



COMMON MUSCULOSKELETAL PROBLEMS ARISING AMONG WOMEN AFTER PARTURITION AT SELECTED AREA OF BANGLADESH

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We the undersigned certify that we have carefully read & recommend to the Faculty of
Medicine, University of Dhaka, for the acceptance of this dissertation entitled

**COMMON MUSCULOSKELETAL PROBLEMS ARISING AMONG
WOMEN AFTER PARTURITION AT SELECTED AREA OF
BANGLADESH**

Submitted by **Mahbuba Akter** for the partial fulfillment of the requirement for the degree
of Bachelor of Science in Physiotherapy (B.Sc. PT).

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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.

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List of Acronyms

BHPI	Bangladesh Health Professions Institute
CRP	Centre for the Rehabilitation for the Paralysed
DRA	Diastasis Recti
DQT	Dequervein's Tenosynovitis
IRB	Institutional Review Board
LBP	Low Back Pain
MSDs	Musculoskeletal Disorders
PGP	Pelvic Girdle Pain
TrA	Transverse Recti Abdominis
UI	Urinary Incontinence

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Abstract

Purpose: The purpose of the study was to explore the common musculoskeletal problems that arises among women after the event of parturition at a selected area of Bangladesh. *Objectives:* To know the common Musculo-skeletal symptoms after parturition among the women. To find out the relationship between the number of parturitions along with severity of musculoskeletal symptoms. *Methodology:* This study was conducted in cross sectional study design. The study was conducted on musculoskeletal condition. The samples were collected through simple random sampling procedure and the samples were 112. The data was collected from Enam Medical College Hospital and Super Medical Hospital. The data was collected through established questionnaire with face-to-face interview. The questions were structured and the questions were close ended. Data were analyzed with Microsoft Office Excel 2007 using SPSS 20 version software program. *Results:* A Pearson Chi-square test was performed to show the association among low back pain, pelvic girdle pain, diastasis recti abdominis, urinary incontinence, carpal tunnel syndrome with number of children. An established questionnaire for assessing the probability of developing long term musculoskeletal disorders called Orebro Musculoskeletal Questionnaire (OMPQ) was used in this study to show the association between number of child and OMPQ score. This study found that 57.1% of the participants had Low Back Pain (LBP), 67.1 % had Pelvic Girdle Pain (PGP), 38.4% of the population had Urinary Incontinence (UI), 12.5% women had pain on Carpal Tunnel Syndrome (CTS) and 12% of the participants had Diastasis Recti Abdominis (DRA). *Conclusion:* The study suggested that this result might be used basic data for developing management and or assessment program in postpartum musculoskeletal population.

Key words: Musculoskeletal, Postpartum, Conditions, Pain.

Word count: 12042

Background 1.1

Pregnancy is a period of numerous physical and physiological alteration (Ghodke et al., 2017). Weight gained in the period of pregnancy is (20-40) pounds that certainly alters the body center of gravity to the anterior (Ghodke et al. 2017). Neuro-mechanical transformation to pregnancy give arises to alteration in gait, postural dysfunction (Ghodke et al., 2017). Not unexpectedly, these alterations affect the musculoskeletal system, which can arise a spectrum of problems, like as backache, dislocation of pelvic bones, transient osteoporosis and tendinitis (Bermas, 2017). Musculoskeletal conditions for instance back and neck pain have persisted the major reason of disability globally around the past two decades and unfortunately the burden is uplifting day by day (Zadro et al. 2019).

Musculoskeletal conditions are usually manifested by pain frequently persistent and restriction in mobility, agility and altogether degree of functioning, minimizing people's capacity to work. Nearly 1.71 billion people have musculoskeletal disorder around the globe (Williams et al. 2018).

The world health organization defines musculoskeletal disorders as "health problem of the locomotor apparatus, i.e., muscle, tendon, bone, skeleton, cartilage, ligaments and nerves. This includes from any kind of complaint, from slight transitory discomfort to irreversible and incapacitating injuries." The Finnish institute of Occupational health (FIOH) reported as the musculoskeletal disorders as one of the most familiar job-related disability prioritizing that though various body parts are engaged, the back is most vulnerable for creating most of the discomfort (Gómez-Galán et al. 2017).

During pregnancy there happens stretching out of the muscle of the abdomen so thus it could compensate to the expansion of uterus. By their stretching usually these stretched muscles become unable to support and capability to conduct the process of conserving body posture. Commonly it occurs from the first trimester of pregnancy and persist after six months of delivery. Postpartum is state that starts abruptly after delivery broaden to six

weeks after giving birth of a child. In some patients the alterations even become persistent and thus leads to chronic disorders (Ghodke et al. 2017).

Parturition in women happens from alteration in the levels of circulating hormones of the mother and fetus at the end of pregnancy. However, labour in humans brings about from a complex dynamic biochemical event that occurs in between the fetoplacental unit (i.e., fetus, placenta, membrane, liquor amni) and the mother (Kota et al. 2013)

At the period of postpartum women are subsiding from numerous pregnancy related alterations such as increased gaining of weight, hormonal changes like as laxity of the joints and connective tissue, changes in the posture such as lumbar lordosis increase, flattening of feet flattening or reducing the arch of foot , transient osteoporosis in addition the consequences after the impacts of the delivery phenomenon such as fissuring of the pelvic floor muscles or getting recovery from cesarean -section surgery. Onset of lumbo-pelvic pain for the first time has also been complained in postpartum women that they did not experience such kind of painful events at the time of pregnancy (Christopher et al. 2020).

The upright bearing of human being LBP is stated as pain located in the lumbar region placed beneath the costal margin and above the inferior gluteal folds (Franke et al. 2017). LBP in postpartum is more familiar and can dominate to major restriction to daily activities of a woman's life (Ha et al. 2019). It has been reported that it has been found in about 30-40% of women during the post -partum period. They had been claimed the main risk factors allied to the advancement of post-partum back pain is previous history of pain on the back region. Risk factors that are playing role associated with the back pain that is persistent in character even after Twenty-Four weeks their delivery are starting of pain which is severe in nature during the early onset of the gestation, unable to reduce weight as the women had in her pre pregnancy state, excessive body mass index and if the mother has the history of hypermobility during their pregnancy (Borg-Stein & Dugan. 2007).

Postpartum pelvic girdle pain (PGP) is another commonest issue arises among the parturient (Almoussa et al. 2018). The prevalence of this condition is found one in thirty-six among the European women has been found in relatively older research. However, the most recent research has been found the higher rate of prevalence. A study of Denmark found that the incidence of PGP is 20.1%. An Iran based study has been found that the

prevalence rate is 28% (Borg-Stein & Dugan. 2007). Researcher has been claimed hormonal and mechanical changes as the cause of postpartum PGP. They added that during the postpartum period these factors are not responsible for PGP as there's no hormonal effect at that period rather endocrine level returns to the normal after delivery. They had been documented the emotional stresses can give arises the risk of developing persistent PGP during postpartum period (Sakamoto et al. 2019). There are a spectrum of disorders affecting the pubic symphyseal region during pregnancy and parturition. Pubic symphysis regional pain occurs as a result of increased motion related to the ligamentous laxity.

Postpartum Pelvic floor dysfunction (PFD) is also occupying a significant portion of complains among the parturients which comprises of urinary incontinence, fecal incontinence, Pelvic Organ Prolapse (POP), sexual dysfunction. It has been clarified by the documents that postpartum PFD has several underlying risk factors such as unusual gaining of weight, obesity, unhealthy life habits such as (smoking, leading sedentary life), age of the woman, parity and the delivery method of the individual can predispose to postpartum PFD (Zuchelo et al. 2018).

Diastasis recti abdominis (DRA) is a problem arises due to midline inter-recti separation that affects both on pregnancy and postpartum period in the women. Identifying the DRA is operated by assessing through fulfillment of certain criteria such as separation is more than 2 cm at one or more points of the linea alba, that also includes the umbilical level or 4.5 cm above or below of the umbilicus or a bulging in the midline which is visible in nature (Thabet et al. 2019).

When referring to pain, the terms "lumbo-pelvic pain" can also refer to pain in the lower back region, anterior pelvic region, posterior pelvic region, or any combination of these areas (Saleh et al. 2019). A study has indicated that about 53% of women have incapacity as a result of lumbo-pelvic discomfort during the postpartum period. Additionally, it has been noted that one in three women experience post-partum lumbo-pelvic pain, which frequently lasts for two years after giving birth (Fernando et al., 2020).

According to a prospective cohort study by (Van de Pol et al., 2010) a large proportion of postpartum women experience low back discomfort and pelvic instability, which affects their mobility and has an impact on their daily activities. Although problems of the lower extremities are more common, those of the upper limb are also common, including

Dequervain's Tenosynovitis and carpal tunnel syndrome, which can cause a wide range of disabilities and even permanent harm if treatment is not received.

Pregnancy related carpal tunnel syndrome (PRCTS) in pregnant women has been estimated in the literature differs from 2 to 70%. The predisposal factors for developing PRCTS are fluctuations of hormones, accumulation of fluid with a tendency to bring about edematous, hypersensitivity of nerve and fluctuations of glucose level. The syndrome barely becomes the matter of concern because the symptoms are mild and usually no intervention is necessary in maximum patients. The diagnosis of PRCTS is basically clinical or may be eletro-diagnostic or sonographic. In case of necessity the treatment of PRCTS start with splinting of wrist during night followed by steroid injection at the site of carpal tunnel. In most he cases women experiences improvement of the symptoms followed by delivery or it may persist up to 3 years onset after symptoms (Zyluk. 2013).

Dequervain's tenosynovitis refers to involvement of the tendon of abductor polisis longus and extensor policis brevis, it is much familiar in female than male. Reason underlying this female more prone of female than to male is the involvement of activities such as twisting, grasping. Women who are homemakers and persons who are involved with works done manual occupation who uses their hand and wrist are accountable for developing Dequervain's Tenosynovitis has been found in the studies. In with digital flexor tendon (trigger finger) the common symptoms for Dequervain's Tenosynovitis are pain radiating at the styloid process of the radius bone and persisted pain at the wrist radiating to the thumb and often up to the forearm. Sometimes it is often accompanied with swelling of the sheath of the tendon. By doing thumb extension and grasping movement it can exacerbates the corresponding symptoms. Finkelstein's test can act as clinical diagnostic test for diagnosis of Dequervain's tenosynovitis (Schned. 1986).

In this study researcher is aimed to identify the common musculoskeletal conditions that arises among women after the event of parturition at a selected area of Bangladesh.

1.2 Rationale

In Bangladesh improvement of adequate maternity supervision is nonetheless remains a tremendous challenge. Women encounters some anatomical and physiological modifications during pregnancy which results in some musculoskeletal problems during prenatal period and also during postnatal period. Gynecological physiotherapist can assist a woman during the period of postpartum to adapt and confront with the physical conditions and furthermore endorse a woman and her birth partner throughout the prenatal, during the delivery period and also during the postpartum period. In the contrast to the developed countries with Bangladesh in the developed countries gynecological physiotherapy is well established and practice efficiently on the of reproductive age where in Bangladesh gynecological physiotherapy is not familiar with the respective population and also it is not practice in wide spread context. This study is aimed to address the common musculoskeletal problems arises among women after parturition in Bangladesh. After completing the study, the patients will be benefited because they will be aware about their postpartum musculoskeletal conditions that arises after parturition and should be learned about the physiotherapy treatment.

In addition, maternal health care is an ensuing area in perspective of developing country like Bangladesh as well as physiotherapist can work by gathering evidence about the musculoskeletal conditions that are commonly seen in Bangladeshi women. This study is beneficial for physiotherapists to inform the vulnerable respective population about the musculoskeletal problems arises among the postpartum women and by providing them an obvious scenario of the consequences and facts of the possible underlying risk factors, the most vulnerable age group and the apparent ways by which they can get rid of these issues. Therefore, it is also advantageous for physiotherapists for working with multidisciplinary team. This study will be also valuable for the various organizations dealing in this field by including physiotherapy employment in their policy for implementing a comprehensive intervention system. Research enhances a profession's strength, and this study will demonstrate the need to assess physiotherapists' abilities, particularly in the areas of gynecology and obstetrics, as well as a core for broadening the scope of practice and creating a future prospect for the physiotherapy profession.

Moreover, for the fulfillment of the 4th year of B. Sc. in Physiotherapy I had to accomplish research of my interest which attained the professional body of interest.

1.3 Research Question

What are the common musculoskeletal problems arising among women after parturition?

1.4 Objectives:

1.4.1 General objectives:

To find out the common musculoskeletal problems arising among women after parturition at selected area of Bangladesh.

1.4.2 Specific objectives:

1. To find out the common Musculo-skeletal symptoms after parturition among the women.
2. To find out the relationship between the number of parturitions along with severity of musculoskeletal symptoms.

1.5 Operational definition

Parturition

Childbirth, the process of delivering the baby and placenta from the uterus to the vagina to the outside world. Also called labor and delivery. Parturition comes from the Latin parturire, "to be ready to bear young" and is related to partus, the past participle of parere, "to produce

Musculoskeletal disorders

Musculoskeletal Disorders or MSDs are injuries and disorders that affect the human body's movement or musculoskeletal system (i.e., muscles, tendons, ligaments, nerves, discs, blood vessels, etc.

