KNOWLEDGE, ATTITUDE AND PERCEPTION OF GYNECOLOGISTS ABOUT PHYSIOTHERAPY FOR GYNECOLOGICAL AND OBSTETRIC CASES

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KNOWLEDGE, ATTITUDE AND PERCEPTION OF GYNECOLOGISTS ABOUT PHYSIOTHERAPY FOR GYNECOLOGICAL AND OBSTETRIC CASES

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This work has not previously been accepted in substance for any degree and isn't concurrently submitted in candidature for any degree. This dissertation is being submitted in partial fulfillment of the requirements for the degree of B.Sc. in Physiotherapy.

I confirm that if anything identified in my work that I have done plagiarism or any form of cheating that will directly awarded me fail and I am subject to disciplinary actions of authority. I confirm that the electronic copy is identical to the bound copy of the Thesis.

In case of dissemination the finding of this project for future publication, research supervisor will highly concern, it will be duly acknowledged as graduate thesis and consent will be taken from the physiotherapy department of SAIC College of Medical Science and Technology (SCMST).

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Acronyms

PT	Physical Therapy.
LBP	Low Back Pain.
DRAM	Diastasis rectus abdominis muscle.
GDM	Gestational diabetes mellitus.
UI	Urinary incontinence.
PD	Primary dysmenorrhea.
C-section	Caesarean section.
POP	Post-operative.
GS	Gestational sac.
CSP	Cesarean scar pregnancy.
PF	Pelvic floor.
POP	Pelvic organ prolapse.
PNE	Postnatal exercise.
ANEX	Antenatal exercise.
PFM	Pelvic floor muscle.
PFME	Pelvic floor muscle exercise.
PFMD	Pelvic floor muscle dysfunction.
PFPT	Pelvic floor physical therapy.
PFH	Pelvic floor hyper-tonicity.
MBBS	Bachelor of Medicine and Bachelor of Surgery.
FCPS	Fellow of College of Physicians and Surgeons.
MCPS	Member of College of Physicians and Surgeons.
PGD	Post Graduate Diploma.
PGR	Post Graduate Resident.
WMO	Women Medical Officers.
AP	Assistant Professors.
WHO	World Health Organization.
MMR	Maternal mortality rate.
OGSB	Obstetrical and Gynecological Society of Bangladesh.
SPSS	Statistical package for the social science.
SCMST	Saic College of Medical Science and Technology.

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Abstract

Background: Obstetrics and gynecology physiotherapy is a physical therapy field that focuses on promoting health during childbearing. It involves integrating physical therapy treatments with obstetrics and gynecology to provide optimal healthcare. The role of physiotherapists includes addressing pregnancy, labor, puerperium, preoperative and postoperative phases, and various obstetrics and gynecology problems. However, doctor knowledge and attitudes influence the frequency of use of these services. **Objective:** To assess the level of knowledge, attitude and perception of gynecologists about physiotherapy for gynecological and obstetric cases. **Methods:** A cross-sectional study design was conducted to accomplish the study. Data were collected from 133 gynecologists of Dhaka, Gazipur and Munshiganj using convenience sampling. A self-structured questionnaire was used to collect data from gynecologists. The data was collected through face-to-face interview. Data were analyzed by using SPSS program (25 version), and used both descriptive (mean, standard deviation, frequency, percentage) and inferential statistics (eg: spearman correlation co-efficient test). **Results:** This study showed that, correlation between work experience of the participants with their level of knowledge revealed (r) = (-0.017) and (p) = (0.843), and Correlation between work experience of the participants with their level of attitude revealed (r) = (0.103) and (p) = (0.239), relation between work experience of the participants with their level of perception revealed (r) = (-0.014) and (p) = (0.869), This study also showed that the correlation between working hours of gynecologists with their level of knowledge (r) = (0.012) and (p) = (0.888), working hours of gynecologists with their level of attitude correlation revealed (r) = (0.124) and p = (0.153), and correlation between working hours of gynecologists with their level of perception revealed (r) = (-0.052) and (p) = (0.555). **Conclusion:** The study assessed gynecologists' knowledge, attitude, and perception of physiotherapy in gynecological and obstetric cases. Results showed that knowledge did not increase with experience, and attitudes were positive. Working hours positively correlated with knowledge, while attitudes and perceptions were negative. Therefore, gynecologists need to be informed about physiotherapy's role.

Keywords: *Knowledge, attitude, perception, gynecology, physiotherapy.*

CHAPTER-I: INTRODUCTION

1.1 Background:

Physiotherapy is a health care profession that gives treatment to individuals in order to build, maintain, and regain optimum mobility and functional capacity throughout a person's lifespan (Maruf et al., 2012). The practice of physiotherapy has grown to be a vital therapeutic tool that uses established scientifically based protocols and is a crucial component of the care given to the majority of patients. It has also become a significant medical and rehabilitative complement to the delivery of health care (Abichandani & Radia, 2015). Physiotherapists have started collaborating with other practitioners to offer their patients the finest options for recovery and therapy in the modern day. A physiotherapist may assist a patient in recovering in a better and quicker manner whereas a doctor can diagnose an ailment, treat symptoms with drugs, carry out operations, and recommend the best course of action for a condition or injury (Mishra & Vidhyadhari, 2019).

