENT ATTENDED AT CRP

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

Session: 2006-07

BHPI, CRP, Savar, Dhaka-1343

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

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

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CONTENTS

Declaration

I declare that the work presented here is my own. All source used have been cited appropriately. Any mistakes or inaccuracies are my own. I also declare that for any publication, presentation or dissemination of the study. I would be bound to take written consent from my supervisor.

Signature: **Date:**

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Acknowledgement

Abbreviations

BHPI: Bangladesh Health Professions Institute

CRP: Center for the rehabilitation of the paralyzed

CT: Computed Tomography

DDD: Degenerative Disc Disease

EQ VAS: EuroQol Visual Analog Scale

EQ-5D-3L: EuroQol-5 Descriptive System-3 Level

HIZ: High Intensity Zone

HTN: Hypertension

LBP: Low Back Pain

MLBP: Mechanical Low Back Pain

MRI: Magnetic Resonance Imaging

MRI: Magnetic resonance imaging

PBWS: Partial Body-Weight Support

QOL: Quality of Life

SPSS: Statistical Package of Social Science

UK: United Kingdom

WHO: World Health Organaization

List of Figures

Abstract

Purpose: The purpose of the study was determine the quality of life among the low back pain patients attended at CRP using EQ-5D-3L. *Objectives*: To explore the quality of life among the low back pain patients attended at CRP, to find out the socio-demographic (age, gender, residential area and occupation) information, to survey the level of mobility of the LBP patients, to evaluate the level of personal hygiene, to measure the level of usual activities, to determine the level of pain or discomfort, to identify the level of mental status during LBP and to mention the today's health of the LBP patients in EQ VAS. *Methodology:* A cross sectional study was conducted with a semi structured questionnaire to collect data from 70 participants, age ranging from 18-70 years. Data were numerically coded and captured in Microsoft Excel, using an SPSS 16.0 version software program. *Results:* Due to LBP there have a lot of problem in mobility and usual activity while most of the participants was said that there have no problem in personal care. Pain or discomfort also high many of participants were worried about their pain. The mean age of the participants was 38.36 years. Most of the participants are female it is about 59% and male are about 41%. As the majority of the participants are female, so most of the participants were found housewife. *Conclusion:* From this study it was fined 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, EQ-5D-3L.

1.1 Background

Low Back Pain (LBP) is a widespread and costly problem in many countries (Mainiadakis & Gray, 2000). The lumber disk herniation is the most regular condition of the backbone degenerative procedures, and they cause of 30% to 80% of the lower back problems cases (Miller et al, 2006). It is a common condition that affects an estimated 70% to 80% of adults at some points during their lifetimes (Tavafian, 2005). In the UK the number of days of invalidity benefit attributable to spinal disorders raised three fold over the 1980s (UK BEAM, 2003). At least 5 million patients with chronic and severely debilitating pain exist among the adult population in Germany, i.e. 8% of this population. Various biological and psychosocial risk factors contribute to the continuing severity of pain, resulting in enormous direct and indirect costs totaling an estimated 38 billion euro annually (Zinmmermann, 2004). In Sweden, the indirect costs for chronic LBP appear to be substantially higher than the direct costs for pharmaceuticals, medical visits, physiotherapy, and hospitalizations. The high indirect costs indicate that more effective treatments for chronic LBP could potentially lead to cost savings even if the therapy costs were higher (Ekman et al, 2005). In India, Many episodes of LBP are disabling, thus making it one of the costly occupational health problem. The proper alignment and lifting operations during drilling process frequently exposed the oil-drilling workers to unusual strain on the spine and thus make them susceptible for developing low back pain (Tiwari et al, 2012). Along with the clinical examinations, computed tomography (CT), and magnetic resonance imaging (MRI), the clinical diagnostic techniques are frequently applied due to the additional standardized screening of patients for micro-disectomy surgical intervention (Zanoli et al, 2001). According to the recent publications, there is an increasing interest in the use of health related quality-of-life measures for the assessment of outcomes of spinal surgery, because it might allow comparisons across studies using the standard questionnaires (Bombardier, 2000).Thus, many researchers report recurrent episodes of LBP with variable length and severity (Yoshiaki et al, 2003). It is widely believed that pain has a profound effect on a person's Quality of Life (QOL) but many of measures designed for using in health care, only assess pain not QOL. Nowadays the quality of life questionnaires are the most important

contemporary measures in health care and are more responsive to changes in clinical condition than pain measures themselves (Skevington, 1998). Studies have shown that lumbar spine disease can negatively affects the QOL and it can have a major impact on daily functions such as dressing oneself, standing, sitting, walking, and lifting which can severely interfere with a wide range of life's activities (Clariborn et al, 2002 & Liddle et al, 2004). In fact, pain and the degree, to which the patients believe that they are disabled by it, is a powerful factor in the extent of their QOL impairments (Turner et al, 2000). Biomechanical factors influence pain, but psychosocial factors have more of an influence on the development and duration of disability (Kovacs et al, 2004). It could be argued that the perspective of healthy is irrelevant to the measurement of health related and also disease specific quality of life, as people do not realize that what is valuable to them until they have lost their health (Bowling, 1995). Despite many studies in different countries however, little will try to known 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 LBP.

1.2 Rationale

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

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. LBP affects patient's mobility, personal care, usual activities as well as mental status also. Mostly these things can change the course of treatment positively. After this study physiotherapist get a idea which level of QOL patients will have LBP. This idea help to set up treatment plan according to patients needs. We can provide better treatment as well as essential advice to the patients. As a health professional it improves our knowledge. By this study patients also benefited by gaining knowledge about his/her condition and gain some information about their life style which are responsible or not for their mobility, personal care, usual activities, and mental status. This research was based on the practical data collected from the patients coming to CRP for the treatment according to my questionnaire. I had made the relation between this information and draw some conclusion which could be used in future. This kind of research was not done before in Bangladesh, so it will be a resource for physiotherapist and other medical professionals for the quick analysis to find out the efficiency of the treatment that why the therapy is working faster or not.

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 among the low back pain patients attended at CRP?

1.4 Objectives

1.4.1 General objective

- To determine the quality of life among the low back pain patients attended at CRP.

1.4.2 Specific objectives

- To find out the socio-demographic (age, gender, residential area and occupation) information
- To identify the level of mobility, personal hygiene, usual activities, pain or discomfort, mental status of the LBP patients.

1.5 Conceptual framework

Independent variable   **Dependent variable**

Mobility

Personal care

Usual activities

Quality of life among LBP patients

Pain or discomfort

Mental status

Pain intensity
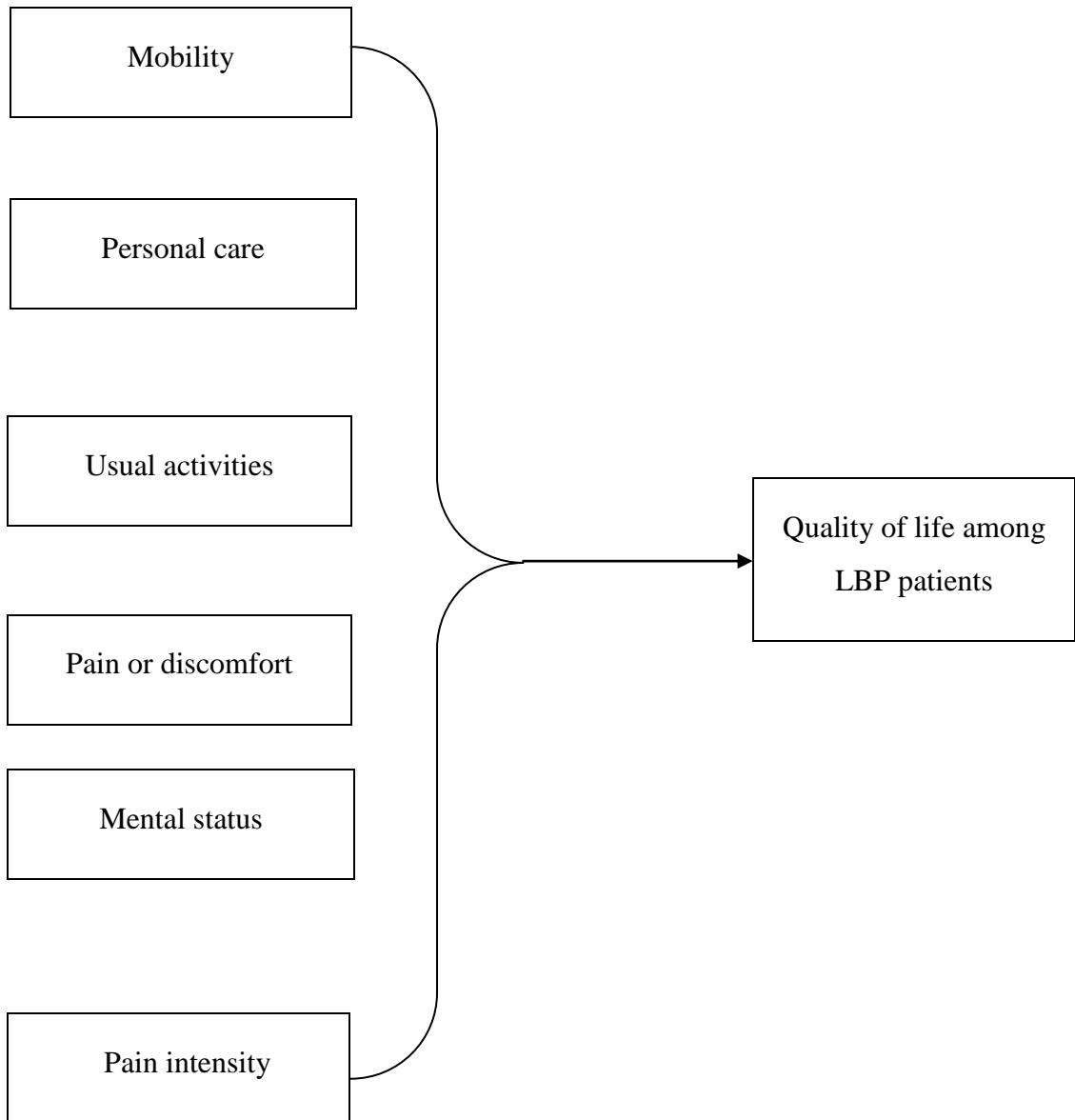
1.6 Operational definition