Low Back Pain (LBP)

Low back pain is pain, muscle tension, or stiffness localized below the costal margin and above the inferior gluteal folds, with or without sciatica, and is defined as chronic when it persists for 12 weeks or more.

Pelvic Girdle Pain (PGP)

PGP is defined as pain between the posterior iliac crest and the gluteal fold, particularly in the vicinity of the sacroiliac joint (SIJ), which may radiate to the thighs and hips. PGP can occur in conjunction with or separately to pain in the pubic symphysis.

Urinary Continence (UI)

Urinary Incontinence is the unintentional passing of urine. It's a common problem thought to affect millions of people. There are several types of urinary incontinence, including: stress incontinence – when urine leaks out at times when your bladder is under pressure; for example, when you cough or laugh.

Diastasis Recti Abdominis (DRA)

Diastasis Recti, (divarication of the rectus abdominis, abdominal muscle separation) is an anatomic term describing a condition in which the two rectus muscles are separated by an abnormal distance.

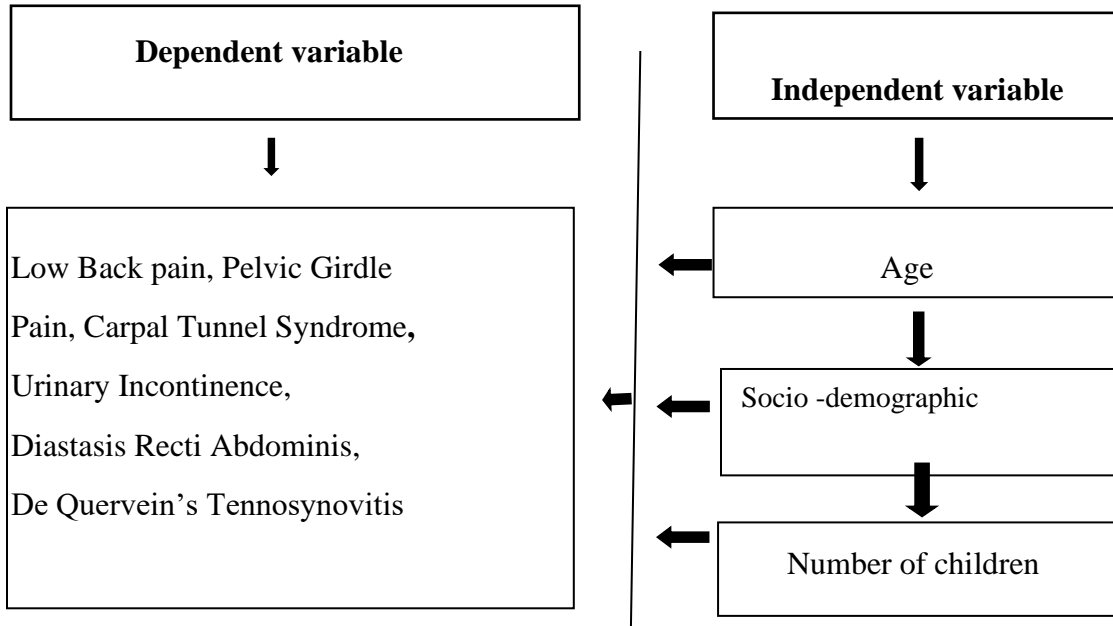
De quervein's Tenosynovitis (DQT)

De Quervain's tenosynovitis (dih-kwer-VAINS ten-oh-sine-oh-VIE-tis) is a painful condition affecting the tendons on the thumb side of your wrist. If you have de Quervain's tenosynovitis, it will probably hurt when you turn your wrist, grasp anything or make a fist.

Carpal Tunnel Syndrome (CTS)

Carpal tunnel syndrome (CTS) is pressure on a nerve in your wrist. It causes tingling, numbness and pain in your hand and fingers.

1.6 Conceptual Framework



Musculoskeletal conditions are reported by roughly one in every two adults in the United States, and are regarded as one of the top five medical conditions reported in 2015. These conditions are a significant contributor to disability, accounting for 17.1% of years lived with disability. The disability and reduced quality of life caused by these conditions are reported to be far more common than hypertension and high cholesterol levels. Low back pain, neck pain, hip and knee osteoarthritis, shoulder complex conditions, and other joints are major contributors to this disability (Cupler et al. 2020).

Pregnancy, along with the first year after childbirth (known collectively as the perinatal period), is arguably one of the most transformative times in a person's life. In the life of a woman This time frame is also complicated. Women face a number of challenges during this vulnerable period (Meltzer-Brody et al. 2018).

Approximately 1.71 billion people have musculoskeletal conditions worldwide. Among musculoskeletal disorders, low back pain causes the highest burden with a prevalence of 568 million people (Williams et al. 2018).

Postpartum lumbo-pelvic (LPP) pain also known as musculoskeletal pain in the lower back and/or pelvic girdle, affects 50–90% of pregnant women. Despite the fact that many women with pregnancy-related LPP recover after childbirth, one-quarter continue to report pain 2 to 3 years later. Furthermore, a decade after childbirth, 10% of women still have disability, a lower quality of life, and a reduced ability to work full-time. At 6 weeks postpartum, 36 of 54 women (66.7 percent) reported pregnancy-related LPP according to (Gluppe et al. 2020) between 8% and 20% of women experience nonspecific lumbo-pelvic pain (LPP) two to three years after childbirth, which reduces their quality of life and interferes with their daily activities. According to research, LPP is linked to lumbar pain (Gluppe et al. 2020).

Research has been stated that 75% had back pain during postpartum. Prevalence rates of upper back, lower back, and pelvic girdle pain with or without other types of pain during postpartum were 43%, 52%, and 41%, respectively. Pain severity was highest for women endorsing pain in three locations (median 55–60). Of women with the most common pain

constellation during pregnancy, lower back and pelvic girdle (32%), 18% had persistent low back and pelvic girdle pain postpartum, 20% had no pain, and the remainder had pain in a different location. Of women with pain in all three locations during pregnancy (27%), 34% had persistent pain in three locations postpartum, 13% had no pain, and the remainder had pain in at least one location (Dunn et al. 2019).

Seventy five percent of women experienced back pain during their pregnancy. During postpartum, the prevalence rates of upper back, lower back, and pelvic girdle pain with or without other types of pain were 43 percent, 52 percent, and 41 percent, respectively. Women endorsing pain in three locations reported the most severe pain (median 55–60). Lower back and pelvic girdle pain (32%) was the most common pain constellation during pregnancy, with 18% having persistent low back and pelvic girdle pain postpartum, 20% having no pain, and the remainder having pain in a different location. Women with pain in all three locations during pregnancy (27%) had persistent pain in all three locations postpartum, 34% had no pain, and the rest had pain in at least one location. According to a study of (Long et al. 2020), 58.7 % of people had lumbar pain (LP).

LBP is a common musculoskeletal disorder that affects both pregnant and postpartum women. According to one study, 45 percent of pregnant women and 25 percent of LPP afflicted postpartum women. This has resulted in has a negative impact on activity level and reduces the quality of life, which may last for several years after birth as an example, as a result of work, socioeconomic loss occurs. Absenteeism As a result, postpartum LPP treatment is recommended. A critical issue that necessitates thorough and accurate investigation evaluation. LPP during pregnancy is caused by a variety of factors. Ligament slackness structural changes in the lumbar spine as a result of hormonal changes and increased lordosis as a result of weight gain predisposes. The lumbo-pelvic region is prone to instability. This reduces the effectiveness of the passive stability system, which should be avoided, be compensated for by dynamic stability through increased activity of deep regional muscles, it may lead to cause pain. It has been demonstrated that the transverse abdominis (TrA) muscle increases sacroiliac joint stiffness. Furthermore, TrA activation may increase spinal stability by increasing intra-abdominal pressure (IAP) and thoracolumbar fascia tension. Although the precise cause of postpartum LPP is unknown, it is possible that facilitating TrA activity may result in decreased postpartum depression.

LPPA. This emphasizes the importance of determining exercise. Interventions that stimulate the activity of these muscles Coactivity of the spinal stabilizer has been demonstrated in studies muscles such as the diaphragm, TrA, and pelvic floor muscle (PFM) are necessary for lumbar mechanical stability. Backbone TrA muscle and PFM have been linked in several studies.co-activation during TrA muscle contraction, which facilitates the PFM's activity and vice versa. As a result, it appears that focusing on the TrA muscle may effectively improve PFM activity in postpartum LPP women. To date, no RCTs have been conducted to investigate the effect of specifically training TrA muscles on changing the PFM's activity.

One therapeutic intervention aimed at improving proper stabilization exercise is a function of the TrA and PFM (SE). SEs were created for the treatment of LPP patients. On retraining the deep brain's optimal control and coordination muscles of the spine. Several clinical trials have used deep abdominal muscle training as part of their post-partum LPP rehabilitation program; however, changes in the muscles targeted have not been measured. Furthermore, little is known about the relationship between increased TrAs activity on post-partum LPP pain relief The purpose of this research was the primary goal was to investigate the efficacy of supervised progressive SE on TrA and PFM activity as well as pain relief in women suffering from postpartum LPP.The other was to evaluate the effect of PFM muscle indirect training via increasing the activity of the TrAs in postpartum women LPP (Ehsani et al. 2020).

Approximately 50% of pregnant women experience low back (LBP) or pelvic girdle (PGP) pain; 25% continue to experience pain one year after delivery. According to a 10-year follow-up 1 in 10 women with PGP during pregnancy had severe consequences up to 11 years postpartum. Approximately 50% of pregnant women experience low back or pelvic girdle pain; 25% continue to experience pain one year after delivery (Olsson et al. 2019). Low back pain had also been reported in 30 to 45 percent of postpartum women (Borg-Stein et al., 2007). A study of Fei et al. (2021) showed that about 21% of women with LBPP during pregnancy reported persistent LBPP at 3–6 months postpartum (Chortatos et al. 2018). In previous studies, approximately 10% of women with PGP during pregnancy continued to experience pain up to 18 months (Chortatos et al. 2018).

Many women develop pelvic girdle pain (PGP) during pregnancy and about 10% have chronic pain several years after delivery. The prevalence for chronic PGP after delivery also varies, with ranges from 8.5 to 37% and it may persist for decades. In this study among the 51 women with chronic pain, 44 (86%) were clinically diagnosed as having PGP based on the criteria for PGP and positive pain provocation tests. Two women had solely anterior pain in the symphyseal joint, 30 had posterior pain in the sacroiliac joints and 12 had pain both in the anterior and posterior pelvic girdle (Fagevik Olsén et al. 2019) Up to 75% of women who had back pain during pregnancy may continue to have pain after giving birth.(1–3),(7–10) Although less information is known about postpartum related back pain, the literature has reported that 2% to 75% of women will continue to have back pain for up to 3 years following the index pregnancy.(11–13) Furthermore, women who experience back pain at 3 months postpartum were found to be at higher risk for persistent or chronic low back pain (LBP) (Berlanga-de-Mingo et al. 2019).

Pelvic girdle pain (PGP) or symphysis pubis dysfunction (SPD) is a common musculoskeletal disorder that affects pregnant and postpartum women. Clinicians and researchers have used a variety of terms and definitions to describe. PGP must be distinguished from pregnancy-related lower back pain. According to European diagnostic and treatment guidelines, PGP is a type of pain that occurs between the posterior iliac crest and the sacrum and the gluteal fold, particularly near the sacroiliac joints (SIJs) that may radiate to the back of the thigh, the groin, or both perineum, and which does not have a typical nerve root distribution.

PGP is a condition that is frequently underappreciated despite its prevalence. The prevalence of PGP has been reported to be 63 percent at the 30th gestational week, 31 percent at 3 months postpartum, and 30 percent one year after delivery. Typically, the symptoms appear in the second half of the pregnancy, with the greatest intensity occurs between the sixth and ninth months of pregnancy. The pain can range from mild to severe and is frequently incapacitating daily activities of women PGP reduces endurance in sitting, walking, and running and standing, as well as making lifting and turning over difficult bed, getting up from chairs, and changing body position all contribute to a reduction in women's quality of life. It has been discovered that PGP has a psychological impact on mothers

socially, because it restricts their physical activity and social life, causing feelings of isolation for example, discouragement and isolation.

Furthermore, PGP has an impact on women's pregnancy experiences and prevents them from looking forward to future pregnancies.

PGP is not a new issue; it was described and reported in the 4th century BC by Hippocrates. Several risk factors have been proposed as triggers for the previous PGP development, including general hypermobility, trauma to the pelvis, age, a high number of previous deliveries, and a high BMI are all factors to consider before and during pregnancy. Physiotherapists have previously focused on managing PGP by performing stabilizing exercises. These strengthening exercises have the dynamic control of the lumbo-pelvic segments has been referred to by activating the local muscle system in tandem with the global muscle system the girdle of the pelvis. Physiotherapists have previously focused on managing PGP through stabilizing exercises. These stabilizing exercises are known as dynamic control of the lumbopelvic segments by activating the local muscle system in tandem with the global muscle system relating to the pelvic girdle.

The muscles that are locally stabilized (the transversely oriented abdominal, lumbar multifidus, and pelvic multifidus) Floor muscles are essential for load transfer in the lumbopelvic region area. Load transfer dysfunction in the lumbopelvic region has been identified. PGP is associated with Stabilizing exercises are performed in order to develop strength and endurance to deal with the patient's physical demands by reducing their PGP symptoms, they can go about their daily activities. Stabilizing exercises are frequently recommended, whether for lower back pain or PGP.