In the United States, family doctors and obstetrician-gynecologists together strive to prevent unwanted pregnancy among their patients by providing a large portion of the contraceptive treatment (Harper et al., 2012). Obstetrics and gynecology physiotherapy is a specialization of physical therapy that focuses on health promotion throughout the child-bearing years. Obstetrics and gynecology physiotherapists must have a mature combination of an attribute that allows women to share some of the most sensitive and confidential parts of their life (Tahir et al., 2017). The Millennium Development Goal 5 has set the lowering of maternal mortality ratios by 75 percent by 2015 as its aim due to the importance of maternal health as a worldwide public health issue. In India, the Maternal Mortality Rate (MMR) was found to be 196 maternal deaths per 100,000 live births for the years 2010–2014, according to a recent World Health Organization (WHO) research on "Trends in Maternal Mortality 1990–2014" (Nayak et al., 2016). The prenatal and postnatal periods as well as labor and delivery are all covered by the physiotherapist's duties in obstetrics and gynecology. Patients in obstetrics and gynecology who complain of low back pain, abdominal or pelvic floor muscular weakness resulting in stress urine incontinence or mild prolapse, pelvic pain, the discomfort of pregnancy, or restricted mobility can benefit from physical therapy treatments (Nazar, 2021). Obstetrics and gynecology-focused physiotherapists need to

possess a mature combination of qualities that will allow women to discuss with confidence what may be some of the most private and personal facts of their life (Odunaiya et al., 2013). The body of a pregnant woman experiences several different physical and physiological changes throughout the whole pregnancy. Low back pain, stress urine incontinence, and pelvic discomfort are common issues that women deal with as a result of the changes that occur during and after pregnancy. Physiotherapy can aid with this by posture reeducation, pelvic floor muscle strengthening, and through certain techniques (Munawar et al., 2013). The benefits of physical activity during pregnancy include improved physical fitness, reduced risk of extreme weight gain, reduced risk of pre-eclampsia and decreased pre-term birth low back pain, improved sleep, reduced stress and depressive symptoms and improved health understanding and self-reported body image (Harrison et al., 2018).

Both throughout pregnancy and after delivery, physical therapy is crucial in obstetrics. There are no risk factors for the infant linked with it. It may also have long-lasting positive benefits on women. Pregnant women should engage in physical activity because it helps them avoid pregnancy-related problems and maintains their physical condition. Birthing ball exercises were performed by pregnant women under supervision, and they demonstrated faster labors. Additionally, it has been demonstrated that multiparous women who engage in more physical activity throughout their late stages of pregnancy have a good impact on the length of the second stage of labor. Additionally, there is proof that women who engaged in prenatal exercise have lower rates of caesarean section, back pain, and incontinence (Shifna et al., 2017).

Exercises for the pelvic floor (Kegels), core stability, breathing exercises, aerobics, postural awareness, and back care are all part of prenatal fitness routines. Prenatal exercise routines that target the pelvic floor muscles, often known as "Kegel exercises," are quite popular. The prevention of urine incontinence both during pregnancy and after birth can be achieved by engaging in rigorous pelvic floor muscle exercise. Additionally, research has shown that strengthening the pelvic floor muscles can reduce the length of the first and second phases of labor. When a woman is pregnant for the first time, or a primigravida, prenatal pelvic floor muscle training may not raise her risk of episiotomy, instrumental delivery, or perineal laceration. Along with improving stress urine incontinence, pelvic floor muscle strengthening has a favorable relationship with this condition (Shifna et al., 2017). Exercise during pregnancy has been shown over time to relieve pain, strengthen muscles in preparation for labor, and

support for loose joints. It also improves circulation, flexibility, capacity (endurance), energy level, fights fatigue, reduces muscle tension and encourages relaxation. Exercise throughout pregnancy can avoid gestational diabetes. An analysis of 8 research revealed that early pregnancy activities had a 24% lower risk of gestational diabetes and that regular exercise before becoming pregnant had a 55% lower risk (Sabiri et al., 2018).

In the postpartum period, lumbo-pelvic pain can cause severe discomfort and mobility restrictions, contribute to persistent back pain, and be a major source of pain. Exercises designed to stabilize the pelvic girdle are beneficial for postpartum individuals with pelvic girdle pain (Nazar, 2021). Pregnancy-related postural alterations are generally brought on by weight increase, which is mostly distributed in the breasts and belly. Hormonal changes connected to pregnancy are typically the cause of laxity in ligamentous and connective tissue (Munawar et al., 2013). A gap of greater than 2 cm between rectus muscles at one or more evaluation places (4.5 cm above or below the umbilicus, or at the level of the umbilicus) has been referred to as diastasis rectus abdominis muscle (DRAM) in another research. DRAM happens anywhere from one day to eight weeks after birth. It occurs 60% of the time in postpartum mothers (Nazar, 2021). An estimated 80% of people may have low back pain at some time in their life, and it is a widespread condition around the world during pregnancy. According to a poll conducted in Sweden, 66% of women between the ages of 38 and 64 reported having low back pain (LBP), and the majority of the time, it was related to pregnancy. According to an Iranian study, 57.3% of women have low back pain during pregnancy (Munawar et al., 2013). According to different research, 90% of women experience postpartum issues, such as weak pelvic floor muscles (70%) and urine incontinence (40%), which are brought on by changes in the body during pregnancy, such as the Center of Mass Change, increased pressure on the organs, and increased body weight (Nazar, 2021).

Regular physical activity appears to reduce the incidence of gestational diabetes mellitus (GDM), gestational hypertension, and preeclampsia. There is also evidence that exercise can help avoid incontinence during pregnancy and after childbirth (Watson et al., 2015). Nazar said in 2021 exercise reduces strain on the linea alba and aids in the maintenance of abdominal muscular strength, tone, and control. According to the International Continence Society, uncontrolled urine leaking is referred to as Urinary Incontinence. The prevalence of urine incontinence was 72.1%, slightly higher among multiparous women (75.4%) and those who had vaginal birth (72.8%). Physical

therapists offer a variety of treatments in obstetric circumstances, including posture reeducation, pain relief for musculoskeletal conditions, and stress reduction instruction. Physical therapists can also assist expectant women by recommending activities to strengthen the muscles in the pelvic floor and to ease back discomfort (Munawar et al., 2013). Due to the lack of sufficient data and concern over potential hazards to the mother and baby, exercise during pregnancy has not always been strongly advised for pregnant women. Numerous studies have recently shown the importance of exercise on the mother and fetus during pregnancy (Sangrasi et al., 2016).