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

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

Mobility: The ability to organize and accomplish the act of moving.

Personal care: The occupation of attending to the physical needs of people including tasks such as bathing, management of bodily functions, and cooking.

Low back pain remains to be the single most common reason for a visit to a general practitioner and is also the greatest cause for work- related disability. It is from mechanical origin is identified by the presence or absence of symptoms and signs with different postures or movements. Mechanical LBP is commonly treated conservatively with physical therapy (Kumar, 2011). LBP is a major health issue with significant socioeconomic implications in most Western countries. Many forms of treatment have been proposed and investigated in the past, with exercise being a commonly prescribed intervention. Within allied health, in particular physiotherapy, there has been a growing movement that recognizes the role of the McKenzie method in treating LBP (Dunsford et al, 2011). It is a common and disabling disorder in western society. The management of LBP comprises a range of different intervention strategies including surgery, drug therapy, and non-medical interventions (Middelkoop et al, 2011).

The low back architecture consists of vertebral bodies (the bones of the spine), vertebral discs (cushions between the bones), cartilage (lines the bones that connect with other bones), supportive structures surrounding the spine, such as muscles, tendons (connecting muscle to bone), ligaments (connecting bone to bone) (Integrative pain medicine, 2012). A number of options exist for patients with intractable back pain and degenerative disc disease (DDD). Interbody fusion techniques exploit the mechanical advantages of the disc space anteriorly, including a large fusion bed, excellent blood supply and graft compression (Truumees et al, 2008). The occurrence of LBP has been linked with various abnormalities of the spine on MRI, evidence being strongest for disc herniation (protrusion or worse), nerve root deviation/compression, disc degeneration and high intensity zone (HIZ). However, each of these abnormalities can be found in the absence of symptoms, and many patients with back complaints do not exhibit any demonstrable pathology on MRI (Shambrook et al, 2011).

Mechanical low back pain (MLBP) is a major public health problem (Phaner et al, 2009). In USA, There were almost 15 million office visits for "mechanical" low back

pain in 1990, ranking this problem fifth as a reason for all physician visits. Low back pain accounted for 2.8 percent of office visits in all three time periods (Hart et al, 1995). Lack of feed forward activation of selected trunk musculature in patients with MLBP may result in a period of inefficient muscular stabilization (Silfies et al, 2007). MLBP is commonly aggravated by activities that increase axial loading in the spine, such as sitting, standing, and walking. Patients with mechanical LBP usually describe relief with positions that unload the spine. One traction technique now being used in clinics to unload the spine is the partial body-weight support (PBWS) system. The use of endurance exercise has also been found to be a consistent predictor of better outcomes in patients with LBP (Joffe D et al, 2002). Today's standard care strategy involves a combination of drug-based and non-drug therapies. The use of conservative orthopedic brace treatment is subject to debate (Phaner et al, 2009). Evidence suggests that spinal manipulation is an effective treatment for mechanical neck and low-back pain (LBP). Treatment efficacy is important to establish for these symptoms because combined they account for a considerable amount of disability and substantial associated direct and indirect costs to society (McMorland & Suter, 2000).

The most common causes of low back pain are injury or overuse of muscles, ligaments, and joints, pressure on nerve roots in the spinal canal (caused by a herniated disc, by repeated vibration or motion during sport activity or when using a machine or lifting in the wrong way, osteoarthritis in older age when it affects the small joints in the spine, Spondylolisthesis, Spinal stenosis, Fractures of the vertebrae (Integrative pain medicine, 2012), Spinal deformities, including curvature problems such as severe scoliosis or kyphosis. Compression fractures are more common among post-menopausal women with osteoporosis and in men or women after long-term corticosteroid use. Less common spinal conditions causing low back pain include Ankylosing spondylitis which is a form of arthritis that most often affects the spine, Bacterial infection: Bacteria are usually carried to the spine through the bloodstream. An infection may enter the spine from An infection somewhere else in the body, Intravenous (IV) drug use, Surgery or injection treatments, An injury, Spinal tumors, which are growths on the bones and ligaments of the spine, on the spinal cord, or on nerve roots (Back Pain Health Center, 2005)

Patients' pain was assigned a mechanisms-based classification based on experienced clinical judgment and Clinicians then completed a clinical criteria checklist specifying the presence or absence of various clinical criteria. A binary logistic regression analysis with Bayesian model averaging identified a cluster of two symptoms and one sign predictive of PNP, including: 'Pain referred in a dermatome or cutaneous distribution', 'History of nerve injury, pathology or mechanical compromise' and 'Pain/symptom provocation with mechanical/movement tests (Smart et al, 2012). A regression analysis identified a cluster of seven clinical criteria predictive of NP, including: 'Pain localized to the area of injury or dysfunction', 'Clear, proportionate mechanical or anatomical nature to aggravating and easing factors', 'Usually intermittent and sharp with movement or mechanical provocation; may be a more constant dull ache or throb at rest', and the absence of 'Pain in association with other dysesthesias', 'Night pain or disturbed sleep', 'Antalgic postures or movement patterns' and 'Pain variously described as burning, shooting, sharp or electric-shock-like' (Smart et al, 2012). Constant pain, pain that wakes, and stiffness after resting were generally considered as moderate indicators of MLBP, while intermittent pain during the day, pain that develops later in the day, pain on standing for a while, with lifting, bending forward a little, on trunk flexion or extension, doing a sit up, when driving long distances, getting out of a chair, and pain on repetitive bending, running, coughing or sneezing were all generally considered as moderate indicators of MLBP (Walker et al, 2009).

Symptoms of low back pain depend on the cause. In case of back sprain or strain Muscle spasms, cramping, and stiffness, Pain in the back and buttocks. Certain movements make it worse, and resting makes it feel better. The worst pain usually lasts 48 to 72 hours and may be followed by days or weeks of less severe pain. In case of Nerve-root pressure if leg pain extends below the knee, it is more likely to be due to pressure on a nerve than to a muscle problem. Most commonly, it's a pain that starts in the buttock and travels down the back of the leg as far as the ankle or foot. In case of nerve-related problems, such as tingling, numbness, or weakness in one leg or in the foot, lower leg, or both legs. Tingling may begin in the buttock and extend to the ankle or foot. Weakness or numbness in both legs, and loss of bladder and/or bowel control, are symptoms of cauda equina syndrome, which requires immediate medical attention (Back Pain Health Center, 2005).

Diagnosis consists of physical examination and laboratory investigation. The physical examination includes observation and measurements, palpation for tenderness and joint alignment and check pulses in the legs, deep tendon reflex tests, sensation tests, movement tests, straight leg test, muscle strength tests (neurologic testing), general abdominal, pelvic, rectal, and leg exams (Back Pain Health Center, 2010).