Despite their popularity as a treatment, there has not been a systematic review of their efficacy for women who are pregnant or have recently given birth the purpose of this research was to conduct a systematic review of studies on the efficacy of in the treatment of PGP during pregnancy, stabilizing exercises are used as well as the postpartum period (Almoussa et al. 2018).

Pregnancy-related low back/pelvic pain (PLBPP) is a common complaint that affects half of all pregnant women. Pelvic girdle pain (PGP) is one of the most common types of pain. PLBPP has five major subgroups. Although recovery occurs within 1 to 3 months of delivery, pain and discomfort persist. In 30% of postpartum women, disability lasts up to

8% in a year. Among females PGP is a persistent complaint among postpartum women. of varying intensities, with resulting effects ranging from 0 to 10. During pregnancy, symptoms range from mild annoyance to severe disability. PGP has a negative impact on a variety of daily activities, work participation capacity, and health-related to life quality. The most commonly proposed underlying causes of PGP are hormonal and biomechanical changes, as well as lumbopelvic non-optimal stability. Ligamentous laxity caused by hormonal influence is linked with sacroiliac joint strain, as well as surrounding connective tissues and myofascial structures.

PGP is linked to insufficient motor activation of the lumbopelvic and surrounding musculatures are comprised of including the transverse abdominis, multifidus, and pelvic floor muscles (PFM). The motor deficit of preceding muscles results in impaired load transfer through the lumbo-pelvic region, resulting in pain associated with weight-bearing postures such as sitting, standing, and walking. Walking or other loaded activities that cause rotational pelvic rotation rowing and cycling are two examples of physical exertion. As a result, it has been proposed that the activation pattern of the stabilizing muscles improves functional outcomes in women suffering from PGP postpartum by improving neuromuscular control, plans of action, however, suggested that using a home training approach with stabilizing exercises alone for 8 weeks was ineffective in improving in comparison to the control group, postpartum PGP.

For women with postpartum PGP, European guidelines recommend that treatment programs focus on stabilizing exercises as part of a multifactorial treatment concept. As a result, more research is required to find effective treatment programs for chronic PGP after childbirth. PFM insufficiency caused by childbirth may be a factor in low back pain (LBP)/pelvic pain. After-delivery pain However, no consideration is given in the rehabilitation programs investigated in the previous research PFM are important contributors to lumbar stability because they form a back brace. They reduce the load on the spine by co-contraction with the abdominal muscles. Therefore, in women with persistent postpartum PGP, we hypothesized that combining PFM training with stabilizing exercises would produce more favorable results than just stabilizing exercises alone (EIDeeb et al. 2019)

Postpartum stress urinary incontinence (SUI) is a common condition, with a prevalence ranging from 4.8 to 35.6 %. Because the pelvic floor fascia of postpartum SUI puerperae provides insufficient support, urine easily flows through the urethra when intraabdominal pressure rises (when coughing, laughing, exercising, sneezing, and so on), resulting in urine leakage. Although postpartum SUI is not a life-threatening disease, it significantly reduces puerperae's quality of life and daily activities. More importantly, postpartum SUI causes puerperae to experience dramatic psychologic disorders such as low self-esteem, anxiety, and depression. There are several treatment options for postpartum SUI, including surgical and conservative ones, but these treatments can be painful, expensive, or time-consuming, and they can also cause other complications.

As a result, illuminating the risk factors for postpartum SUI and investigating potential approaches to preventing the occurrence of postpartum SUI are critical to minimizing its negative effects on puerperae. Several approaches can help prevent postpartum SUI. Pelvic floor muscle training (PFMT), for example, can strengthen the functions of the pelvic floor muscle, which then inhibits incontinence. Furthermore, healthy education eliminates puerperae's misunderstandings of postpartum SUI and alleviates their fear and anxiety, both of which contribute to a reduction in postpartum SUI risk. Furthermore, psychologic counseling improves puerperae's psychologic state, and regular supervision improves the effect of PFMT, both of which are beneficial for postpartum SUI prevention.

A comprehensive care program that includes PFMT, healthy education, psychologic counseling, and regular supervision may be effective in preventing postpartum SUI when used together. However, no such programs have been reported, and the comprehensive care program's effect on preventing postpartum SUI remains unknown. To that end, we devised a comprehensive care and rehabilitation program (CCRP) for puerperae that included intensive healthy education, detailed PFMT guidance, psychologic counseling, and ongoing supervision. And the goal of this study was to look into the prevalence and risk factors of postpartum SUI, as well as the effect of CCRP on preventing SUI and strengthening pelvic floor muscle functions the SUI is the most common subtype of urinary incontinence, accounting for approximately 61 percent of the population with urinary incontinence in China.

SUI is common in puerperae, and its prevalence has been reported in a few studies. For example, a previous study conducted in Norway found that 35.6% puerperae have postpartum SUI within 6 weeks of delivery. In another study, 16.1% puerperae experienced postpartum SUI within 3 months of delivery. Furthermore, a similar study in Iran found that the prevalence of postpartum SUI is 14.1 percent for all puerperae, 15.9 % for vaginal delivery puerperae, and 10.7 % for elective cesarean section puerperae within 4 months of delivery.

Possible explanations include differences in delivery mode, evaluation time, or puerperae characteristics such as BMI and newborn weight. In terms of risk factors, we discovered that vaginal delivery, as well as increased age and BMI, were independent risk factors for postpartum SUI, which was consistent with previous research. Possible explanations for the findings include: Vaginal delivery exacerbates pelvic floor muscle strain and traction trauma on the pudendal nerve, resulting in insufficient pelvic floor fascia support. As a result, vaginal delivery contributes to an increased risk of postpartum SUI. It has been reported that detrusor morphology, detrusor innervation, and bladder metabolism are greatly altered in the elderly, suggesting that increased age may be associated with dysregulated detrusor function thus leading to occur urinary incontinence. Higher BMI results in increased intraabdominal pressure, which contributes to incontinence. Given the high prevalence of postpartum SUI, efforts to facilitate postpartum SUI prevention have been made.

A recently published clinical trial, for example, investigates the role of an educational program in improving pelvic floor muscle functions and preventing urinary incontinence in 99 women, and finds that the educational program has little effect on improving women's pelvic floor muscle functions, but it does improve their knowledge of the pelvic floor. Another study investigates the effect of postpartum PFMT on SUI prevention, revealing that puerperae who exercise PFMT regularly after delivery for 8 weeks have higher pelvic floor muscle function indexes and lower postpartum SUI risk compared to controls (Qi et al. 2019)

Women who are pregnant or postpartum PFD is common after childbirth, with approximately 30% of mothers experiencing urinary (UI) and 10% experiencing anal (AI) incontinence. Concerns about sexuality and pain and pelvic organ prolapse (POP) may also

occur, with perceptions of discomfort caused by one or both of these conditions. More types of PFD were reported by 40-91 percent of primiparous women in the first year after giving birth. PFD and pelvic floor trauma sequelae cause distress and lower quality of life, including Participation in physical activity and exercise has decreased (Sigurdardottir et al. 2020).

In the second and third trimesters of pregnancy, more than one-third of women experience unintentional (involuntary) urine loss (urinary incontinence), and about one-third leak urine in the first three months after giving birth. In late pregnancy, about one-quarter of women experience some involuntary loss of flatus (wind) or feces (anal incontinence), and one-fifth leak flatus or feces one year later birth. PFME are commonly recommended by health professionals to prevent and treat incontinence during pregnancy and after birth. Regular PFME strengthens and maintains muscle strength. Muscles are contracted several times in a row, multiple times per day. Several days a week for an indefinite period of time (Woodley et al. 2020).

Urinary incontinence (involuntary urine leakage) is a common problem among adults who live in the community. It is more common in women, and for many women, pregnancy or the postnatal period is the first time they experience urinary incontinence. Urinary incontinence caused by stress (involuntary urine leakage) Urgency urinary incontinence (involuntary) and physical exertion. The two most common types of urine leakage are leakage associated with, or immediately following, a sudden compelling need to urinate. Women's leakage Many women exhibit stress and anxiety symptoms. Urinary incontinence with urgency This is known as mixed urinary incontinence of these types, stress urinary incontinence is most Pregnancy and the postnatal period are frequently associated with despite a small but significant increase in the risk of urgency incontinence of the bladder (Woodley et al. 2020).

During the pregnancy-puerperium cycle, urinary incontinence (UI) is a common disorder. According to reports, the prevalence of this condition ranges from 18.6 percent to 75 percent during pregnancy and 6 to 31 % during postpartum. UI during pregnancy and the puerperium is caused by a variety of factors, including the pregnancy itself, hormonal changes, anatomical injury after birth, and dynamic forces. UI during the postpartum period, also known as postpartum urinary incontinence (PPUI). It can have a significant

impact on the quality of life during the puerperal period. Acupuncture, electrical stimulation (ES), pelvic floor muscle training (PFMT), and the combination of ES and PFMT have all been reported to be effective treatments for this condition (Ma et al. 2019). Studies that looked at the effect of pelvic floor exercise on female sexual function during the postpartum period found conflicting results. Despite the fact that conducting a systematic review and meta-analysis is the best way to summarize the evidence, there has yet to be a comprehensive systematic review that evaluates the impact of pelvic floor exercises on sexual function and quality of life.

In the population of urinary incontinence, on the Quality of Life in Pregnant Women, on POP stages or symptoms, and one study on pregnant and postpartum women, but none of them ran a meta-analysis. As a result, the goal of this study was to examine the interventional studies that investigated the effect of pelvic floor exercise on female sexual function and quality of life in the postpartum period.

DRA usually regresses to its pre-pregnancy width, but the condition persists in 32–46 % of postpartum women (Olsson et al. 2019). Multiple factors were found to be evident behind the causes of DRA among females like pregnancy, old age, increased intra-abdominal pressure and weight lifting out of which increased abdominal pressure during pregnancy is the most common factor that affects 60% of women at 6 months of postpartum (Long et al. 2020).

Numerous studies have described the prevalence of DRA was between 27 and 100% in the middle and late of pregnancy respectively, 30–68% in the postpartum period. DRA is common in pregnancy and postpartum women (Fei et al., 2021). It normally manifests in the second trimester of the pregnancy and it affects almost all pregnant women, as 66% to 100% experience DRA during the third trimester while almost half of the women up to 53% go through it immediately after the child is born because of the stress of delivering the child (Thabet et al. 2019).

A significant number of women during the antenatal and postnatal periods, with prevalence rate of 32.6 % at 12 months postpartum are suffering from DRA. 4 The muscles of the abdomen are responsible for occurring DRA (Gluppe et al. 2020). Prevalence has been reported to be 60% and 32.5%, six weeks and 12 months postpartum, respectively. Although this prevalence is high, the exact etiology is unknown (Gluppe et al. 2020).

Although pregnancy and childbirth are physiological processes, they may be linked to potentially dangerous factors that put women at risk. The effect of labor on pelvic muscle structure is one of the most common and unavoidable complications, and some issues may arise as a result of the effect.

According to reports, childbirth is responsible for approximately half of all pelvic organ prolapse (POP), and MRI studies revealed that 26 percent of major injuries occur as a result of vaginal childbirth. Vaginal delivery can result in pubourethral and external urethral weakness and laxity tendons and ligaments POP has a negative impact on many aspects of women's lives. QOL refers to personal, psychological, social, economic, occupational, physical, and sexual well-being. The pelvic floor is crucial to female sexual function (SF). The vast majority of postpartum women (76.3%) experienced sexual dysfunction. Two-thirds of participants (64.3 percent) reported sexual dysfunction during the first year after delivery, according to the findings. Urinary leakage during intercourse, vaginal bulging, dryness, and dyspareunia reduces both partners' enjoyment of sexual activity.

Weak muscles cannot provide enough blood flow to the clitoris to achieve orgasm. Strong pelvic floor muscles, particularly the ischio-cavernous muscle, are essential for satisfactory arousal and orgasm. Sexual enjoyment is increased for both partners by genital contraction in Levator ani, which involves the pubo-coccygeous and iliococcygeus muscles. As a result, sexual functions may occur improve by strengthening the pelvic floor muscles there are some treatment options exist, and which one is chosen depends on the severity of the symptoms.

There is an understanding many studies have shown that pelvic floor muscle training is an effective first-line treatment. Treatment of pelvic floor dysfunction, as well as pelvic floor muscle training, can help to prevent postpartum pelvic muscle impairment. A sexual dysfunction the results of studies that looked at the effect of pelvic floor exercise on female sexual function during the postpartum period were contradictory.

Among two hundred and seventy-nine patients with a mean age of 48.45years a study was included in this study. The dominant hand was affected in 217 cases. There were 14 DeQuervains. Prevalence of CTS was 19.7%, significantly higher than the general population (2%-4%). (Berlangua-de-Mingo et al. 2019).

Carpal tunnel syndrome (CTS) is a common condition among pregnant women. In a previous study, researcher found a prevalence of 34% during the last trimester in a large cohort of pregnant women. Severity of CTS symptoms generally decreases quickly after childbirth. Only few studies have investigated persisting pregnancy-related CTS symptoms in the postpartum period. According to the current literature, 4% to 54% of women with CTS symptoms during pregnancy still report symptoms at one year postpartum.