The awareness and understanding of the functions of physiotherapy among diverse people has been the subject of several research in various parts of the world. Studies on the awareness, views, and beliefs of Saudi Arabian physicians towards physiotherapy have also been conducted (Bolarinda & Joseph, 2021). The medical profession's perception of physiotherapy has undergone a significant shift. A medical doctor was the only person deemed qualified to care for any injured person. In order to provide patients with the finest options for rehabilitation and treatment, health professionals now collaborate with physiotherapists (Mahto et al., 2021). When a patient is being rehabbed, physical therapy is crucial. A physiotherapist's job is to use their knowledge and skills in the field to the assessment, planning, execution, and evaluation of physiotherapeutic interventions for the treatment of a variety of acute or chronic illnesses, disabilities, and impairments (Shimpi et al., 2014)

It entails giving people and populations services in order to maximize their mobility and functional capacity throughout their lifespan, serving as a crucial component of the delivery of health and community/welfare services. They work with multidisciplinary rehabilitation programs as well as independently of other healthcare and other providers. The field is dedicated to promoting health, a healthy way of living, and a high quality of life that includes a wide variety of physical and physiological therapeutic treatments and assistance (Abichandani & Radia, 2015). Medical physicians have a significant effect on other health professions, including physiotherapists, because they are at the top of the healthcare professional pyramid. As a result, patients continue to rely on their doctors for referrals to other healthcare experts, despite the fact that physiotherapy is now widely recognized as an autonomous profession (Mahto et al., 2021). In order to enhance or restore human motor capabilities, optimize movement potential, treat or avoid pain syndromes, and treat or prevent physical problems brought on by illnesses, accidents, and other impairments,

physiotherapists assess, design, and carry out rehabilitation programs. They use a wide variety of physical treatments and procedures, including movement, warmth, ultrasound, laser, and other methods. Over the years, the field of physiotherapy has developed from basic physical treatments to specialist physiotherapy services in medical settings. These specialties include, among others, neurology, pediatrics, orthopedics, cardiac care, geriatrics, women's health, and sports. Although physiotherapy plays a significant role in healthcare, the extent to which the general public is aware of it as a vital healthcare partner is still debatable. This is likely because the general public and other members of the healthcare team are unaware of the breadth of this profession. A common misconception about the profession is that it mostly focuses with massage and fitness (Bolarinde & Joseph, 2021).

Numerous reviews of the literature indicate that there is a lack of knowledge, particularly with regard to specialist physiotherapy services. These findings are supported by patients' judgments that doctors lack sufficient expertise and comprehension of their job. The effects of globalization on health care are profound, and demand for health care professionals is rising. The quality of health care has in fact significantly increased due to the development of new medical procedures and the constant inflow of research. Physical therapy, sometimes known as physiotherapy, is one of the expanding fields of medicine. There has been a significant shift in the medical community's attitude toward and practice of physiotherapy throughout time (Mishra & Vidhyadhari, 2019).

The ability to articulate potential courses of action that would produce the desired result is made feasible by knowledge, which is essential in creating suitable actions. Increasing public and other healthcare professionals' knowledge of physiotherapy's place in the delivery of medical treatment is the biggest problem facing physiotherapists. A profession's perception can be distorted by lack of knowledge, just as it can be made more appreciable and useful by more knowledge. As a result, effective use of physiotherapy may depend on having a solid understanding of its functions within the healthcare delivery system. Philosophers have long characterized knowledge as a justifiable true belief, using an idea from Plato's dialogue theaetetus. On the other side, attitudes are ingrained evaluative ideas related to how people feel, think, and act. The observable, evaluative reactions one makes are used to assess the quality of their attitude. This is why researchers rely on behavioral indicators of attitude, including what individuals say or how they respond to surveys, or on physiological indicators like

changes in heart rate. It is assumed that a person's perspective on any category will be correlated with how effectively that category satisfies that person's own ideals (Maruf et al., 2012).

It is uncommon to perform first-contact physical therapy in Nigeria. The majority of the patients that Nigerian physiotherapists see are referred by doctors who specialize in various fields of medicine. Many individuals require physiotherapy. The few individuals who are lucky enough to obtain the services, however, do not always receive the necessary direction to that end and are baffled by the "strange" methods used to treat them. According to the literature, medical professionals might not be fully aware of all the services offered by physiotherapy or how physiotherapy might benefit their patients. In addition, in a poll of 151 doctors in California, 83.4% of the doctors prescribed physical therapy instead of merely referring patients. Given these physiotherapy practice settings, which include patients as the intended audience, the issue of inadequate understanding and ignorant belief leading to inappropriate attitudes and biased utilization cannot be ruled out (Maruf et al., 2012). Gynecologists and Obstetricians will be able to prescribe and offer advice regarding the effectiveness of exercise and the physiological changes that take place during pregnancy with additional dangers and benefits for the mother and fetus thanks to their evidence-based practice (Sangrasi et al., 2016).

Utilization of individual professional talents depends on collaboration between members of the health team and how much they appreciate one another's knowledge when providing services to the patient, who is the team's primary emphasis. Therefore, there is a need for multidisciplinary collaboration amongst health care specialists, such as obstetricians, gynecologists, midwives, physiotherapists, medical laboratory scientists, and social workers (Odunaiya et al., 2013). To provide women greater healthcare alternatives, gynecologists in hospital settings must become more knowledgeable about physiotherapy. Because of this, there is a need for improved communication and interaction between gynecologists and physical therapists, which may be accomplished by holding seminars, clinical meetings, and workshops about the value of physiotherapy in the gynecological sector (Nazar, 2021).