The World Health Organaization (WHO) defines Quality of life' as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, soical relationships and their relationship to their environment (WHOQOL, 1997). It is a multi-level and amorphous concept, and is popular as an endpoint in the evaluation of public policy (e.g. outcomes of health and social care). While the main domains of quality of life identified in the literature are relevant to adults of all ages, these can vary in priority among people in different age groups (Bowling 1995).

There are three types of Quality of Life model conceptual model, conceptual framework and theoretical framework. Conceptual Model is a model that specifies dimensions and properties of QOL. Conceptual Framework is the model that describes, explains or predicts the nature of the directional relationships between elements or dimensions of QOL. Theoretical Framework is a model that includes the structure of the elements and their relationship within a theory that explains these relationships (Galloway, 2006).

The EuroQol Group is developed EQ-5D which is a standardized measure of health status. They provide a simple, generic measure of health for clinical and economic appraisal. In 1990 the EQ-5D 3 level version (EQ-5D-3L) was introduced. The EQ-5D-3L has contained of 2 pages- the EQ-5D descriptive system and the EQ visual analogue scale (EQ VAS). The EQ-5D-3L descriptive system comprises the following 5 dimensions, those are mobility, self-care, usual activities, pain/discomfort and anxiety/depression. Each dimension has 3 levels: no problems, some problems, extreme problems. The respondent is asked to indicate his/her health

state by ticking (or placing a cross) in the box against the most appropriate statement in each of the 5 dimensions. The EQ VAS records the respondent's self-rated health on a vertical, visual analogue scale where the endpoints are labeled 'Best imaginable health state' and 'Worst imaginable health state'. This information can be used as a quantitative measure of health outcome as judged by the individual respondents (Rabin, 2011)

3.1 Study design

The purpose of the study was to find out the quality of life among the low back pain patients attended at CRP musculoskeletal unit. In this study used cross sectional study design.

3.2 Study area

Data was collected from the Physiotherapy Musculoskeletal Unit of the Centre for the Rehabilitation of the Paralyzed (CRP), Savar.

3.3 Study population

All the low back pain patient according to inclusion & exclusion criteria of attended in CRP musculoskeletal unit is considered as the study population.

3.4 Sample size

The equation of sample size calculation are given below-

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

Here,

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

p = 0.36 (Here, p = Prevalence and p = 36%)

q = 1-p

    =1-0.36

    = 0.64

d = 0.05

The actual sample size for this study is calculated as 354, but as the study performed as a part of academic research project and there were some limitations. So that 70 low back pain patients was taken as the sample of this study.

3.5 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.

3.5.1 Inclusion criteria of the study

- Male and female both were included.
- Voluntary participation.
- First conducting patients.

3.5.2 Exclusion criteria of the study

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

3.6 Data collection tools

The tools that needed for the study were- Consent paper, questionnaire, quality of life scale, paper, pen, file, calculator, computer, and printer.

3.7 Data collection procedure

Data was collected through the face to face interview with participants using EQ-5D-3L questionnaire.

3.8 Data Analysis

Data was analyzed Microsoft office Excel 2007 using a SPSS 16 version software program. Data were represented by descriptive and inferential statistics.

3.9 Ethical consideration

A research proposal was submitted to local ethical review committee 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. 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.

Participant were explained about his/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 are 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.

3.10 Inform consent

The aims and objectives of this study should be 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 his/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 his/her problem with senior authority.

3.11 Limitation of the study

Though the expected sample size was 354 for this study but due to resource constrain researcher could manage just 70 samples which is very small to generalize the result for the wider population of LBP. There are a few literatures about QOL among 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.

In this study cross sectional study design was used to explore the quality of life among low back pain patients attended at CRP using EQ-5D-3L questionnaire. Total number of participants was seventy.

4.1 Quality of life among low back pain patients

In 70 participants with low back pain there were 17.6% participants had no problem in their QOL and 82.4% participants had problem in their QOL.

No problem in
QOL
17.4%
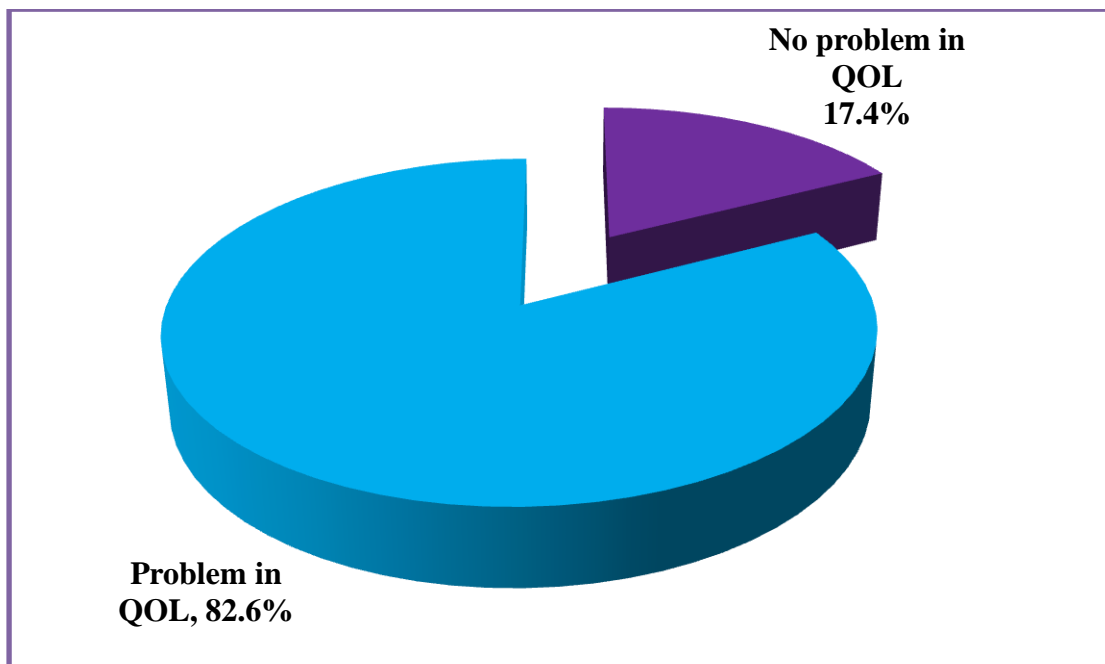
Problem in
QOL, 82.6%

Figure: 1 Quality of life among low back pain patients

4.2 Age range of the participants

In this study between 18-29 years and between 38-44 years participants was showing same result about 23% (16), between 30-37 years and between 45-70 years participants was also showing the same result about 27% (19) (Figure: 1).
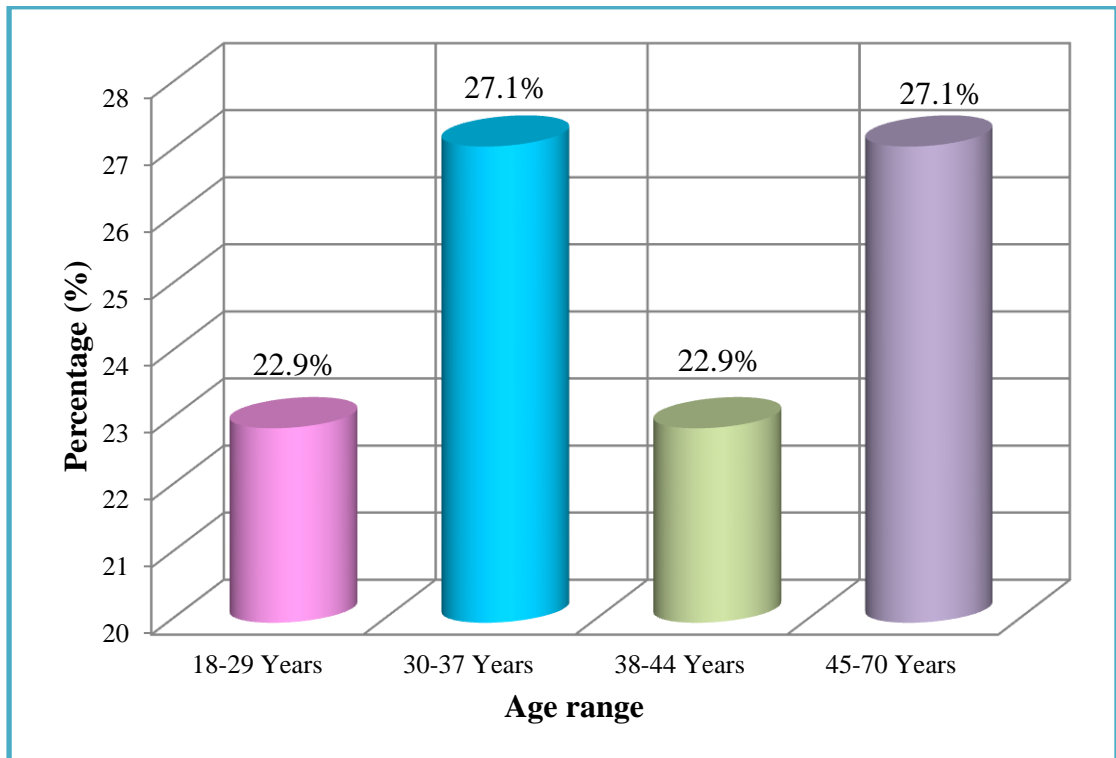
Figure 2: Age range of the participants

4.3 Gender of the participants

Most of the participants of this study were female and it was about 59% (41) and rests about 41% (29) participants were male that shows in this pie chart (Figure 2) below.