In the present study, 34% (354 of 1,044 women) reported CTS symptoms during pregnancy, which dropped to 11% at 6 weeks postpartum and further to 6% at 4 months postpartum, to remain more or less stable until 12 months postpartum: 5% of the total sample still reported CTS symptoms at 12 months postpartum, which is 15% of women who reported CTS symptoms during pregnancy (Meems et al. 2017).

When completed four to twelve weeks after a soft tissue injury, the Orebro Musculoskeletal Pain Questionnaire (MPQ) is a 'yellow flag' screening tool that predicts long-term disability and failure to return to work. 2. A cut-off score of 105 has been found to predict who will recover (with 95% accuracy), who will have no further sick leave in the next six months (with 81% accuracy), and who will have long-term sick leave (with 67 per cent accuracy). In an NSW worker population, the MPQ predicted failure to return to work six months after a compensable musculoskeletal injury.

The injuries in the study group were diverse, and the MPQ was discovered to be more specific and sensitive to back injuries. The injuries in the study group were diverse, and the MPQ was discovered to be more specific and sensitive to back injuries. A cut-off score of 130 correctly predicted 86 percent of those who did not return to work in workers with back injuries screened at four to twelve weeks.

The identification of workers at risk of failing to return to work due to personal and environmental factors through the MPQ allows treating practitioners to implement appropriate interventions (including the use of activity programs based on cognitive behavioral strategies) to reduce the risk of long-term disability in injured workers. Evidence suggests that if these factors are addressed, they can be changed.

Visual analog scale or VAS is an excellent tool for assessing pain which is subjective in nature. In a VAS scoring system (0-10) score are given for the assessing of pain to the study population or to the participants. VAS is a scale of vertical line which represents the

character or the nature of pain perceived by subjective awareness. In a VAS scale (0-3) indicates the mild pain, (4-6) determine moderate pain and (7-10) shows the severe pain.

The VAS disability scores had a weak to moderate correlation with the SF-36 domain scores and the RMDQ score.

The VAS disability scores correlated best with the SF-36 physical functioning scores, though the correlation was weak overall and moderate in patients with chronic low back pain. Patients may have interpreted the disability VAS as a measure of physical functioning rather than social functioning and role restriction. The relationship between VAS disability and VAS pain scores was moderate to strong. This is even better than the correlation found between VAS disability scores and SF-36 physical functioning scores or RMDQ, implying that patients rated their pain intensity on the VAS for disability to some extent. The criteria for confirming validity were not met, researcher has been concluded that the VAS is an ineffective measure of self-reported disability.

Only one other study on the validity of the VAS as a single-item instrument for constructs other than pain was found in the literature. The VAS was investigated as a single-item measure of quality of life in patients with adenocarcinoma in this study (Boer et al., 2004). The authors discovered a moderate-to-high correlation between the VAS for quality of life and their external criterion, and they concluded that the single-item VAS was an effective tool for assessing global quality of life. Their conclusion that a complex construct can be measured using a single item contradicts our findings. One possible explanation for this disparity is that the concept of 'quality of life' is simpler than that of 'disability.'

There are some limitations to this study that should be mentioned. First, because this study only included patients who were eligible for rehabilitation treatment, we cannot rule out the possibility that the psychometric properties differ in other populations, such as those in general health services. Second, because no other widely used questionnaire for patients with chronic musculoskeletal pain was available in the Netherlands, we used four domains of the SF-36 to assess disability. The SF-36 was developed as an assessment instrument for health-related quality of life, from which we excluded domains that did not measure functioning.

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failure to return to work. A cut-off score of 105 has been established. It has been discovered to predict those who will recover (with 95% accuracy), those who will not have any further sick leave in the future next six months (with 81% accuracy), as well as those who will be on long-term sick leave (with 67 per cent accuracy) In a NSW population of, the MPQ predicted failure to return to work six months after a compensable musculoskeletal injury workers. The injuries in the study group were diverse, and the MPQ was discovered to be more specific and sensitive for back pain injuries.

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For question 5, count the number of painful sites and multiply by two to get your score (maximum score allowable is 10). The score for questions 6 and 7 is the number bracketed after the ticked box. The score is the number that has been ticked or circled for questions 8, 9, 10, 11, 13, 14, 15, 18, 19, and 20. The score for questions 12, 16, 17, 21, 22, 23, 24, and 25 is 10 minus the number circled. In the shaded area beside each item, write the score. Add the scores for questions 5 through 25 to get the total MPQ score. The OMPQ questionnaire established a cut mark of 130, indicating that those with an OMPQ score greater than 130 were more likely to develop long-term musculoskeletal conditions and had the lowest chance of returning to work within the next 6 months. Whether those with cut marks less than 105 are less likely to develop long-term musculoskeletal conditions and are more likely to return to work within the next 6 months.

3.1 Study design

A cross sectional study was conducted as appropriate to achieve the aims. A cross sectional study is a descriptive study in which disease and exposure status is measured simultaneously in a given population. Cross-sectional studies can be thought of as providing a "snapshot" of the frequency and characteristics of a disease in a population at a particular point in time.

3.2 Study site

The study was conducted at the Enam medical college and hospital, Super Medical hospital. Enam Medical College is renowned tertiary medical college hospital located at parbitanogor, savar-1340, Dhaka. It has specialized in treating for all kind of medical conditions. Super medical hospital is a private institute located at Savar bus stand, Savar-1340, Dhaka. It is specialized for painless normal delivery.

3.3 Study population

The population shares a specific set of characteristics or criteria that have been established by the investigator. The criteria of study population are determined from a literature review and the goals for the study. All postpartum women of Bangladesh were considered as the study population. Bailey (1997) claimed that a sample is a subset of the population that has been selected to participate in the project. Sample should represent the population as closely as possible. For survey research, it is better to get as many subjects as possible with the consideration of the size of the ideal population. The target population was the patient with musculoskeletal condition among women after parturition attended at Enam medical college and hospital, Super Medical hospital,

3.4 Sample size

Sampling procedure for cross sectional study done by following equation:

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

Here, n= the desired sample size (eventual sample size).

z= 1.96 which corresponds to the 95% confidence level.

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

p= proportion of the most the target population estimated 50%

$$p \text{ (Prevalence)} = 50$$

$$q= 1-p$$

$$= 1$$

$$= (1.96)$$

$$P = 0.573 \text{ q}$$

$$= 1-p$$

$$= 1-0.573$$

$$= 0.427$$

$$d = 0.05$$

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

$$= \frac{(1.96)^2}{(0.05)^2} \times 0.427 \times 0.573$$

$$= 384$$

However, as the research was conducted as an academic purpose so there were time limitations. Therefore, researcher had taken 112 samples for the study.

3.5 Sampling technique

The study was conducted by using the convenience sampling methods because it is the easiest, cheapest and quicker method of sample selection. It was be easy to get those subjects according to the criteria concerned with the study purpose through the convenience sampling procedure.

3.6 Inclusion criteria

1. Post-partum women who had musculoskeletal problems.
2. Those who were in between 18-45 years old.
3. Subjects who were willing to participate in the study- Otherwise they would not give exact information that would helpful to the study.

3.7 Exclusion criteria

1. Those who had musculoskeletal problems prior to child birth.
2. Those who had neurological problems
3. Those who had serious pathological issues

3.8 Data collection tools

The tools that needed for the study were- consent paper, questionnaire, visual analogue scale, paper, pen, file, calculator, computer, and printer.

3.9 Data collection methods

Data was collected through the face-to-face interview with participants. Researcher used an established questionnaire which is modified Orebro Musculoskeletal Questionnaire (OMPQ) that includes structured questions including both open ended and close ended questions. Structured questions are always closed questions and most frequently used in survey research design.

Visual Analogue Scale- a Visual Analogue Scale (VAS) is a measurement instrument that tries to measure a characteristic or attitude that is believed to range across a continuum of values and cannot easily be directly measured. For example, the amount of pain that a patient feels ranges across a continuum from none to an extreme amount of pain. From the patient's perspective this spectrum appears continuous their pain does not take discrete jumps, as a categorization of none, mild, moderate and severe would suggest. The visual analog scale (VAS) is a tool widely used to measure pain. A patient is asked to indicate her perceived pain intensity (most commonly) along a 100 mm horizontal line. Anchored by word descriptors at each end, the patient marks on the line the point that they feel represents their perception of their current state. The VAS score is determined by measuring in millimeters from the left-hand end of the line to the point that the patient marks.

3.10 Data analysis

Data was analyzed with the software which named Statistical Package for Social Science (SPSS) version 20.0 and Microsoft Excel 2016. Every questionnaire was rechecked for missing information or unclear information. At first put the name of variables in the variable view of SPSS and the types, values, decimal, label alignment and measurement level of data. The next step was to input data view of SPSS. After input all data researcher checked the inputted data to ensure that all data had been accurately transcribed from the questionnaire sheet to SPSS data view. Then the raw data was ready for analysis in SPSS.

3.11 Ethical consideration.

It should be ensured that it would maintain the ethical consideration at all aspects of the study. It is the crucial part of the all form of research. The study was approved by ethical committee of the research project before conducting the research project. The study has followed the guideline of World Health Organization (WHO) and Bangladesh Medical Research Council (BMRC). A written application was submitted to the authority of the Enam Medical college Hospital; Parbatinogor, Savar, Dhaka. & Super Medical Hospital, Savar-1343, Dhaka for involvement of clients and other facilities to complete this study. The participants were explained the purpose and goals of the study. The participants were ensured that their comments would not affect their occupational 22 role. When the

investigator had received an approval letter from the ethical committee and obtained permission from authority of the Enam Medical college Hospital; Parbatinogor, Savar, Dhaka. & Super Medical Hospital, Savar-1343, Dhaka then the data collection was started.

3.12 Inform consent

The aims and objectives of this study should be informed to the subjects verbally. Before conducting research with the respondents, it is necessary to gain consent from the subjects. A 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 would 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 will also be informed or given notice that the research result would not be harmful for them. It would be kept confidential. Every participant has the right to discuss about her problem with senior authorities.

The data was collected by the researcher herself. Structured questions were used with both open ended and close ended questions in the questionnaire. The data was analyzed with Microsoft office Excel 2007 with SPSS 20 version software program. In this study researcher use bar, column, table, pie chart to show the results of the study. Because it is easier to make sense of a set of data

4 Scio-demographic information of the respondents

4.1 Age

In this study the researcher found that among 112 participants; 55%; (n=64) of the participants were age range in between (23-27), 24%;(n=27) of the participants had (18-22), 19%;(n=22) had age range between (28-32) and rest of them 1%;(n=2) had age range in between (33-37) years old. So, by this result we could come to a conclusion that majority of the participants were belongs the child bearing age in respect to the Bangladeshi context. And the least amounts of participants belong to the age range in between (33-37) years which is the not the familiar age group for child bearing in respect to the perspective of Bangladesh.

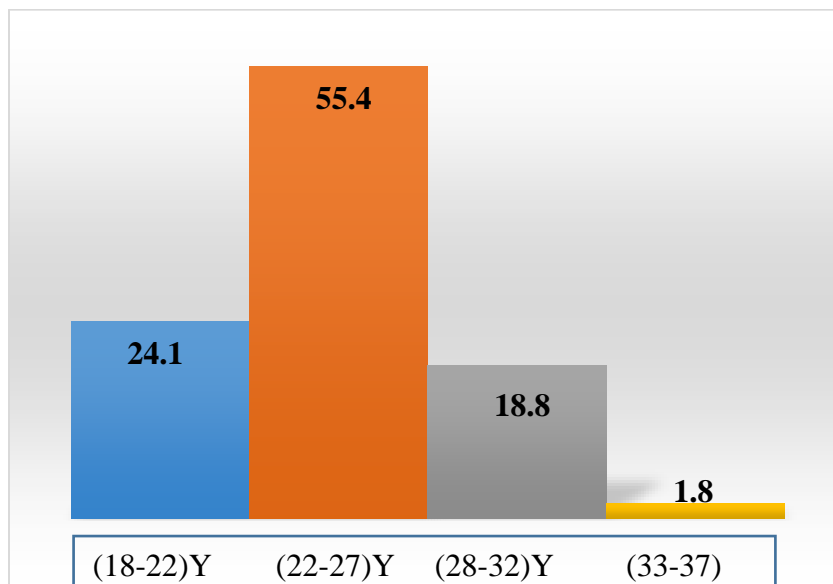


Figure 1: Age ranges of the participants

4.2 Percentage of number of children among the respondents

The pie chart is showing that among 112 respondents; majority of the participants 45%;(n=50) had 1 child. The second highest number of children bearing percentage is 40%;(n=45) had 2 children. Then the corresponding number of children bearing percentage is 12%;(n=14) had 3 children. Rest of the participants 3%;(n=4) had 4 children.