1.2 Rationale:

Physiotherapy has different roles in gynecological and obstetric cases. Physiotherapy in some gynecological and obstetric cases in different countries of the world has given good results. Although there was not enough opportunity for physiotherapists to work in that sector in Bangladesh. Therefore, it was necessary to know the knowledge, attitude and perception of gynecologist in that regarded. As the functional role of physiotherapist was not common at sector in Bangladesh. The researcher thought that through, gynecologist understood, that may result in created a place in that sector. In addition, research on various gynecological and obstetrics cases has revealed that physiotherapy worked well in that case, but in the context of Bangladesh, there was not much not interest it, public opinion and doctors were a little behind in that regard, the researcher thought that can bring about a change in that case, and the results of the research can change the pictured. That sector was ready for worked only when it was known what gynecologists thought about it, or what their knowledge, attitudes and perceptions were based on, it was possible to reach the patients that sector.

Physiotherapy was needed after cesarean section, urinary incontinence can be treated with kegal exercise, low back pain, and even diastasis recti, scar healing, and other cases physiotherapy were effective, and patients benefited from it. In the context of Bangladesh, gynecological and obstetric cases were benefited patients greatly if the treatment regimen was combined with physiotherapy. Physiotherapy was very effective in obstetric cases and every pregnant woman taking physiotherapy were help in normal delivery. Although physiotherapy was practiced in gynecology and obstetrics cases in different countries of the world, it was not practiced at all in the context of Bangladesh, the gynecologist must be responsible in one way or another, because the researcher felt that if the gynecologist has the right knowledge, attitude and perception about physiotherapy in that case, and patients or make the opportunity then the patient were benefited. That was the researcher was doing the research on this topic.

1.3 Research question:

What is the level of knowledge, attitude and perception of gynecologists about physiotherapy for gynecological and obstetric cases?

1.4 Objectives of the study:

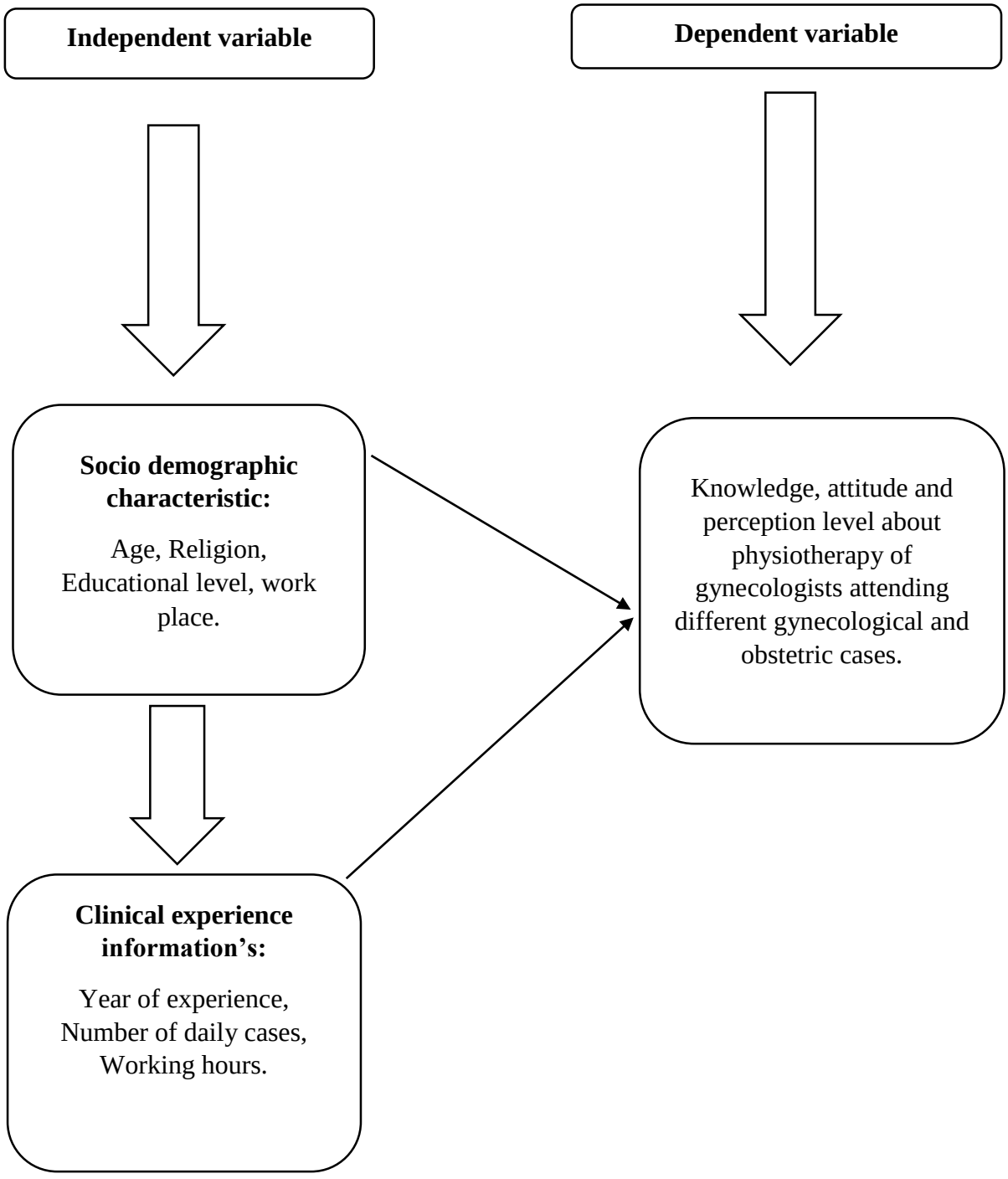
1.4.1 General objective:

- To assess the level of knowledge, attitude and perception of gynecologists about physiotherapy for gynecological and obstetric cases.

1.4.2 Specific objectives:

- To inquire about level of clinical experience of the gynecologists.
- To explore the relationship between experience of gynecologists and their level of knowledge, attitude and perception about physiotherapy for gynecological and obstetric cases.
- To find out the correlation between working hours of gynecologists and their level of knowledge, attitude and perception about physiotherapy for gynecological and obstetric cases.
- To determine the socio-demographic characteristic among gynecologists.