Figure 3: Gender of the participants

4.4 Residential area of the participants

In this study 53% (37) participants were living in urban and 47% (33) participants were living in rural area (Figure 3).
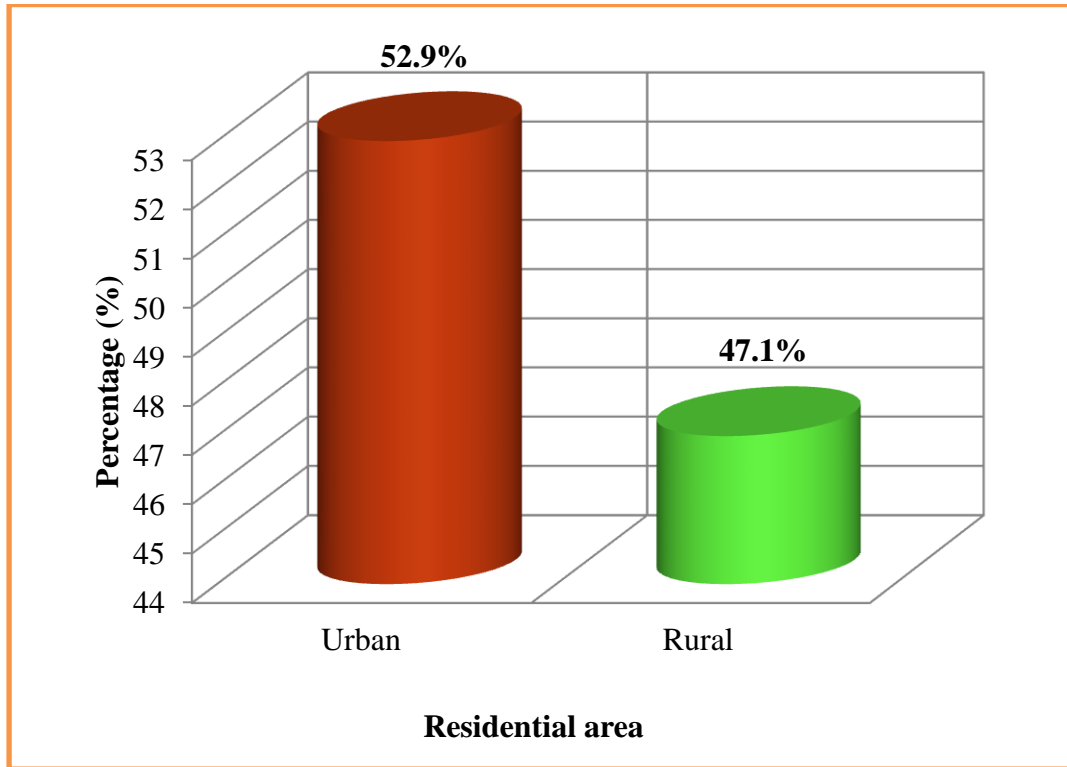
Figure 4: Residential area of the participants

4.5 Occupation of the participants
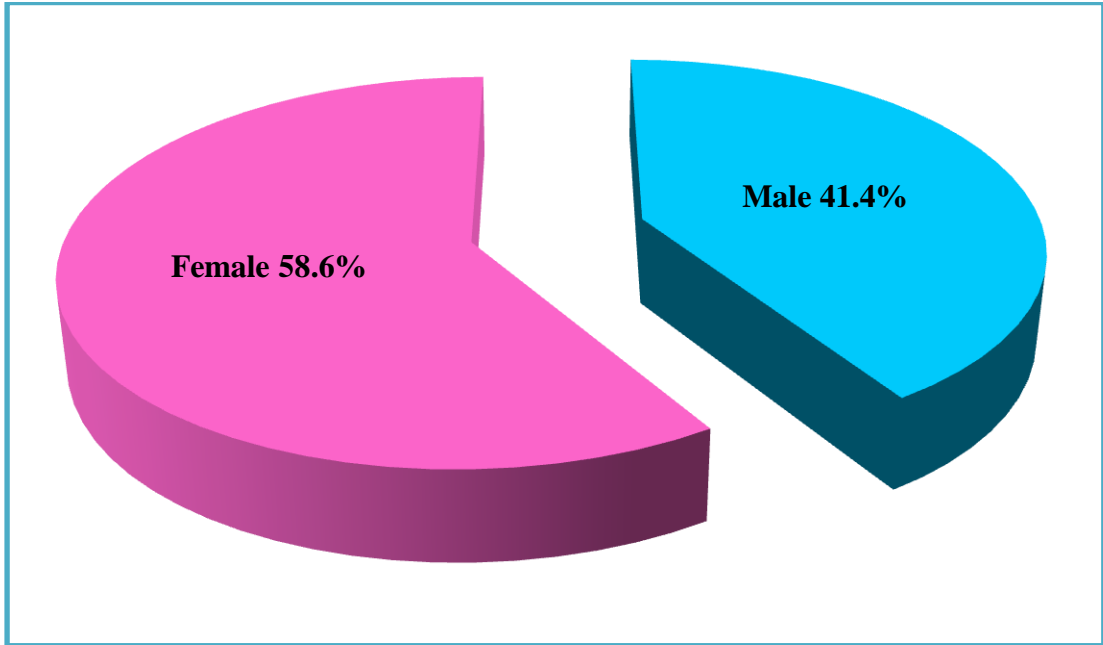
This bar chart (Figure 4) shows that the businessman and service holders, both of them had same output of 10% (7), about 2% (1) participants were day labor, unemployed and teacher were also same participants about 3% (2), about 54% (38) participants were housewife, about 4% (3) participants were student and about 14% (10) participants were others (farmer, doctor, engineer, tailor, driver, security guard).
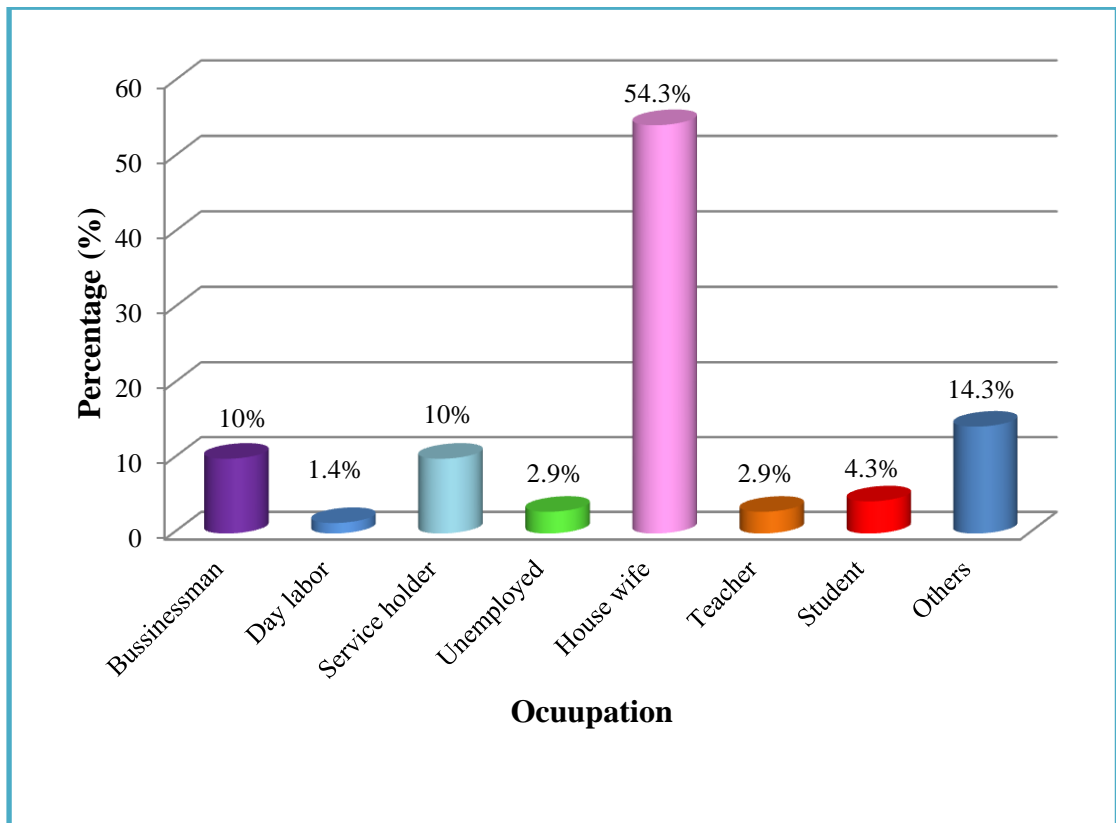
Figure 5: Occupation of the participants