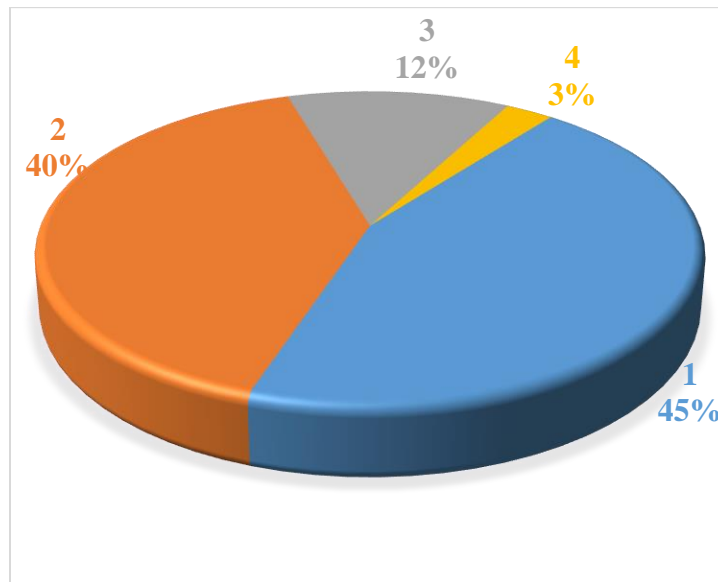


Figure 2: Percentage of number of children among the respondents

4.3 Economic condition of patients

It has been found by the research that the highest amount of the participants which 52%;(n=58) had their family income within the range of (15000-20000). Second highest economical condition belonging group is 45%;(n=52) their monthly family was (10,000-15000) taka only. Finally lowest number of the participant's 2.7%;(n=3) family income was more than 20,000 taka per month.

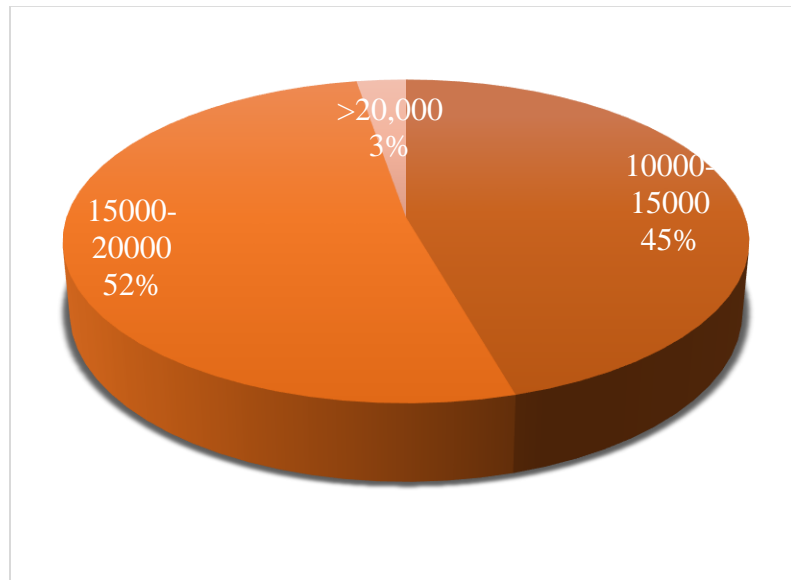


Figure 3: Economic condition of patients

Figure 4.4: Awareness about Physiotherapy among the respondents

Among the participants 79%;(n=89) did not know about Physiotherapy which is majority of the participants which is almost one fourth of the total participants. Rest of the participants 21%;(n=23) knew about Physiotherapy and which is the minor amount portion of the participants.

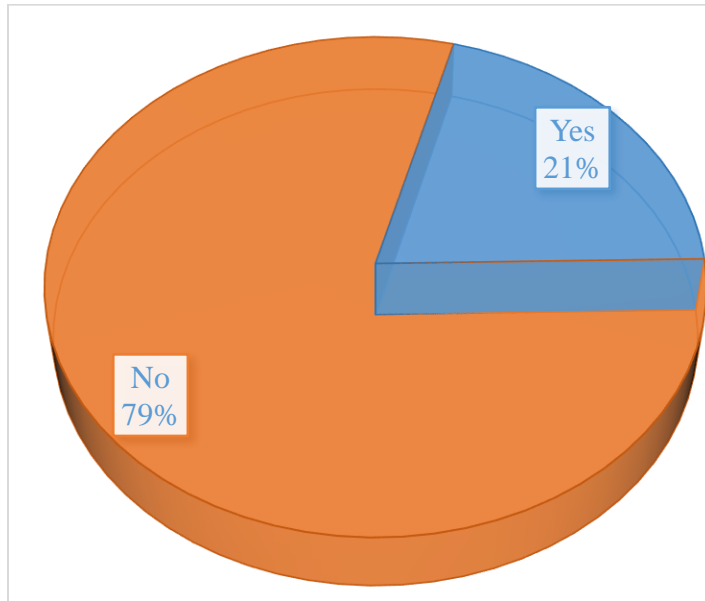


Figure 4: Awareness about Physiotherapy among the respondents

4.5 Prevalence of common musculoskeletal symptoms:

It has been found by the study that majority of the participants 57.1%;(n=64) were suffering from low back pain, secondly 14.3%;(n=16) of the participants had pain on their neck, 14.3%;(n=16) had pain on the others including (knee pain, heel pain) which the third highest portion of the participants, fourth highest amount of the participants 9.8%;(n=9) had shoulder pain, 2.7%;(n=3) had back pain which was the fifth highest amount of the participants and consequently and rests of the participants (1.8%) had pain on their arms.

4.5.1 Percentage of Pelvic Girdle Pain After Parturition

The investigator found 112 postpartum women as sample. Among them 67.9%;(n=76) participants reported Pelvic Girdle Pain. According to VAS scale Pelvic Girdle Pain was measured. Among them about 18.1%;(n=21) which is majority portion of the participants who had Pelvic Girdle Pain; had pain scoring about 4 in the VAS scale, 16;(n=18) had pain scoring about 6, 13.4%;(n=15) participants had pain scoring 7, 7.1%;(n=8) had pain scoring 3 and 0.9%;(n=1) of the participants had 8 scoring in pain measurement scale. So, the prevalence of pelvic girdle pain among the postpartum women was 67.9%;(n=76) and rest of the participants 32.1%;(n=39) did not complain about pelvic girdle pain.

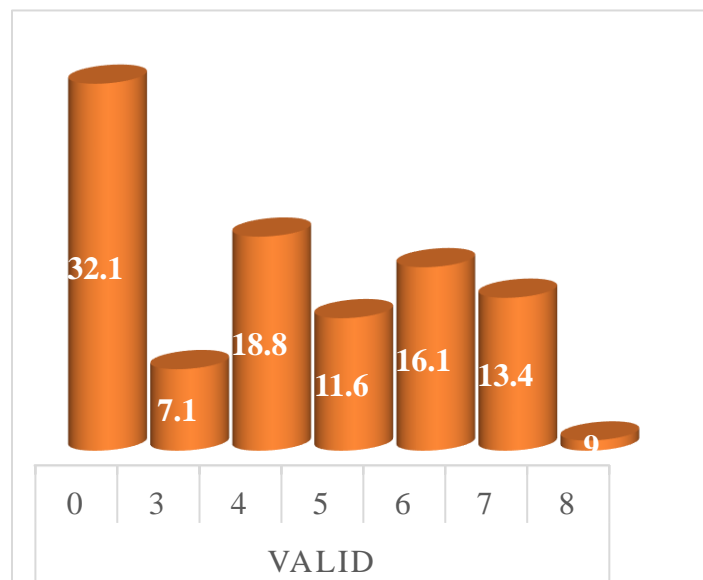


Figure 5: Percentage of Pelvic Girdle Pain After Parturition according to VAS scale

4.5.2 Percentage of Urinary Incontinence among Postpartum Women

The investigator found that majority of the participants 61.6%;(n=69) did not had any urinary incontinence problem while rest of the participants 38.4%;(n=43) women had urinary incontinence.

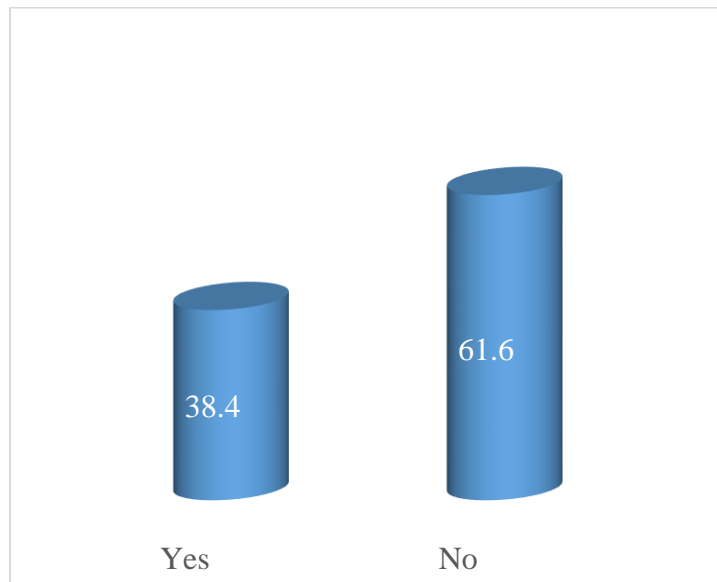


Figure 6: Percentage of Urinary Incontinence After Parturition

4.5.3 Percentage of Diastasis Recti Abdominis After parturition

Researcher had found that majority amount 88%;(n=70) of the participants did not claimed DRA while rest of the participants 12%;(n=42) had diastasis Recti Abdominis.

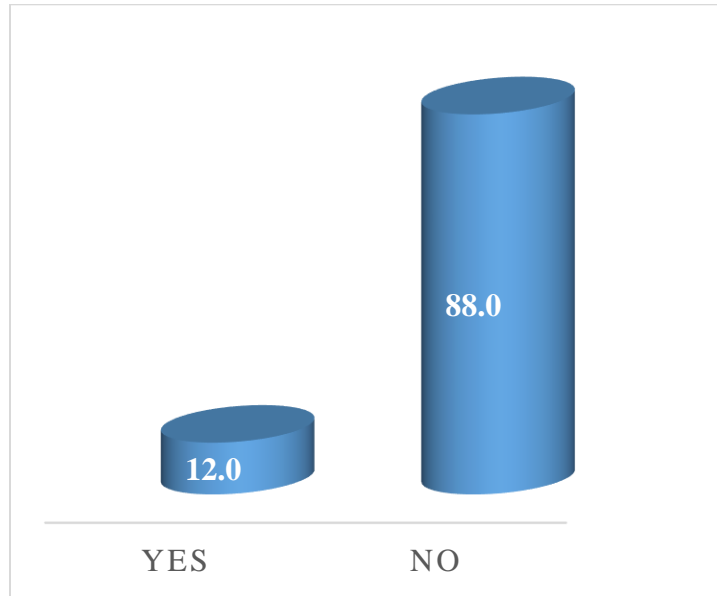


Figure 7: Percentage of Diastasis Recti Abdominis After Parturition

4.5.4 Percentage of Dequerveins tenosynovitis

The study had found that majority of the participants 82.1%;(n=92) did not had any DQT while 18.9%;(n=20) did not had Dequervein's tenosynovitis on the contrary. Where 4.5% had 3, 3.6% had 1, 2.7% had 4, 1.8% had 5,1.8% had 6 and rest of the 1.8% had 7 scoring on 0 to 10 pain measurement scale.

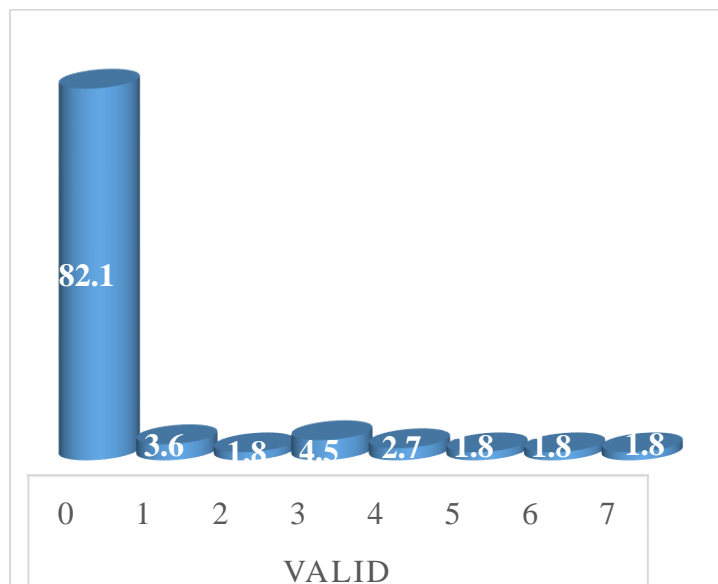


Figure 8: Percentage of Dequerveins Tenosynovitis to VAS Scale

4.5.5 Percentage of Carpal tunnel syndrome

From this research it has been found that majority of the participants 87.5%;(n=98) reported that they were not experiencing any pain on their wrist region. Whether 13.5%;(n=14) had complained about their pain in the wrist region.