1.5 Conceptual framework:



1.6 Operational definition of different variables:

Knowledge: Knowledge can be defined as factual awareness or practical skills, and it can also refer to familiarity with objects or situations. Knowledge is a composite of various experiences, values, background data, and professional insights. A framework for evaluating and incorporating new experiences and information is provided by knowledge.

Attitude: In psychology, attitude is a psychological construct that describes a person's mental and emotional make-up, their approach to something, or their personal viewpoint on it. Their mentality, perspective, and emotions make up their attitude. An attitude is a psychological tendency that is demonstrated by how favorably or negatively one views something.

Perception: Perception is the organization, identification, and interpretation of sensory data in order to represent and comprehend the information or environment provided. All perception is based on impulses that go through the neurological system and are triggered by physical or chemical activation of the sensory system.

Gynecologist: A physician who specializes in the treatment of illnesses of the female reproductive organs and the provision of well-woman health care with a primary focus on the reproductive organs.

Physiotherapy: Physical therapy (PT), commonly referred to as physiotherapy, is a field of allied health. Physical therapists that specialize in this field work with patients to promote, maintain, or recover their health through physical examinations, diagnosis, treatment, prognosis, patient education, physical intervention, rehabilitation, illness prevention, and health promotion. Many nations refer to physical therapists as physiotherapists.

Gynecology and Obstetrics: A medical specialty that focuses on the care of women during pregnancy and delivery, as well as the diagnosis and treatment of illnesses of the female reproductive organs. It also focuses in other aspects of women's health, such as menopause, hormone difficulties, contraception (birth control), and infertility. Obstetrics and Gynecology are other terms for the same thing.

Gynecological Cases: Cervical Dysplasia, Menstrual Disorders, Pelvic Floor Prolapse, Pelvic Pain, Polycystic Ovarian Syndrome, Uterine Fibroids, Urinary Incontinence.

Obstetrics Cases: Abdominal pregnancy, abruption placentae, contracted pelvis, contraction ring, prolapse of the cord, eclampsia, failed forceps and placenta previa.

Low back pain during pregnancy: It is defined as pain that develops during pregnancy between the pubic symphysis and the 12th rib and may radiate to the calf, knee, and/or posterior lateral thigh, but not the foot. This discomfort can start at any time throughout pregnancy and is not brought on by a recognized disease like a herniated disc.

Normal delivery or Labor: Series of events that take place in the genital organs in an effort to expel the viable products of conception (fetus, placenta and the membranes) out of the womb through the vagina into the outer world is called labor.

Cesarean section: The surgical technique known as a caesarean section, commonly referred to as a C-section or caesarean delivery, involves delivering one or more infants through an incision made in the mother's belly. This is frequently done because a vaginal birth would put the mother or the baby at danger.

Scar: A scar is the body's natural mechanism of mending and replacing skin that has been removed or injured. Scars are often made of fibrous tissue. Scars can occur for a variety of causes, including infections, surgery, traumas, or tissue inflammation.

Pelvic girdle pain: Pelvic girdle pain associated with pregnancy, trauma, arthritis, and osteoarthritis. Pain is felt between the posterior iliac crest and the gluteal folds, particularly in the neighborhood of the sacroiliac joint. The discomfort may radiate to the posterior thigh and may occur in combination with/or apart from the symphysis.

Genital organ prolapse: Pelvic organ prolapse (POP) is a gynecological disorder in which the pelvic organs protrude into the vagina as a result of ligament or muscle weakening. POP is classified based on the compartment of descent. Cystocele is an anterior wall herniation, rectocele is a posterior vaginal wall descent, and vaginal vault prolapse is a sinking of the uterus, cervix, or vaginal apex.

Urinary incontinence: Incontinence is described as the involuntary flow of urine from the bladder. Incontinence can afflict both men and women of any age, although it is more frequent in women and the elderly.

Hysterectomy: Hysterectomy is the surgical removal of the uterus, either partially or completely. The cervix, ovaries (oophorectomy), Fallopian tubes (salpingectomy), and other adjacent tissues may also be removed. Hormone modulation is possible with partial hysterectomies but not with entire hysterectomies.

Diastasis recti: Diastasis recti (rectus diastasis) or divarication of the recti is an abnormal expansion of the space between the two medial sides of the rectus abdominis muscle (increased inter-recti distance) caused by stretching of the linea alba.

CHAPTER-II LITERATURE REVIEW

Utilization of individual professional talents is dependent on teamwork and how much each member of the health care team values the knowledge of the others when providing services to the patient, who is the team's primary concern. As a result, interdisciplinary collaboration is required between obstetricians, gynecologists, midwives, physiotherapists, medical laboratory scientists, and social workers (Odunaiya et al., 2013). Researcher said that, physiotherapy is a medical specialty that uses physical means to evaluate, diagnose, treat, and try to prevent disease and disability. In order to develop, preserve, and restore maximum movement and functional ability throughout the lifespan, it involves providing services to individuals and populations, and is a crucial component of the delivery of health and community/welfare services. They work with interdisciplinary rehabilitation programs as well as independently of other health care or service providers. Incorporating a wide range of physical and physiological therapeutic interventions and aids, the profession is dedicated to health, lifestyle, and quality of life (Abichandani & Radia, 2015).

An important aspect of a patient's rehabilitation is physiotherapy. The application of physiotherapy knowledge and abilities to the assessment, planning, delivery, and evaluation of physiotherapeutic therapies in the management of diverse situations of acute or chronic illness, disability, or handicap is the responsibility of a physiotherapist (Shimpi et al., 2014). As a profession, physiotherapy has developed throughout the years from basic physical treatments to specialized care in medical facilities. Neurology, pediatrics, orthopaedics, cardiac care, geriatrics, women's health, and sports are a few of these fields of speciality. Although physiotherapy plays a significant role in healthcare, the extent to which the general public is aware of it as a vital healthcare partner is still debatable. This is likely because the general public and other members of the healthcare team are unaware of the breadth of this profession. A common misconception about the profession is that it mostly focuses with massage and fitness (Bolarinde & Joseph, 2021). Health care is being significantly impacted by globalization, and demand for health care professionals is rising. The quality of healthcare services has in fact significantly increased as a result of the development of new medical procedures and the ongoing inflow of research. Physical therapy or physiotherapy is one of the expanding areas of health treatment. The medical

community's attitude toward and practice of physiotherapy has seen a significant shift throughout the years. In the modern day, physiotherapists have begun collaborating with other practitioners to offer their patients the finest options for rehabilitation and therapy (Mishra & Vidhyadhari, 2019).