4.6 Mobility of the participants

In this study 16% (11) had no problems in walking, 41% (29) had some problems in walking and 43% (30) had a lot of problems in walking (Figure 5).
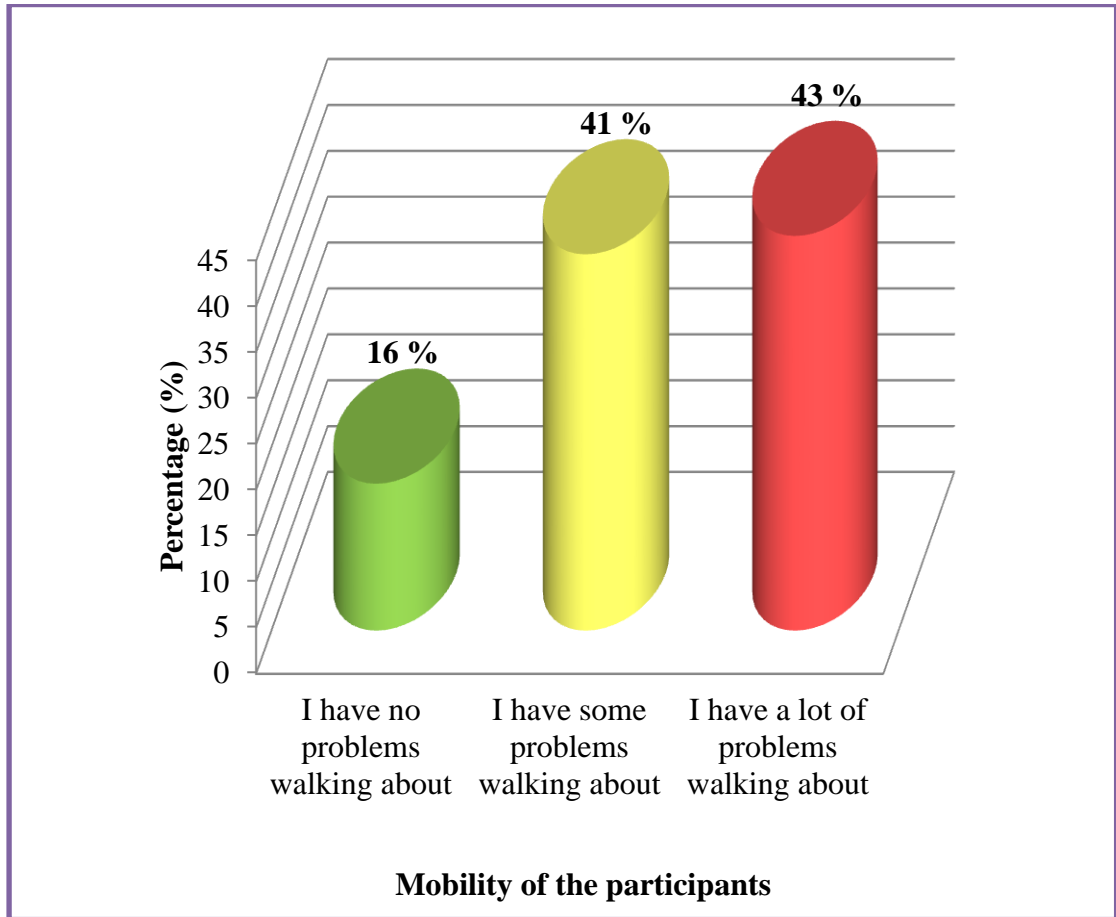
Figure 6: Mobility of the participants

4.7 Personal care of the participants

This figure 6 shows that 57% (40) had no problems during washing or dressing themselves, 40% (28) had some problems during washing or dressing themselves and 3% (2) had a lot of problems during washing or dressing themselves.
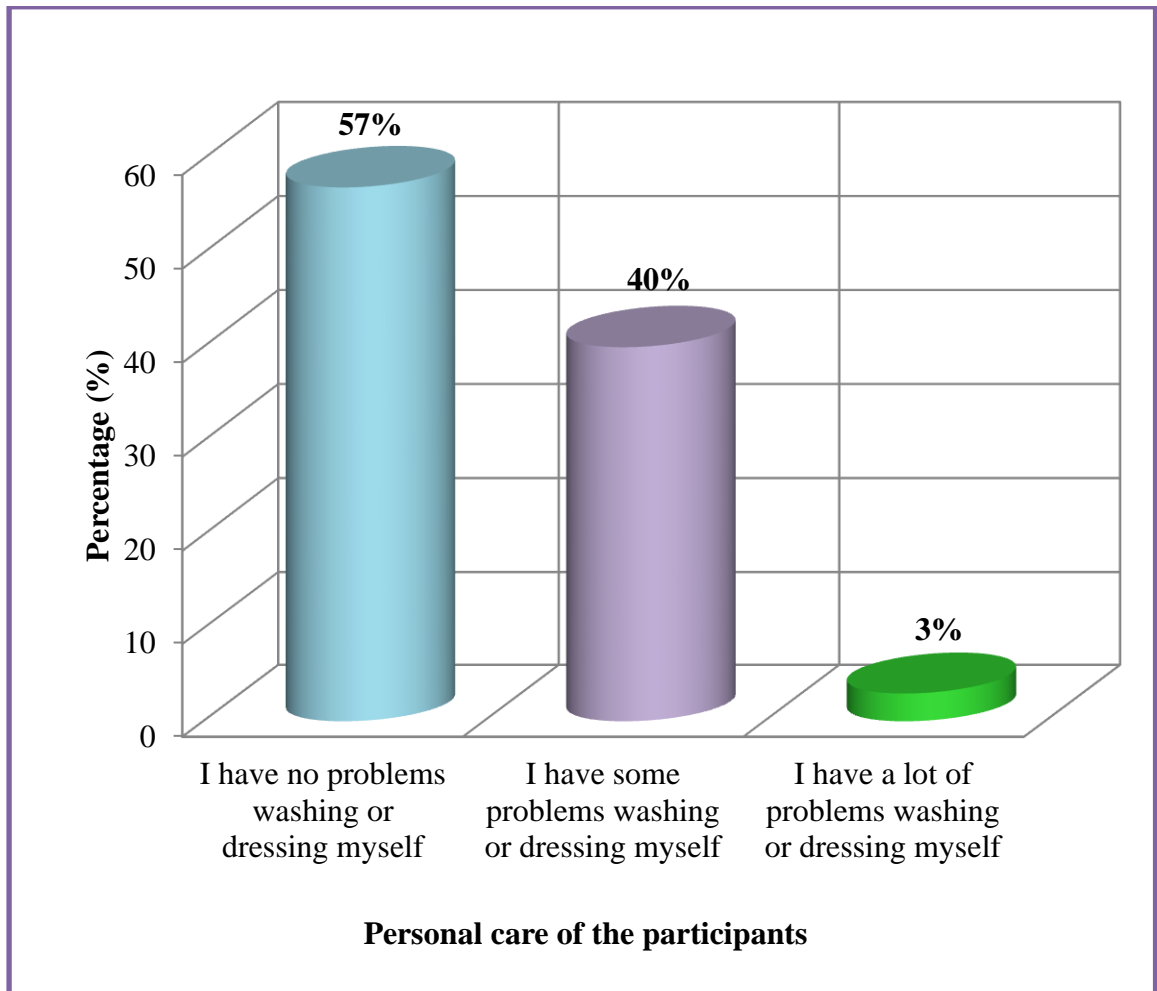
Figure 7: Personal care of the participants