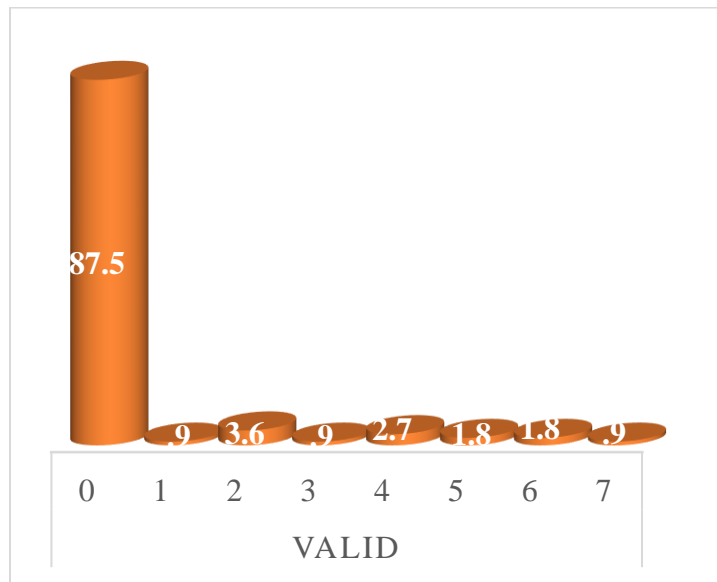


Figure 9: Percentage of Carpal tunnel syndrome to VAS Scale

4.6 Association between musculoskeletal pain with number of children

4.6.1 Association between pelvic girdle pain with number of children

Table-1 Association between pelvic girdle pain with number of children

Number of Children	Pelvic girdle pain		df	Chi-Square	P-value
	Yes (n;%)	No (n;%)			
	67.9%;(n=76)	32.1%;(n=36)			
1	34	16	18	39.340	0.003
2	32	13			
3	8	6			
4	2	1			
Total	112				

From the table attached above it has been shown that 67.9%;(n=76) were suffering from pelvic girdle pain. Where rest of the participants 32.1%(n=36) were not complaining any pelvic girdle pain. Where the association between pelvic girdle pain and number of children in Chi-Square test was 39.340 and P value was 0.003 which stand that the association is significant because as we know that P value <0.005 is considered as significant value.

So, we can assume from this association that the intensity of pelvic girdle pain increases with the number of children given birth by the respondents.

4.6.2 Association between Intensity of pain with number of children

Table-2 Association between Intensity of pain with number of children

Number of Child	Intensity of pain						df	Chi-Square	P-value
	3	4	5	6	7	8			
1	10	10	11	14	5	0	15	45.848	0.000
2	0	3	13	21	6	2			
3	0	0	0	5	8	1			
4	0	0	2	0	1	0			
Total	112								

The researcher has been found that the intensity of pain is dramatically increases when the number of children has been increased. Where 50 of the participants had 1 child 44.6%;(n=50) and maximum of them (14) had pain intensity to the peak which is 6, 45 participants had two children 40.2%;(n=45) and their pain intensity and 21 of them had pain intensity on 6, 14 participants had 3 children 12.5%;(n=14) and their pain intensity 8 of among them had 7 scoring in the pain intensity scale and rest of the participants had significance increase of intensity of pain with the increasing of number of children. 3 of the participants had 4 children 2.7%;(n=3) and their pain intensity was 8 which was the highest intensity among all of them.

It has been found by this study is that among 112 participants 40 of them had pain intensity on 6, 26 had on 5, 20 had on 7, 13 had on 4 and 3 of them had on 3 scoring in the pain intensity measurement scale. Where those who had 3 children their minimum pain intensity started from score 6 on the contrary those who had 1 child their pain intensity had started from 3 scoring of the scale is half from those who had 3 children. So, it can be come to conclusion that the number of children is proportionate to increase the intensity of pain

which is = 3:6 =1:2. Where the association between pain intensity and number of children in Chi-Square test was 45.848 and P value was 0.000 which stands for that the association is significant because as we know that P value <0.005 is considered as significant value.

5 Musculoskeletal Symptoms Severity after parturition as per OREBRO Scale:

The OREBRO scale is a 25 items questionnaire, whereas 5-25 questions were used to measure the musculoskeletal symptoms severity. Questions 5 to 25 ranges from 0–10-point scale. The more the score indicates the more severity of musculoskeletal symptoms. The findings of the study illustrated that the mean severity of musculoskeletal symptoms was 101.64 (\pm 12.56) with maximum OREBRO score 138 and minimum OREBRO score 84.

Table 3 Orebro musculoskeletal questionnaire scoring

Score	Participants(n)	Percent (%)
84-103	68	32.7
104-123	34	16.3
124-143	10	4.8
Total	112	100

From the table attached it had been shown that 32.7%;(n=68) participants had OMPQ score range in between (84-103), 16.3%;(n=34) of the participants had OMPQ score in between (104-123) and rest of the participants 4.8%;(n=10) was in age range in between (124-143).

Table 4 Association between OMPQ score with number of children

Number of Child	OMPQ Score			df	Chi-Square	P-value
	84-103	104-123	124-143			
1	29	17	4	1	153.849	0.013
2	30	10	5			
3	7	7	0			
4	2	0	1			
Total	112					

The highest score range of the OMPQ is 124-143. The more the score indicates the more severity of musculoskeletal symptoms. As per the findings of the present study, majority of the respondents 60.71%; n=68 respondents were within the OMPQ score 84-103. The second highest amounts of participants 30.35%;(n=34) were in the OMPQ score range in between 104-123 and consequently rest of the participants 8.92%;(n=9) were in the OMPQ score 124-143. Where the association between OMPQ score and number of children in Chi-Square test was 153.849 and P value was 0.013 which stands for that the association is significant because as we know that P value <0.005 is considered as significant value. Therefore, we could come to a conclusion that the following association is presenting an assumption that the intensity of OMPQ score dramatically increases with the number of children.

Table 5 Association between OMPQ score with age of the participants

Age	OMPQ Score			df	Chi-Square	P-Value
	% (n)					
	84-103	104-123	124-143	Total		
	60.71%;(n=68)	30.35%;(n=34)	8.92%;(n=9)			
18-22	21	6	0	27		
23-27	34	21	7	62		
28-32	12	7	2	21	1	9.823
33-37	1	0	1	2		0.043
Total	112					

The highest score range of the OMPQ is 124-143. The more the score indicates the more severity of musculoskeletal symptoms. As per the findings of the present study, majority of the respondents 60.71%;(n=68) respondents were within the OMPQ score 84-103. Among those women, second highest amounts of participants 30.35%;(n=34) were in the OMPQ score range in between 104-123 and consequently rest of the participants 8.92%;(n=9) were in the OMPQ score 124-143. Among the participants majority of them were in between 23-27 age range there was 55.35%;(n=62), second highest age group was 18-22 age arrange 22.13%;(n=27), moreover third highest number of participants were belonged to 28-32 were 71.21%;(n=21) and consequently rest of the participants were belongs to 33-37 age range 1.78%;(n=2). the association between OMPQ score and number of children in Chi-Square test 9.823 was and P value was 0.043 which stands for that the association is significant because as we know that P value <0.005 is considered as significant value.

The purpose of this study was to know the common musculoskeletal problems arises among women after parturition. 112 women were participated in this study. Among them 55% of the population had age range in between (23-27), 24% of the population had (18-22), 19% had range between (28-32) and rest of them 2% had (33-37) %; their mean was (35.5); according to the study of (Pol et al. 2007) the mean age of the postpartum women of Netherland was (30.5). Another study of Thabet et al. (2019) conducted in Saudi Arabia had shown that the postpartum women had their age range in between (22-35) years. A study of Mukkannavar et al. (2013) conducted in India showed the age group was in between (18-38).

From; a study conducted by Christofer et al. (2020) in USA; reported that with 91% of pain complaints related to the lower back. Another study of the literature has reported that conducted by Weis et al. (2020) done in Canada had stated that about (2-75) % of the postpartum women had low back pain. A study conducted by Long et al., (2020) in China (58.7%) had low back pain. A study of Mukkannavar et al. (2013) conducted in India showed that about 51% of the participants had low back pain.

According to this study 67.1 % had PGP; In a UK based study conducted by Vermani et al. (2010) stated that the rate of the women who were suffering from postpartum PGP is 25%. An USA and Canada based systematic review and meta -analysis conducted by Davenport et al. (2018) had stated that 25% of the postpartum women suffered from postpartum PGP and they were suffering from more than one year after their postpartum period. Whether a study conducted by Long et al. (2019) in China had shown that the rate is 52%. An Egypt based study conducted by ElDeeb et al. (2019) had stated that the amount of PGP developed women is 30% who were suffering for more than one year from the time of their delivery. A nationwide study across India conducted by Mukkannavar et al. (2013) stated that 46% of the postpartum were suffering from PGP.

This study had been found that about 38.4% of the population had urinary incontinence. While a USA based study conducted by Patel et al. (2021) had been stated that 12.5% to 27.4% at 6 months to 30-months postpartum. Whether a UK based study across 21

countries conducted by Woodley et al. (2020) stated that 30% of the postpartum women had urinary incontinence. An Iran based study conducted by Daneshpajoo et al. (2021) stated that about 63% of the participants had urinary incontinence. A study conducted in China conducted by Lin et al. (2018) had been stated that at 12.5% of postpartum women had upto 12 months of their delivery.

In this this study the researcher had found that 12% of the participants had DRA. 39% of women were affected by DRA at 6 months postpartum conducted by Laframboise et al. (2021) conducted in USA. Whether A study of Mota et al. (2019) undergone in Portugal stated that 35% to 60% of postpartum women were suffering from DRA. A study conducted in China had stated that (30–68%) in postpartum women DRA was found.by Qu et al. (2021). 32–46 % of postpartum women were suffering from DRA after their parturition had been stated by Olsson et al. (2019) conducted in Sweden.

In this study it had been found that about 12.5% women had pain on their wrist (carpal tunnel syndrome). Whether in a meta-analysis of Pauda et al. (2010) conducted on CTS in USA of pregnant women, symptoms were noted in more than 50% of patients after 1 year and approximately 30% after 3 years. In an Italian study by Pazzaglia et al. (2005) from 7 hospitals of Italy, 50% of women with prior clinical and electrophysiological diagnosis of CTS in pregnancy still had symptoms 1 year after delivery. A study conducted in Turkey by Turgut et al. (2001) had been stated that 4.3% of the women had carpal tunnel syndrome one year after their delivery.

In this study the researcher had found that 17.9% of the respondents had dequervein's tenosynovitis. A United Kingdom based study condutced Read et al. (2000) by had stated that 25% of the women who had delivery presenting de Quervain's disease during 12 months of period.

This researcher had been found that among 112 participants 38.4% women had urinary incontinence. A randomized control trial study conducted by Sigurdarduttir et al. (2021) in Iceland had been stated that about 30% of the participants were suffering from urinary incontinence during their postpartum period. A study conducted in 20 countries around the world conducted by Woodley et al. 2017) had been stated that 26% of the population had urinary incontinence. A study by Leroy et al. (2016) conducted in Brazil had been

stated that 31% of the participants were suffering from urinary incontinence. According to Johannessen et al. (2020); a study conducted in Norway had been stated that among 29% of the postpartum participants had urinary incontinence. A study conducted by Wang et al. (2020) in China had been stated that 36% of the postpartum participants were suffering from urinary incontinence.

To calculate your score for question 5, count the number of painful sites and multiply by two (maximum score allowable is 10). The number bracketed after the ticked box represents the score for questions 6 and 7. The number that has been ticked or circled for questions 8, 9, 10, 11, 13, 14, 15, 18, 19, and 20 is the score. For questions 12, 16, 17, 21, 22, 23, 24, and 25, the score is 10 minus the number circled. Write the score in the shaded area beside each item. To calculate the total MPQ score, add the scores for questions 5 through 25.

A cut mark was set by OMPQ questionnaire that who had OMPQ score more than 130 were more prone to develop long term musculoskeletal conditions and least chance to return to job within next 6 months. Whether those who had cut mark less than 105 did not has the chance to develop long term musculoskeletal conditions and more chance to return to job within next 6 months.

5.1 Limitations of the study

The study should be considered in light of the following limitations.

In the study there were only 112 participants which are very little to represent the whole population of postpartum women.

The findings of the study were not generalized to the wider population. The most easily accessible participants were collected from Dhaka only and no other area of the country. This small number of samples is not enough to generalize the result.

Physiotherapy unit for postpartum care is not available in many hospitals in Bangladesh. So, the investigator could not collect data from all the primary, secondary levels of hospitals and from all the hospitals of Dhaka also.

In the study data was collected from two hospitals of Dhaka. If investigator got more time, a larger data could be collected from different parts of Bangladesh. If it could possible, it may make the result more valid and reliable.

Few researchers had done before on this topic area. So, there was little evidence to support the result of the study.

As it was a new topic area so it was difficult to collect appropriate information about the topic area especially on the perspective of Bangladesh.

- The interview scheduled survey and interviewing skills were not adequate to get deeper information from the participants, as it was the first attempt for the researcher.

6.1 Conclusion

Aim of the study was to find out the common. the women during postpartum period at selected hospitals in Bangladesh. For the fulfillment of this study the investigator used a quantitative research model in the form of a prospective type survey. Conveniently 112 participants who came in hospitals after their delivery for follow up were chosen. The investigator used a questionnaire. Each Participant was given a questionnaire to identify common musculoskeletal problems arises among women after selected hospitals of Bangladesh. And from the documents of the patients the researcher forms a data base for the total sample included in the study. From the data base, it was found that is the most common complaint of postparum women almost in 67.1 % cases and rest 23.9% of the participants had no pelvic girdle pain , followed by low back pain 57.1% had reported that the participants had low back and rest of the participants 23.9% did not complained of it, urinary incontinence was reported by 38.4% of the participants and 61.6% of the participants had not urinary incontinence, carpal tunnel syndrome was complained by 12.5% of the participants and rest 87.5% did not complained of it, approximately 17.9% of the participants complained of Dequervein's tenosynovitis and rest 83.1% of the participants did not complained of it and separation of abdominal muscle diastasis recti abdominis complained by 12% of the participants and rest 88% of the participants did not complained of it which found as less common complaints of postpartum period in women.