In order to articulate potential courses of action that would provide the desired result, knowledge is essential in producing suitable actions. The biggest issue for physiotherapists is spreading knowledge about the value of physiotherapy among the general public and other healthcare professionals. Poor knowledge of a career might result in misunderstandings about it, just as strong knowledge can increase one's enjoyment and usage of that profession. Therefore, proper use of physiotherapy may be influenced by a clear understanding of its functions within the healthcare delivery system. The classic definition of knowledge in philosophy is justified genuine belief, which comes from Plato's dialogue Theaetetus (Maruf et al., 2012). As opposed to this, attitudes are ingrained judgments about how individuals think, feel, and act. The observable, evaluative answers one makes are a good indicator of the attitude that person has. For this reason, researchers rely on behavioral indicators of attitude, such what individuals say or how they answer to surveys, as well as on physiological indicators like changes in heart rate. According to this theory, a person's attitude toward any category will be correlated with how effectively that category satisfies their own ideals (Maruf et al., 2012).

Within the context of promotion, prevention, treatment, and rehabilitation, physiotherapy is concerned with discovering and maximizing movement potential. A wide range of diseases and conditions are treated with physiotherapy, including musculoskeletal problems (joint pain, stiffness, low back pain, etc.), neurological disorders (stroke, Parkinson’s disease, cerebral palsy, etc.), cardiac and pulmonary anomalies (chronic obstructive pulmonary disease, asthma, atrial septal defects, ventricular septal defect, myocardial infection), obstetrics and gynecological conditions (pregnancy & prolapsed intervertebral disc), sports injuries (anterior cruciate ligament injury, shoulder impingement syndrome, etc.), geriatric (Mishra & Vidhyadharia, 2019). Physiotherapists evaluate, develop, and carry out rehabilitation programs that enhance or restore human motor functions, maximize movement potential, treat or prevent pain syndromes, and address physical challenges brought on by illnesses, injuries, and other impairments (Bolarinde et al., 2021). Another researcher said that, the promotion of health throughout the child-bearing stage is the focus of the physical

therapy specialism known as obstetrics and gynecology physiotherapy. Obstetrics and gynecology-focused physiotherapists need to possess a mature combination of traits that will allow women to reveal some of their most personal and intimate facts. Integrating physical therapy services within obstetrics and gynecology is essential for providing the best possible health care. However, attitudes toward physical therapy and expertise of gynecologists are key factors in the use of these services. The physiotherapist plays a key role in obstetrics and Gynecological conditions such pregnancy, labor, puerperium, preoperative and postoperative phases (Tahir et al., 2017).

According to study said, in obstetrics and gynecology, the physiotherapist's duties encompass care during pregnancy, childbirth, and the antenatal and postnatal periods. Patients in obstetrics and gynecology who complain of low back pain, abdominal or pelvic floor muscle weakness resulting in stress urinary incontinence or mild prolapse, pelvic pain, the discomfort of pregnancy, or decreased mobility benefit from physical therapy services (Nazar, 2021). Odunaiya et al said in (2013) that participants ranged in age from 31 to 50 years. In another study showed that, gynecologists and obstetricians made up the study's 300-person total sample size. Out of them, 123 (41%) came from public hospitals and 177 (59%) from private facilities. Regarding experience, 144 (48%) had more than 5 years of experience, while 156 (52%) had 3 to 5 years or more. In the entire sample, 192 (64%) completed their Bachelor of Medicine and Bachelor of Surgery (MBBS), 57 (19%) completed their Fellowship of college of Physicians and Surgeon (FCPS), and 51 (17%) completed their Member of College of Physicians and Surgeons (MCPS) (Munawar et al., 2013).

Physical activity has significant benefits and minimal risks for women with uncomplicated pregnancies, and it is recommended in pregnancy guidelines. Physical activity during pregnancy has been shown to improve physical fitness, lower the risk of excessive weight gain, lower the risk of preeclampsia and pre-term birth, reduce low back pain, improve sleep, lower anxiety and depressive symptoms, and improve health perception and self-reported body image (Harrison et al., 2018). In the United States, family physicians and obstetrician-gynecologists work jointly to prevent unintended births among their patients by covering a sizable percentage of the contraceptive therapy. They met the criteria for dispensing the most potent methods of contraception to women, according to our evaluation (Harper et al., 2012). According to study said that, 91% of gynecologists/obstetricians believe exercise is beneficial during

pregnancy, but only 34% recommend it to their patients. 62% believe that sedentary women with uncomplicated pregnancies should be encouraged to exercise, 47% believe chronic conditions should continue exercise throughout pregnancy, 64% agreed on strength training participation, and 91% believe that the maternal and fetal risks of exercise during pregnancy are minimal. Additionally, it was determined that only (67%) of the FCPS, trainee FCPS, and other post-graduate obstetricians and gynecologists in both sub-specialty groups advised their patients to exercise during pregnancy (Sangrasi et al., 2016).