4.8 Usual activities of the participants

In this study 6% (4) had no problem to do their usual activities, 56% (39) had some problems to do their usual activities and 38% (37) had a lot of problems to do their usual activities (Figure 7).
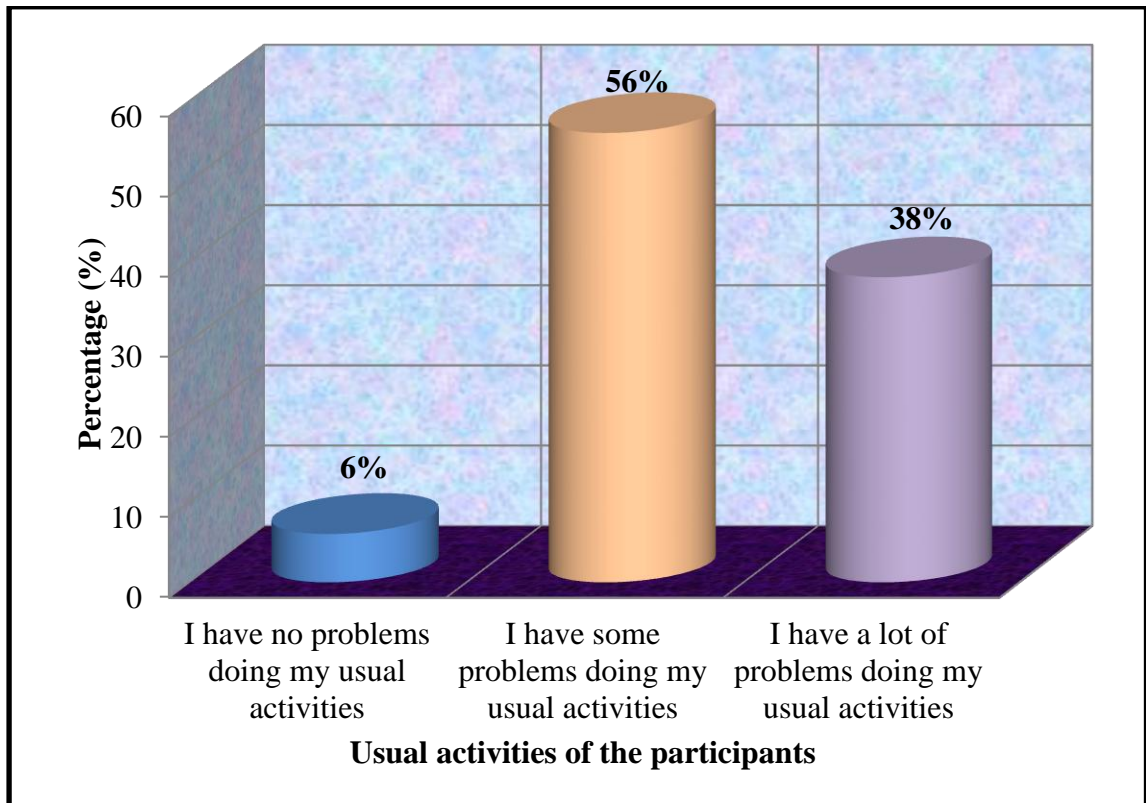
Figure 8: Usual activities of the participants

4.9 Pain or discomfort of the participants

In this study 39% (27) had some pain or discomfort and 61% (43) had a lot of pain or discomfort (Figure 8).
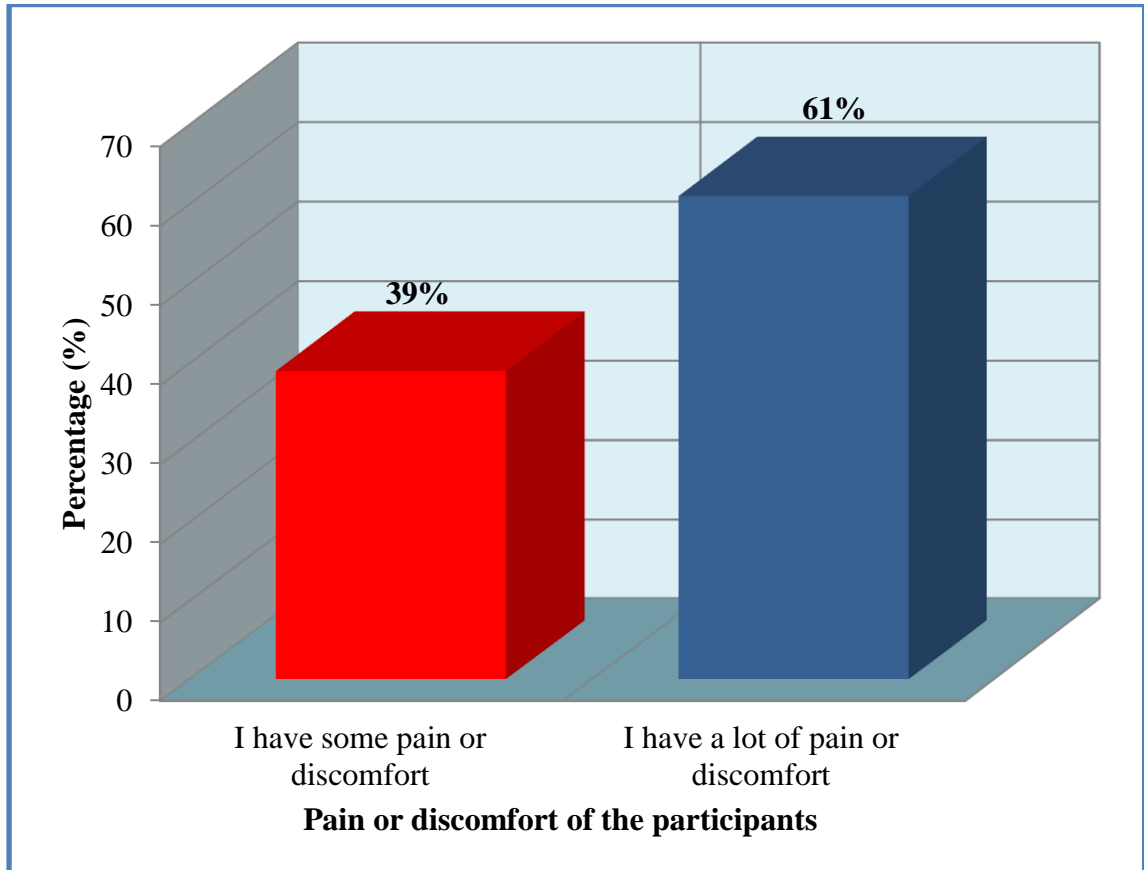
Figure 9: Pain or discomfort of the participants