6.2 Recommendation

The researcher identified some further step that might be taken into consideration for the better accomplishment of further research. For the ensuring of the generalizability of the research it is recommended to investigate large sample. In this study researcher only took the postpartum women who came for follow up at selected hospitals of Bangladesh. So, for further study researcher strongly recommended to include other hospitals from all over Bangladesh. In this study, musculoskeletal complaints of postpartum period were focused only so need to further research to explore the frequency of musculoskeletal complaints in prenatal period. It is recommended for further study to generalized physiotherapy treatment among the pregnant and postpartum women to prevention and treatment of musculoskeletal complaints in women both in hospitals from all over Bangladesh condition.

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সম্মতি পত্র

(অংশগ্রহনকারীকে পড়ে শোনাতে হবে)

আসালামুআলাইকুম/নমস্কার,

আমার নাম মাহবুবা আক্তার, আমি এই গবেষণা প্রকল্পটি বাংলাদেশ হেলথ প্রফেশনস ইনস্টিটিউট (বি এইচ পি আই) এ পরিচালনা করছি যা আমার ৪র্থ বর্ষ বি এস সি ইন ফিজিওথেরাপী কোর্সের অধিভুক্ত। আমার গবেষণার শিরোনাম “বাংলাদেশের কিছু নির্ধারিত হাসপাতালে গর্ভঅবস্থা পরবর্তী কালীন সময়ে মহিলাদের মধ্যে তৈরী হওয়া সাধারণ অস্থি- সন্ধি ও মাংশপেশিজনিত সমস্যা” আমি এক্ষেত্রে আপনার কিছু ব্যক্তিগত এবং আনুষঙ্গিক প্রশ্ন প্রসব পরবর্তী ফিজিওথেরাপি সম্পর্কে করতে চাচ্ছি। এতে আনুমানিক ৩০-৪৫ মিনিট সময় নিবো। আমি আপনাকে অবগত করছি যে,এটা আমার অধ্যয়নের অংশ এবং যা অন্য কোন উদ্দেশ্যে ব্যবহার হবে না। গবেষক সরাসরি এই অধ্যয়নের সাথে অন্তর্ভুক্ত নয়। তাই এই গবেষণায় আপনার অংশগ্রহণ বর্তমান ও ভবিষ্যৎ চিকিৎসায় কোন প্রকার প্রভাব ফেলবেনা। আপনি যে সব তথ্য প্রদান করবেন তার গোপনীয়তা বজায় থাকবে এবং আপনার প্রতিবেদনের ঘটনা প্রবাহে এটা নিশ্চিত করা হবে যে এই তথ্যের উৎস অপ্রকাশিত থাকবে।এই অধ্যয়নে আপনার অংশগ্রহন স্বেচ্ছাপ্রণোদিত এবং আপনি যে কোন সময় এই অধ্যয়ন থেকে কোন নেতিবাচক ফলাফল ছাড়াই নিজেকে প্রত্যাহার করতে পারবেন। এছাড়াও কোন নির্দিষ্ট প্রশ্ন অপছন্দ হলে উত্তর না দেয়ার এবং সাক্ষাৎকারের সময় কোন উত্তর না দিতে চাওয়ার অধিকারও আপনার আছে।

এই অধ্যয়নে অংশগ্রহনকারী হিসেবে যদি আপনার কোন প্রশ্ন থাকে তাহলে আপনি আমাকে অথবা /এবং শামিমা ইসলাম নিপা, লেকচারার, রিহ্যাবিলিটেশন সাইন্স বিভাগ, বি এইচ পি আই ,সিআরপি, সাভার ,ঢাকা- ১৩৪৩-তে যোগাযোগ করতে পারেন।

সাক্ষাৎকার শুরু করার আগে আপনার কি কোন প্রশ্ন আছে?

আমি আপনার অনুমতি নিয়ে এই সাক্ষাৎকার শুরু করতে যাচ্ছি।

হ্যাঁ...

না...

১। অংশগ্রহনকারীর স্বাক্ষর.....।

২। সাক্ষাৎগ্রহনকারীর স্বাক্ষর.....।

CONSENT FORM
(Please read out to the participants)

Assalamualaikum/Namasker, my name is, Mahbuba Akter, I am conducting this study for a B. Sc in Physiotherapy project study dissertation titled “**Common Musculoskeletal Problems Arising Among Women After Parturition at Selected Area of Bangladesh**” under Bangladesh Health Professions Institute (BHPI), University of Dhaka. I would like to know about some personal and other related information regarding Spinal cord injury. You will perform some tasks which are mention in this form. This will take approximately 30-45 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 this (Gynecological unit), so your participation in the research will have no impact on your present or future treatment in this area (Gynecological unit). 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 and also all information will be destroyed after completion of the study. Your participation in this study is voluntary and you may withdraw yourself at any time during this study without any negative consequences. You also have the right not to answer a particular question that you don't like or do not want to answer during interview. If you have any query about the study or your right as a participant, you may contact with me, researcher and/or Shamima Islam Nipa, lecturer, department of master's in rehabilitation science, Savar, Dhaka. Do you have any questions before I start?

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

Yes

No

Signature of the Participant _____

Signature of the Interviewer _____

প্রশ্নাবলী

টাইটেল ঃ “বাংলাদেশের নির্ধারিত এলাকায় গর্ভ- অবস্থা পরবর্তীকালীন সময়ে নারীদের মধ্যে তৈরি হওয়া সাধারণ অস্থি- সন্ধি ও মাংসপেশি জনিত সমস্যা”

আইডি নং:

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সাক্ষাৎকারের তারিখ:

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সাক্ষাৎকার গ্রহণকারীর নাম:

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তথ্য সংগ্রহের স্থান:

এনাম মেডিকেল কলেজ এবং হাসপাতাল	০
সুপার মেডিকেল হাসপাতাল	১

যোগাযোগের নম্বর:

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পর্ব-১(সামাজিক জনসংখ্যা সংক্রান্ত) ঃ

ক্রমিক নং	প্রশ্ন	কোডিং ক্যাটাগরি
১।	আপনার বর্তমান বয়স কত?	১৮-২৮=০ ২৯-৩৮=১

		৩৮-৪৫=২
২।	আপনার পেশা কি?	গৃহিণী= ০ চাকুরীজীবী= ১ অন্যান্য (ব্যবসায়)=২ দিনমজুর=৩
৩।	আপনার পরিবারের মাসিক আয় কত?	১০,০০০-১৫,০০০=০ ১৫,০০০-২৫,০০০=১ ২৫,০০০-৩০,০০০=২ ৩০,০০০>=৩
৪।	আপনার শিক্ষাগত যোগ্যতা কি?	অক্ষরজ্ঞান সম্পন্ন=০ প্রাথমিক=১ মাধ্যমিক=২ উচ্চ মাধ্যমিক=৩ স্নাতক=৪ স্নাতকোত্তর=৫

পর্ব -২ নমুনা সম্পর্কিত তথ্যঃ

১। আপনার সন্তানের ক্রম সংখ্যা কত?

১ম ২য় ৩য়

২। আপনি কি কোমর ব্যাথায় ভুগছেন?

হ্যাঁ না

৩। আপনার ব্যাথার তীব্রতা কত?

০ _____ ১০

৪। আপনার ব্যাথার ধরন কেমন?

নির্দিষ্ট সময়ে মারোমারো সবসময়

৫। আপনার কি কোমর এবং পশ্চাতদেশের আশেপাশে ব্যাথা আছে? (পেলভিক গার্ডেল এ ব্যাথা)

০ _____

১০

হ্যাঁ না

৬। আপনার কি প্রসাব ঝরে পরে?

হ্যাঁ না

৭। আপনার কি পেটের দুপাশের মাংশপেশী আলাদা হয়ে গেছে?

হ্যাঁ না

৮। আপনি কি আপনার বৃদ্ধাংগুলের জয়েন্টে ব্যাথা অনুভব করেন?

০ _____

১০

হ্যাঁ

না

৯। আপনি কি আপনার কাজিতে ব্যাথা অনুভব করেন?

০ _____ ১০

হ্যাঁ

না

১০। আপনার কি গর্ভাবস্থা পূর্ববর্তী সময়ে মাংসপেশী এবং অস্থিসন্ধিতে ব্যাথা ছিলো?

হ্যাঁ

না

১১। যদি আপনার উত্তর হ্যাঁ হয় তবে দয়াকরে অংশগ্রহণ বন্ধ করুন। উত্তর না হলে প্রশ্নাবলী উত্তর চালিয়ে যান।

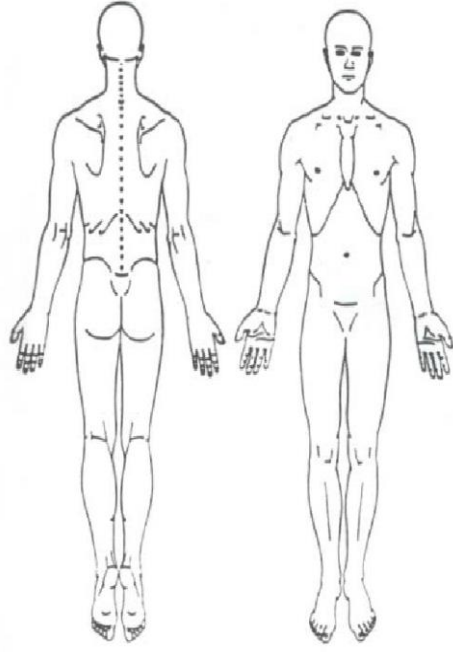
১২। আপনি কি গাইনোকলজিকাল ফিজিওথেরাপি চিকিৎসা সম্পর্কে জানেন?

১৩। আপনি কি আপনার এই ব্যাথার জন্য ফিজিওথেরাপি চিকিৎসা সেবা গ্রহণ করেন?

হ্যাঁ

না

১৪। দয়াকরে নিম্নে সংবলিত ছবি থেকে ব্যাথার সঠিক স্থানটি নির্বাচন করুনঃ



অরোরো মাংসপেশী এবং অস্থিসন্ধি প্রশ্নাবলীঃ

১ আপনার ব্যাথার অবস্থান কোথায়? সঠিক স্থানগুলোতে টিক (✓) দিন ।

ঘাড়	
কোমর	
কাঁধ	
পা	
বাহু	
পিঠ	
অন্যান্য (বর্ণনা করুন)	

২। বিগত ১৮ মাসে কতদিন আপনি ব্যাথার জন্য কাজে যেতে পারেননি? টিক (✓) দিন।

০ দিন (১)	
১-২ দিন (২)	
৩-৭ দিন(৩)	
৮-১৪ দিন(৪)	
১৫-৩০ দিন (৫)	
১ মাস (৬)	
২ মাস (৭)	
৩-৬ মাস (৮)	
৬-৯ মাস (৯)	
১ বছরের বেশি (১০)	

৩। আপনার এই ব্যাথার সমস্যায় কতদিন ধরে ভুগছেন? টিক দিন(✓)

০-১ সপ্তাহ (১)	
১-২ সপ্তাহ(২)	
২-৩ সপ্তাহ (৩)	
৩-৪ সপ্তাহ (৪)	
৪-৫ সপ্তাহ (৫)	
৬- ৮ সপ্তাহ (৬)	
৯-১১ সপ্তাহ (৭)	
৩-৬ মাস (৮)	

৬-৯ মাস (৯)	
৯-১২ মাস (১০)	
১ বছরের বেশি (১০)	

৪। আপনার কাজ কি ভারী অথবা এক্ষেয়েমিপূর্ণ? সবচেয়ে সঠিক সংখ্যায় বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

একদমই নয়

ভীষণভাবে

৫। আপনার গত সপ্তাহে হওয়া ব্যাথাকে আপনি কিভাবে মূল্যায়ন করবেন? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ব্যাথাহীন

ভীষণ ব্যাথা

৬। (০-১০) মাত্রার স্কেলে, আপনার গত তিন মাসের ব্যাথা কেমন হবে? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ব্যাথাহীন

ভীষণ ব্যাথা

৭। বিগত তিন মাসে গড়ে কতবার আপনি ব্যাথায় আক্রান্ত হয়েছেন? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

কখনই না

সবসময়

৮। এসব কিছু উপর ভিত্তি করে আপনাকে দিনপ্রতি গড়ে কতটা ব্যাথার সাথে খাপ খাওয়াতে হয়?