Lack of exercise during pregnancy and the postpartum period has been linked to a variety of issues, some of which may not be mutually exclusive. There are still some traditional misconceptions and beliefs that pregnancy-related activity is risky and overly sensitive. Women, on the other hand, are hesitant to exercise because they believe it would have a detrimental effect on their health. Determinants of women's physical activity include increased care obligations brought on by pregnancy and childbirth as well as societal views. Prevalence and patterns of physical activity among pregnant women from affluent nations have been described by prior researchers (Mbada et al., 2015). Both throughout pregnancy and after delivery, physical therapy is crucial in obstetrics. There are no risk factors for the infant linked with it. It may also have long-lasting positive benefits on women. Pregnant women should engage in physical activity because it helps them avoid pregnancy-related problems and maintains their physical condition. Birthing ball exercises were performed by pregnant women under supervision, and they demonstrated faster labors. Additionally, it has been demonstrated that multiparous women who engage in more physical activity throughout their late stages of pregnancy have a good impact on the length of the second stage of labor. Additionally, there is proof that women who engaged in prenatal exercise have lower rates of caesarean section, back pain, and incontinence (Shifna et al., 2017).

Physiotherapy is used in prenatal care, according the research. 70% of respondents recognized that physiotherapy is primarily concerned with exercises, and 73% of participants were aware of what physiotherapy was. Only 46% of the respondents knew what prenatal exercises were when antenatal exercise questions were posed. Further research revealed that 46% of them thought physiotherapists were the most qualified to recommend workouts. The following prenatal exercise categories were known to the respondents: aerobics (28%), back care exercises (20%), abdominal exercises (21%), pelvic floor exercises (13%), relaxation and breathing techniques

(21%), and so on. However, the vast majority (80%) of those who could be contacted either did not know about or were unsure of the effectiveness of the various prenatal exercise options (Nayak et al., 2016).

According to research, every woman needs physiotherapy during the pregnant period, according to 199 (66.3%) obstetricians (Munawar et al., 2013). Researcher said that, gestational diabetes mellitus (GDM) is one of the most common pregnancy complications, affecting 7% of all pregnancies in the United States (i.e., 200,000 cases per year), and this number is rising as the prevalence of obesity among women of reproductive age rises. GDM is associated with an increased risk of both short-term and long-term complications in both mothers and offspring. Women with GDM are more likely to have perinatal morbidity, impaired glucose tolerance, and type 2 diabetes in the years following pregnancy (Tobias et al., 2011). In the management of glycemic control, physical activity is advantageous as an adjunctive intervention. To lessen the negative effects of poorly controlled GDM, glycemic control management is essential. For this reason, pregnant women in good health, those with GDM, and those who are overweight or obese should engage in aerobic exercise at a moderate intensity for 30 minutes most days of the week (Harrison et al., 2018).

Treatment for postnatal dysfunctions with physiotherapy is underused. The benefits of post-natal exercise (PNE) are not well known to most women or even gynecologists. Lack of information causes referrals for postnatal physiotherapy to be made late or not at all. Due to the delay, the disease's symptoms are prolonged and exacerbated, and the likelihood that the dysfunctions linked to postnatal problems would resolve is decreased. Urinary and fecal incontinence, inflammatory bowel disease, Cohn's disease, pelvic congestion disease, dyspareunia, pre- and postnatal musculoskeletal dysfunctions, puerperal depression, neurological diseases, and a variety of surgical issues are among the consequences following pregnancy (Majeed et al., 2022). After pregnancy, pelvic muscle dysfunction is a prevalent disease in women. Exercises for the pelvic floor muscles (PFME) are advised for women to do both during pregnancy and after giving birth in order to prevent pelvic floor muscle disorders. Pelvic floor dysfunction is a crippling disorder caused by pelvic floor muscle damage or denervation. The puerperial period and pregnancy are two possible risk factors for pelvic floor diseases. It is thought that strengthening the pelvic floor muscles is important for both treating and preventing pelvic problems. Training the pelvic muscles helps avoid urine incontinence throughout pregnancy and after delivery. Supervised

training is a really efficient way to make sure that ladies exercise frequently. Only a few women exercise their pelvic floor every day. Exercises for the pelvic floor are substantially more frequently performed in the immediate postpartum period than they are afterwards. Even Nevertheless, pregnant ladies concurred that regular pelvic floor exercises are crucial. Few ladies really practiced it. Pregnancy and inactivity during the postpartum period are two factors that might contribute to diastasis recti (Majeed et al., 2022).

According to study, in the first six months of pregnancy, regular physical activity can help pregnant women avoid having a cesarean section. When pregnant women engage in physical activity of the right intensity, the second stage of labor is shortened, and delivery is quick and simple. Pregnancy and physical activity have additional benefits, including: As a result, one feels better about themselves, has better body image, experiences less anxiety and depression, and adjusts to pregnancy quickly and easily induced changes (Bahadoran & Mohamadirizi, 2015). There are numerous exercises for pregnant women that work to strengthen muscles and promote physical fitness. Aerobic exercise is an effective method because it raises the heart rate and increases oxygen and blood demand for muscles, causing them to breathe faster. Walking, dancing, calisthenics, and swimming are examples of aerobic exercises. Strength training is another method for increasing muscle mass. Lifting weights and performing pushing and pulling exercises are all part of this type of exercise. Kegel exercise are also an essential component of a prenatal exercise regimen (Sarfraz et al., 2013). Researcher said that, concerning the advantages of physiotherapy, 258 (86%) agreed that physiotherapy activities are beneficial for strengthening pelvic floor muscles (Munawar et al., 2013).