4.10 Mental status of the participants

The pie chart shows that 9% (6) participants were not worried, sad or unhappy for their pain, 70% (49) participants were little bit worried, sad or unhappy for their pain and 21% (15) participants were very worried, sad or unhappy for their pain (Figure 9).
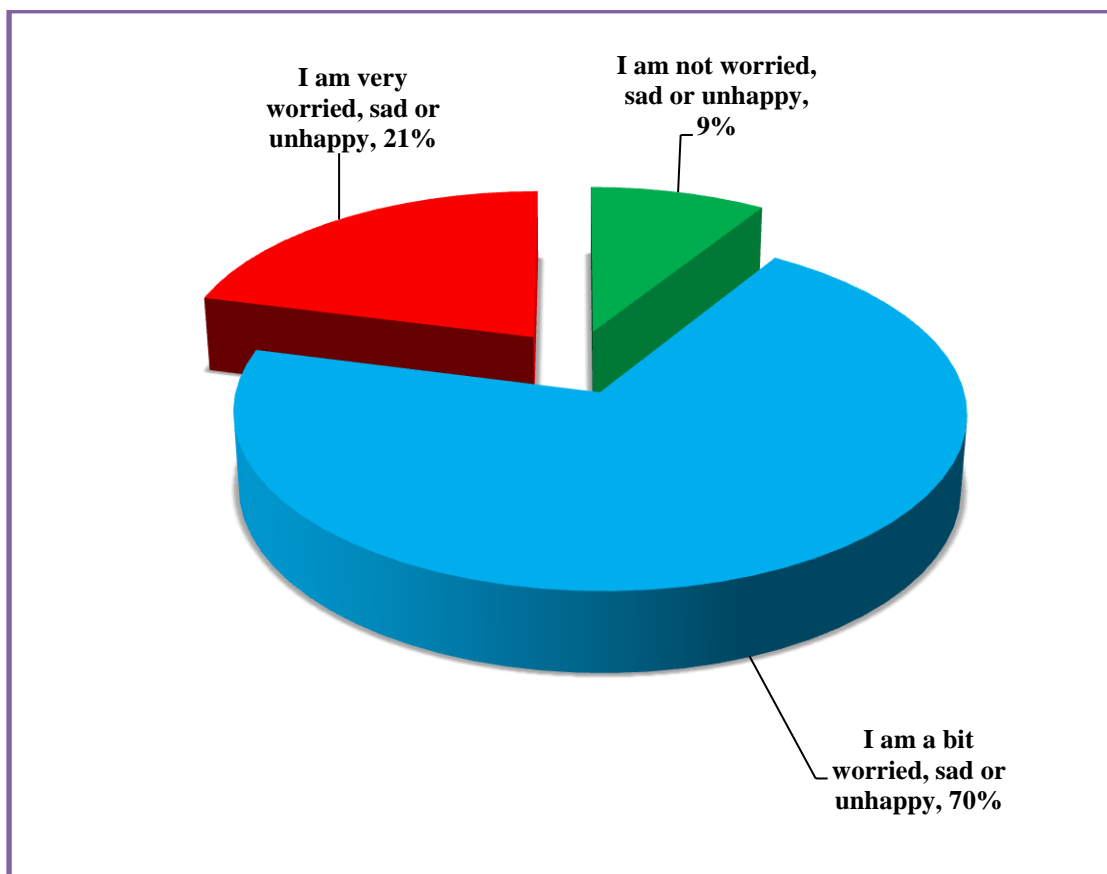
Figure 10: Mental status of the participants

4.11 Today's health in EQ VAS

The question was 'What is your health today?' with verbal response anchors of 'Very depressed' (0) to 'Best ever felt' (100). The mean score for this group at baseline was almost 46 with a range of 0-90 and mode of 55.

CHAPTER: V	DISCUSSION

Seventy patients of LBP were studied. The mean age of LBP patients of this study were about 38 years, with the youngest participant 18 years old and the oldest 69. The mean score for this age group was 38.36. In an Iranian study the mean age was 43.8 years (Tavafian et al, 2005). Almost 59% were female and 41% were male. The male female ratio was 1:1.4. Berman and Singh in 1997 states that in their study 27% of the group were males and 73% were females.

Most of the participants were housewife, about 54%. Others occupations were 10% participants were businessman, 2% participants were day labor, 10% participants were service holder, 3% participants were unemployed, 3% participants were teacher, 4% participants were student and 14% participants were others (farmer, doctor, engineer, tailor, driver, security guard). 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).

In 70 participants with low back pain there were 17.6% participants had no problem in their QOL and 82.4% participants had problem in their QOL. Here shows that there is a significant difference of QOL patient with LBP and it is 64.8%. So it is clear that the QOL is become poor of LBP patients.

In this study 16% participants had no problems in walking, 41% had some problems in walking and 43% had a lot of problems in walking. So it was figure out that most of the patients with LBP had a lot of problems in their mobility.

On the other hand, 57% participants had no problems during washing or dressing them, 40% had some problems and 3% had a lot of problems during washing or dressing themselves. It was seems to clear that LBP provide some affects their personal care of daily life.

By this study we also could saw that 6% had no problem to do their usual activities, 56% had some problems and 38% had a lot of problems to do their usual activities. LBP also hampered their usual activity.

In this study 39% had some pain or discomfort and 61% had a lot of pain or discomfort. Majority of participants were coming in CRP with lot of pain history. One of Iranian study states that 51% patients reported that experiencing mild pain and the remaining 49% patients reported that suffering from severe pain (Tavafian et al, 2005).

Here it was seems to mentioned that 9% participants were not worried, sad or unhappy for their pain, 70% participants were little bit worried, sad or unhappy for their pain and 21% participants were very worried, sad or unhappy for their pain. So LBP affects their happiness also.

All of participants described their today's health with verbal response anchors of 'Very depressed' (0) to 'Best ever felt' (100). The mean score for this group at baseline was almost 46 with a range of 0-90 and mode of 55.

CHAPTER: VI	CONCLUSION

From the study it can be concluded that female are more affected than male with LBP. 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 mobility, personal care, usual activities, pain or discomfort and mental status. Due to LBP there have a lot of problem in mobility and usual activity while most of the participants was said that there have no problem in personal care. Pain or discomfort also high many of 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.

The results of the study explore the QOL 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.

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মৌখিক সম্মতিপত্র

চিকিৎসা কেন্দ্রঃ পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্র (সি আর পি)

আসসালামুয়ালাইকুম/ নমঃস্কার। আমার নাম মহসীনা সুলতানা। কোমর ব্যাথার কারণে সি আর পি তে চিকিৎসা নিতে আসা রোগীদের জীবন প্রকৃতির ধরনের পরিবর্তন সম্পর্কিত একটি গবেষণা পরিচালনা করছি। আমি বি এইচ পি আই এর ৪র্থ বর্ষ বি এস সি ইন ফিজিওথেরাপী কোর্সের একজন ছাত্রী এবং এই গবেষণা তার অধ্যায়নের অংশ। (নিম্নোক্ত তথ্যাদি পাঠ করার পর অধ্যায়নে অংশগ্রহণকারীগণ অংশগ্রহণ করার জন্য আমন্ত্রিত)।

এই অধ্যায়নের লক্ষ্য হল কোমর ব্যাথার সাথে সাথে বয়স, পেশা, আবাসিকস্থলের ভিত্তিতে জীবন প্রকৃতির কি ধরনের পরিবর্তন হতে পারে তা খুঁজে বের করা যা পরবর্তি সময়ে কোমর ব্যাথার চিকিৎসার জন্য সহায়ক হবে। এই গবেষণা/ অধ্যায়নের জন্য আপনাকে কিছু প্রশ্ন করা হবে, আপনি এর উত্তর করবেন এবং এতে প্রায় ২০ মিনিট সময় লাগবে।এই গবেষণায় অংশগ্রহণের কারণে আপনার চিকিৎসার কোনরকমের অসুবিধা হবে না এবং আপনার ব্যক্তিগত সকল তথ্য গোপন রাখা হবে/ গবেষক গোপনিয়তা রক্ষা করবেন। প্রশ্ন-উত্তর পর্বের যেকোন মুহুর্তে আপনি সম্মতি প্রত্যাহার এবং কোন প্রশ্নের উত্তর প্রদানের অপারগতা প্রকাশের ব্যাপারে আপনার সম্পূর্ন অধিকার রয়েছে।

এই গবেষণার ব্যাপারে আপনার কিছু জানার থাকলে গবেষক মহসীনা সুলতানা অথবা ওবায়দুল হক, এ্যাসোসিয়েট প্রফেসর এবং কোর্স কো-আরডিনেটর, ফিজিওথেরাপি বিভাগ, বি এইচ পি আই আর সাথে যোগাযোগ করতে পারবেন।

রোগীর স্বাক্ষর: _____   তারিখঃ _____

গবেষকের স্বাক্ষর: _____   তারিখঃ _____

VERBAL CONSENT STATEMENT

Health care center: Center for the Rehabilitation of the Paralyzed (CRP)

Assalamualaikum/Namasker, my name is Mohsina Sultana; I am conducting this study for a Bachelor project study titled "Quality of life among the low back pain patient attended at CRP." from Bangladesh Health Professions Institute (BHPI), University of Dhaka. I would like to know about some personal and other related questions about low back pain and quality of life. This will take approximately 20 minutes.

 I would like to inform you that this is a purely academic study and will not be used for any other purpose. The researcher is not directly related with musculoskeletal area, so your participation in the research will have no impact on your present or future treatment in musculoskeletal area. All information provided by you will be treated as confidential and in the event of any report or publication it will be ensured that the source of information remains anonymous. Your participation in this study is voluntary and you may withdraw yourself at any time during this study without any negative consequences. You also have the right not to answer a particular question that you don't like or do not want to answer during interview.