আপনি কতটাব্যাথা কমাতে সক্ষম হন? সবচেয়ে সঠিক সংখ্যায় বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

একদমই কমাতে পারিনা

সম্পূর্ণভাবে ব্যাথা কমাতে পারি

৯। গত সপ্তাহে আপনি কতটা চিন্তিত বা উদ্ভিন্ন ছিলেন? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ভীষণ শান্ত এবং উৎফুল্ল ছিলাম

ভীষণ উদ্ভিন্ন এবং চিন্তিত ছিলাম

১০। গত সপ্তাহে আপনি হতাশায় ভোগা নিয়ে কতটা পীড়ায় ছিলেন? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

একদমই না

ভীষণভাবে

১১। আপনার ধারণা মতে এই বর্তমান ব্যাথা দীর্ঘস্থায়ী হবার কতটা ঝুঁকি আছে? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

কোনো ঝুঁকি নেই

ভীষণ ঝুঁকি আছে

১২। আপনার গননা মতে আগামী ছয় মাসের মধ্যে আপনার কাজ করার সম্ভাবনা কতটুকু? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

কোনো ঝুঁকি নেই

ভীষণ ঝুঁকি আছে

১৩। আপনার ধারণামতে আপনার কাজের সময়সূচী, ব্যবস্থাপনা, বেতন, পদোন্নতির সম্ভাবনা এবং সহকর্মী সমেত আপনার কাজ নিয়ে আপনি কতটা সন্তুষ্ট? একটি বৃত্ত দিন।

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

একদমই সন্তুষ্ট নয়

সম্পূর্ণভাবে সন্তুষ্ট

১৪। শারিরিক পরিশ্রম আমার ব্যাথাকে বাড়িয়ে তোলে-

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

সম্পূর্ণভাবে দ্বিমত

সম্পূর্ণ একমত

১৫। ব্যাথা বাড়ার সাথে সাথে যতক্ষণ না ব্যাথা কমে আমি কাজ বন্ধ রাখিঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

সম্পূর্ণভাবে দ্বিমত

সম্পূর্ণ একমত

১৬। আমি আমার বর্তমান ব্যাথার জন্য স্বাভাবিক কাজ করতে পারিনাঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

সম্পূর্ণভাবে দ্বিমত

সম্পূর্ণ একমত

১৭। আমি এক ঘন্টার জন্য হালকা কাজ করতে পারিঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯

১০

ব্যাথার জন্য আমি তা করতে পারিনা

ব্যাথা না থাকায় আমি তা করতে পারি একমত

১৮। আমি এক ঘন্টা হাটতে পারিঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ব্যথার জন্য আমি তা করতে পারিনা ব্যাথা না থাকায় আমি তা করতে পারি একমত

১৯। আমি সাধারণ গৃহস্থালি কাজকর্ম করতে পারিঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ব্যথার জন্য আমি তা করতে পারিনা ব্যাথা না থাকায় আমি তা করতে পারি একমত

২০। আমি সাপ্তাহিক বাজার করতে পারিঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ব্যথার জন্য আমি তা করতে পারিনা ব্যাথা না থাকায় আমি তা করতে পারি একমত

২১। আমি রাতে ঘুমাতে পারিঃ

১ ২ ৩ ৪ ৫ ৬ ৭ ৮ ৯ ১০

ব্যথার জন্য আমি তা করতে পারিনা ব্যাথা না থাকায় আমি তা করতে পারি একমত

Questionnaire

Title: Common musculoskeletal problems arising among women after parturition at selected area of Bangladesh

ID NO:

DATE OF INTERVIEW:

NAME OF
INTERVIEWER:

NAME OF RESPONDENT:

PLACE OF DATA COLLECTION:

Enam medical college hospital	0
Super medical hospital	1

CONTACT NO:

--	--	--	--	--	--	--	--	--	--	--	--

Address:

--

1. Do you have musculoskeletal problems?
2. Does your problem exist before you conceive?

PART- A (SOCIO-DEMOGRAPHIC QUESTIONS)

Serial No.	Question	Coding Category
1.	What is your current age? (In years) 	
2	What is your occupation?	Housewife = 0 Service holder = 1 Others (Business) = 2 Day labourer=3
3.	What is your family's monthly income?	10000-15000=0 15000-25000=1 25000-30000=2 30000>=3

4.	What is your educational qualification?	Literate=0 Primary level=1 Secondary level=2 Higher secondary =3 Graduate=4 Post graduate=5
----	---	--

PART B SAMPLE RELATED INFORMATION:

1. What is the chronological state of this child?

1st 2nd More than two

2. Do you have any musculoskeletal problem?

Yes No

2. Do you feel low back pain?

Yes No

3. How severe your pain is?

0 _____ 10

Pain on VAS

4. What is the behavior of pain?

Occasional Intermittent Constant

5. Do you have pain around waist and buttock (pelvic girdle pain)?

Yes No

0 _____ 10

6. Does your urine leak? (Urinary incontinence)

Yes No

7. Does your abdominal muscles are separated? (Diastasis recti)

Yes No

8. Do you feel pain on your thumb joint (Dequervain's tenosynovitis)

Yes No

0 _____ 10

9. Do you feel pain on your wrist joint? (Carpal tunnel syndrome)

Yes No

0 _____ 10

10. Did you have musculoskeletal pain before you conceive?

Yes No

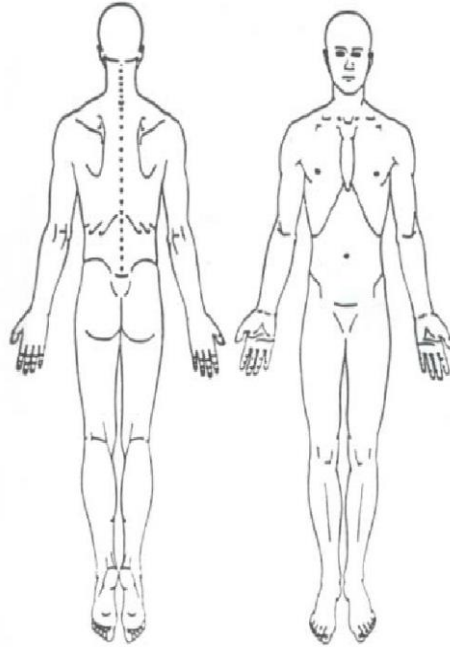
11. If yes then stop answering. If no please continue the questionnaire.

12. Do you know about gynecological physiotherapy treatment?

13. Do you receive any physiotherapy for this pain?

Yes No

14. Please mark appropriately the exact location of your pain below



Orebro musculoskeletal questionnaire:

1. **Where do you have pain?** Place a tick (✓) for all appropriate sites.

Neck	
lower back	
Shoulder	
Leg	
Arm	

Upper back	
Other (state)	

2. How many days of work have you missed because of pain during the past 18 months? Tick (✓) one.

0 days (1)	
1-2 days (2)	
3-7 days (3)	
8-14 days (4)	
15-30 days (5)	
1 months (6)	
2 months (7)	
3-6 months (8)	
6-9 months (9)	
Over 1 year (10)	

3. How long have you had your current pain problem? Tick (✓) one.

0-1 week (1)	
1-2 weeks (2)	
3-4 weeks (3)	
4-5 weeks (4)	
6-8 weeks (5)	
9-11 weeks (6)	
3-6 months (7)	
6-9 months (8)	
9-12 months (9)	

Over 1 year (10)	
------------------	--

4. **Is your work heavy or monotonous?** Circle the best alternative.

0 1 2 3 4 5 6 7 8 9 10

Not at all

extremely

5. **How would you rate that pain you have had during the past week?** Circle one.

0 1 2 3 4 5 6 7 8 9 10

No pain

pain as bad as it could be

6. **In the last three months, on average, how bad was your pain on a 0-10 scale?**

Circle one.

0 1 2 3 4 5 6 7 8 9 10

No pain

pain as bad as it could be

7. **How often would you say that you have experience pain episodes, on average, during the past three months?** Circle one.

0 1 2 3 4 5 6 7 8 9 10

Never

Always

8. **Based on all things you do to cope, or deal with your pain, on an average day, how much are you able to decrease it?** Circle the appropriate number.

0 1 2 3 4 5 6 7 8 9 10

Cant's decrease it at all

can decrease it completely

9. **How tense or anxious have you felt in the past week?** Circle one.

0 1 2 3 4 5 6 7 8 9 10

Absolutely calm and relaxed

As tense and anxious as I've ever felt

10. **How much have you been bothered by feeling depressed in the past week?**

Circle one.

0 1 2 3 4 5 6 7 8 9 10
Not at all extremely

11. In your view, how large is the risk that your current pain may become persistent? Circle one.

0 1 2 3 4 5 6 7 8 9 10
No risk very large risk

12. In your estimation, what are the chances that you will be able to work in six months? Circle one.

0 1 2 3 4 5 6 7 8 9 10
No chance very large chance

13. If you take into consideration your work routines, management, salary, promotion possibilities and work mates, how satisfied are you with your job?
Circle one.

0 1 2 3 4 5 6 7 8 9 10
Not satisfied at all completely satisfied

14. Physical activity makes my pain worse.

0 1 2 3 4 5 6 7 8 9 10
Completely disagree completely agree

15. An increase in pain is an indication that I should stop what I'm doing until the pain decreases.

0 1 2 3 4 5 6 7 8 9 10
Completely disagree completely agree

16. I should not do my normal work with my present pain.

0 1 2 3 4 5 6 7 8 9 10
Completely disagree completely agree

17. I can do light work for an hour.

0 1 2 3 4 5 6 7 8 9 10
Can't do it because of pain problem can do it without pain being a problem

18. I can walk for an hour.

0 1 2 3 4 5 6 7 8 9 10

Can't do it because of pain problem

can do it without pain being a problem

19. I can do ordinary household chores.

0 1 2 3 4 5 6 7 8 9 10

Can't do it because of pain problem

can do it without pain being a problem

20. I can do the weekly shopping.

0 1 2 3 4 5 6 7 8 9 10

Can't do it because of pain problem

can do it without pain being a problem

21. I can sleep at night.

0 1 2 3 4 5 6 7 8 9 10

Can't do it because of pain problem

can do it without pain being a problem



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)

(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 02224445464, 02224441404, Website: www.bhpi.edu.bd

Date: 16.03.2022

To
The Manager,
Super Medical Hospital,
Savar, Dhaka.

Subject: *Regarding Data collection for dissertation.*

Greetings from Bangladesh Health Professions Institute (BHPI). I would like to inform you that, BHPI, the Academic Institute of CRP is running B. Sc in Physiotherapy Course, under Faculty of Medicine, University of Dhaka.

According to the content of 4th year of University course curriculum, the students have to do Research and Course work in different topics to develop their skills. Considering the situation, your institute will be the most appropriate place to collect data.

4th year students of BHPI Mahbuba Akter would like to collect data in your organization in your convenient time.

We shall remain grateful to you if you could kindly allow us in conducting the placement.

With regards

Shofiq
Md. Shofiqul Islam
Associate Prof. & Head
Dept. of Physiotherapy
BHPI



D. M.
22.03.22
MANAGER
SUPER MEDICAL HOSPITAL (P.W) Ltd.
SAVAR DHAKA

The Chairman
Institutional Review Board (IRB)
Bangladesh Health Professional Institute (BHPI), CRP
Savar, Dhaka-1343. Bangladesh

Subject: Application for review and ethical approval.

Dear sir,

With due respect, I am Mahbuba Akter, student of final year B.Sc. in Physiotherapy program at Bangladesh Health Professional Institute (BHPI) the academic institute of Centre for the Rehabilitation of the Paralyzed (CRP) under the Faculty of Medicine, University of Dhaka. As per the course curriculum, I have to conduct a research project entitled **“Common musculoskeletal problems arises among women after parturition at selected area of Bangladesh”**

The purpose of the study is to gain in-depth insight and understandings from women with parturition in order to understand their own experiences and perspectives on musculoskeletal problem due to giving birth of baby. The study involves face-to-face and/or by over phone interview by using questionnaire to explore the common musculoskeletal problem arises among women after parturition at selected area of Bangladesh that may take 30 to 45 minutes to fill in the questionnaire and there is no likelihood of any harm to the participants. Data collectors will receive informed consent from all participants and the collected data will be kept confidential.

Therefore, I look forward to having your kind approval for the research project and to start data collection. I can also assure you that I will maintain all the requirements for study.

Sincerely,

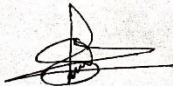
Thesis presentation date: 12th October 2021

mahbuba
09.02.2022
Mahbuba Akter
Final Year B.Sc. in Physiotherapy
Session: 2016 – 2017,
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Shofiq

Head of Department
B.Sc. in Physiotherapy, BHPI.
Md. Shofiqul Islam
Associate Professor & Head
Department of Physiotherapy
Bangladesh Health Professional Institute (BHPI)
CRP, Chapari, Savar, Dhaka-1343

Recommendation from the Supervisor


Shamima Islam Nipa,
Lecturer, BHPI.



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
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(The Academic Institute of CRP)

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Date: 16.03.2022

To
The CEO,
Enam Medical College and Hospital
Savar, Dhaka.

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With regards

Shofiqul Islam
Md. Shofiqul Islam
Associate Prof. & Head
Dept. of Physiotherapy
BHPI



Approved
Shofiqul Islam

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Institutional Review Board (IRB)
Bangladesh Health Professional Institute (BHPI), CRP
Savar, Dhaka-1343. Bangladesh

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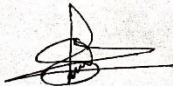
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CRP, Chapari, Savar, Dhaka-1343

Recommendation from the Supervisor


Shamima Islam Nipa,
Lecturer, BHPI.