If you have any query about the study or your right as a participant, you may contact with Mohsina Sultana, researcher and/ or Md. Obaidul Haque, Associate professor and Course Coordinator of Physiotherapy Department, BHPI, CRP, Savar, Dhaka-1343.

Signature of the Patient: _____   Date: _____

Signature of the Interviewer _____   Date: _____

প্রশ্নাবলীঃ

"কোমর ব্যাথার কারণে সি আর পি তে চিকিৎসা নিতে আসা রোগীদের জীবন প্রকৃতি"

কোডঃ	সাক্ষাতকারের তারিখঃ
রোগীর নামঃ	
ঠিকানাঃ	
ফোন নাম্বারঃ	
সাক্ষাতকার গ্রহণকারীর নামঃ	

| প্রথম অংশঃ সামাজিক-জনতাত্ত্বিকতথ্য		
প্রশ্ন নং	প্রশ্নসমূহ	প্রতিক্রিয়া
১।	আপনার বয়স	_____ বছর
২।	লিঙ্গ	১।পুরুষ ২।মহিলা
৩।	আবাসিক এলাকা	১।শহর ২।গ্রাম
৪।	পেশা	১।ব্যাবসায়ী ২।দিনমজুর ৩।চাকরিজীবি ৪।বেকার ৫।গৃহিনী ৬।শিক্ষক ৭।ছাত্র ৮।অন্যান্য (নির্দিষ্টিকরুন)_____

দ্বিতীয় অংশঃ জীবন প্রকৃতিরক্রম পর্যায়াঙ্কিতমাপ (ই কিউ-৫ডি-৩ ওয়াই)

প্রশ্ন নং	প্রশ্নসমূহ	প্রতিক্রিয়া
১০।	চলাচল (হাঁটা সম্পর্কিত)	১। হাঁটাতে কোন সমস্যা নেই। ২। হাঁটাতে অল্প সমস্যা। ৩। হাঁটাতে অনেক সমস্যা।
১১।	নিজের যত্ন সম্পর্কিত	১। পোষাক পরিধানে কোন সমস্যা নেই। ২। পোষাক পরিধানে অল্প সমস্যা। ৩। পোষাক পরিধানে অনেক সমস্যা।
১২।	সাধারণ কার্যক্রম (যেমন, স্কুলে যাওয়া, শখ, খেলাধুলা, পরিবার ও বন্ধুদের সাথে সময় কাটানো)	১। সাধারণ কার্যক্রমে কোন সমস্যা নেই। ২। সাধারণ কার্যক্রমে অল্প সমস্যা। ৩। সাধারণ কার্যক্রমে অনেক সমস্যা।
১৩।	ব্যাথা ও অসস্তি	১। কোন ব্যাথা ও অসস্তি নেই। ২। অল্প ব্যাথা ও অসস্তি আছে। ৩। অনেক ব্যাথা ও অসস্তি আছে।
১৪।	দুঃশ্চিন্তাগ্রস্ত অথবা অসুখি	১। দুঃশ্চিন্তাগ্রস্ত অথবা অসুখি নই। ২। কিছুটা দুঃশ্চিন্তাগ্রস্ত অথবা অসুখি। ৩। অনেক দুঃশ্চিন্তাগ্রস্ত অথবা অসুখি।

- ✓ আমরা জানতে চাইব আজ আপনার স্বাস্থ্য ভাল নাকি থারাপ।
- ✓ এই মাপকাঠিটি ১০০ থেকে ০ পর্যন্ত দাগ কাটা।
- ✓ ১০০ মানে আপনার সর্বোচ্চ ভাল স্বাস্থ্য যা আপনি মনে করছেন।
- ✓ ০ মানে আপনার সর্বনিম্ন থারাপ স্বাস্থ্য যা আপনি মনে করছেন।
- ✓ মাপকাঠিটিতে X চিহ্ন দ্বারা আপনার আজকের স্বাস্থ্যের অবস্থা চিহ্নিত করুন।
- ✓ এখন, অনুগ্রহপূর্বক মাপকাঠিটির যে নাম্বার অঙ্কিত করেছেন সেটা নিচের বক্সটিতে লিখুন।

আজকের দিনে আপনার স্বাস্থ্য =

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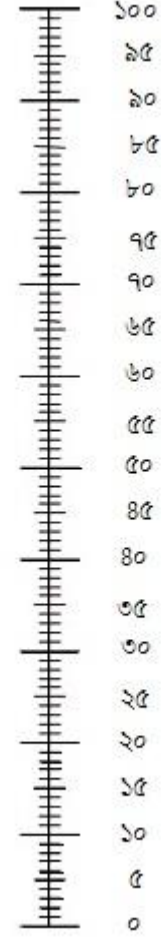
আপনার সর্বনিম্ন থারাপ স্বাস্থ্য যা আপনি মনে করছেন

Questionnaires

"Quality of life among the low back pain patient attended at CRP"

Code:	Date of interview:
Subjects name:	
Address:	
Mobile number:	
Name of interviewer:	

Part: 1 Socio-demographic information

| Ques. No.	Questions & filters	Response
1.	Please give your age	_____Years
2.	Gender	1. Male 2. Female
3.	Your residential area?	1. Urban 2. Rural
4.	Occupation	1. Businessman 2. Day laborer 3. Service holder 4. Unemployed 5. Housewife 6. Teacher 7. Students 8. Other (Specify): _____

Part: 2 Quality of life scale (EQ-5D-3L)

Ques. No.	Questions & filters	Response
5.	Mobility (walking about)	1. I have no problems walking about 2. I have some problems walking about 3. I have a lot of problems walking about
6.	Looking after myself	1. I have no problems washing or dressing myself 2. I have some problems washing or dressing myself 3. I have a lot of problems washing or dressing myself
7.	Doing usual activities(for example, going to school, hobbies, sports, playing, doing things with family or friends)	1. I have no problems doing my usual activities 2. I have some problems doing my usual activities 3. I have a lot of problems doing my usual activities
8.	Having pain or discomfort	1. I have no pain or discomfort 2. I have some pain or discomfort 3. I have a lot of pain or discomfort
9.	Feeling worried, sad or unhappy	1. I am not worried, sad or unhappy 2. I am a bit worried, sad or unhappy 3. I am very worried, sad or unhappy

The best health you can imagine

- We would like to know good or bad your health is TODAY.
- This scale is numbered from 0 to 100.
- 100 mean the <u>best</u> health you can imagine.
- 0 mean the <u>worst</u> health you can imagine.
- Mark an X on the scale to indicate how your health is TODAY.
- Now, please write the number you marked on the scale in the box below.

YOUR HEALTH TODAY=

100
95
90
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80
75
70
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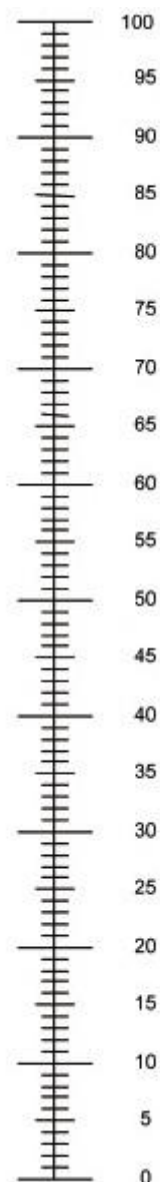
The worst health you can imagine

Permission latter

October 17, 2012

To

The Head of the Physiotherapy department,

Center for the Rehabilitation of the Paralyzed,

Savar, Dhaka-1343

Subject: Prayer for seeking permission to collect data to conduct a research study.

Sir,

With due respect & humble submission to state that I am a student of 4th professional, B.Sc. in Physiotherapy at Bangladesh Health Professions Institute (B.H.P.I). According to course curriculum, we have to conduct a research for the partial fulfillment of our degree. I have chosen a research title "Quality of life among low back pain patient attended at CRP" using EQ-5D-3L questionnaire. For this reason, I need to take permission to collect data from the outpatient musculoskeletal department at CRP, Savar. Patients with LBP attended at CRP will be eligible participants for my study. I would need 1 week to complete my data collection from this setting.

Therefore, I pray & hope that you would be kind enough to grant my application & give me the permission for collect data from the musculoskeletal department of CRP, Savar.

Yours faithfully

Mohsina Sultana

Mohsina Sultana

4th year B.Sc in Physiotherapy

Session: 2006-2007.

BHPI, CRP, Savar, Dhaka-1343.

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Head of the Physiotherapy Department, CRP