Researcher studied that 69% of respondents do not frequently place limitations on exercise, and 15% think that low-intensity exercise is sufficient to have a positive impact on health (Watson et al., 2015). 85.8% participants were agree that it is important to perform exercise under the guidance of health care professionals and 14.2% participants were disagree about this (Ashraf & Ahmad, 2019). Another author state that, the importance of physiotherapy in the postpartum period, also known as the postnatal period or postpartum, cannot be understated. The body even starts to get back to normal, but there is still some muscular and ligamentous laxity that puts women at risk for organ prolapse, urinary incontinence, and diastasis recti. After the birth of the child, at least six weeks, a gynecological physiotherapist should examine and evaluate

the patient. Patient should start an exercise program that is tailored for neuromuscular, ergonomic, and rehabilitative care according to clients' needs after identifying the true concerns. Exercises to strengthen the pelvic floor and pain management during postpartum continue to be the most beneficial interventions (Jabbar et al., 2021). The most prevalent musculoskeletal complaint among pregnant women is back discomfort. It is estimated that 50% to 70% of pregnant women are affected by this issue. Pregnancy-related lumbo-pelvic discomfort is a chronic ache that affects many parts of a woman's life, including work, housework, leisure activities, and even sleeping. This pain can lead to persistent back pain, and it can cause significant misery and incapacity at various stages after pregnancy (Mirmolaei et al., 2018).

A common issue in the postpartum period is postnatal low back pain (LBP), which can range in severity from a mild annoyance to a severely incapacitating condition. Pelvic pain is another common problem. It has been determined that in the first year after delivery, the prevalence of postnatal LBP can range from 21% to 82% (Bennett, 2014). Despite serious consequences, many pregnant women do not seek treatment or report their LBPP to antenatal providers. Physical therapy is a form of treatment that entails activities carried out by physical therapists in order to "develop, maintain and restore maximum movement and functional ability," rather than just to lessen pain. For women worried about the health of their unborn children, it is a significant non-pharmacological treatment option. The use of a pelvic belt, the use of a pillow, acupuncture, ergonomic training, massage, and relaxation techniques are just a few examples of possible interventions (Richards et al., 2012). Another study sated that most gynecologists 285 (95%) agreed that physiotherapy is effective for back pain during and after pregnancy (Munawar et al., 2013).

In similar study, menopause is the term used to describe the end of a woman's regular monthly period and the end of her ability to become pregnant. The ovarian function decline is accompanied by a transitional phase that is characterized by physiological, psychosocial, and sociological changes. Although the menopause is a natural part of aging, the hormonal changes that take place at this time in a woman's life change her health risk profile. It is typically regarded as a risk factor for an increase in the morbidity of estrogen deficiency, which results in musculoskeletal impairments. Up to 10-15% of women may be considered disabled by the time they reach 45 years old and enter menopause (Anadkat & Tanna, 2016). Numerous harmful health outcomes, such as cardiovascular disease and mortality, are linked to a sedentary

lifestyle. Physical inactivity has been shown to make a number of health issues, including but not limited to those associated with menopause, worse in postmenopausal women. One of the most well-known non-pharmacological interventions is physical activity, and postmenopausal women as well as older adults have reported that it has positive effects on their physical and mental health (Fraile et al., 2020).

Researcher noticed that, manual therapy, functional training (coordination, strength, muscle resistance, flexibility, and relaxation), mechanical, physical, or electrotherapy agents are all forms of physiotherapy that can be used to achieve predetermined goals. In order to increase the number of motor units, increase muscle excitation frequency, and increase muscle mass, pelvic rehabilitation must first improve the tone and strength of the muscle fibers. At this point in their lives, physiotherapy can benefit women by reducing the symptoms and enhancing quality of life. Due to the variety of tools and scales used to measure and assess pelvic floor strength, it is challenging to compare the findings of different studies and to conclusively state which training program is more effective (Rochera et al., 2017). Researcher said that, urinary incontinence (UI) is defined as "involuntary leakage of urine that is objectively a demonstrable, social, and hygienic problem" by the International Continence Society. Urinary incontinence can be classified into three types: stress, urge, and mixed (Ghaderi et al., 2014).

Adults in the community who have urinary incontinence frequently struggle with this issue. Urinary incontinence affects women more frequently, and for many, it first manifests during pregnancy or the postpartum period. The two most prevalent types of urinary incontinence in women are stress and urge. Stress urinary incontinence is characterized by having the symptom of involuntary leakage with physical exertion, and urge urinary incontinence is characterized by having the symptom of involuntary leakage associated with, or immediately following, a sudden compelling need to void (Smith et al., 2010). Involuntary leakage of urine, often known as urinary incontinence (UI), is an expensive issue that negatively affects function and quality of life globally. Older women are more likely than younger women to experience bladder control issues such as UI, urine urgency, urinary frequency, and nocturia. Incontinence may affect up to 75% of women over the age of 75, with middle-aged and postmenopausal women aged 40 to 65 being afflicted at a rate of 44% to 57% (Neville et al., 2017). Author state that, physical therapy is crucial in the prevention and treatment of stress urine incontinence; it aids in the stimulation and strengthening of the pelvic floor muscles, as

well as bladder training, Kegel exercises, and biofeedback, all of which are thought to be beneficial by several studies (Ayman et al., 2017). Researcher indicated that in order to deal with urine incontinence during the prenatal period, 243 (81%) gynecologists agreed that physical therapy is beneficial (Munawar et al., 2013). The most common type of recurrent pelvic pain is called dysmenorrhea, which is a medical name for discomfort associated with menstruation. The words "dyes" (difficult, unpleasant, abnormal), "meno" (month), and "rrhea" are derived from Greek (flow). Dysmenorrhea has a negative impact on women's mental health as well as adolescent girls' quality of life, which ultimately results in lost work time and financial loss, especially for working women. It also has a negative impact on academic performance, school, and sports activities for school-going girls. Over 50% of adolescents and between 30% and 50% of menstrual women experience primary dysmenorrhea, which is quite common (Desai, 2022).

Dysmenorrhea is divided into two categories based on its pathophysiology Primary dysmenorrhea (PD), which is menstrual pain linked to typical ovulatory cycles, absent of pelvic pathology, and with a definite physiological cause. Adolescents and young adults are most likely to experience it. Secondary dysmenorrhea, which is menstrual pain linked to a diagnosable illness (endometriosis, fibroids, adenomyosis, pelvic adhesions, endometrial polyps, pelvic inflammatory disease) or the use of an intrauterine contraceptive device (Liria et al., 2021). Primary dysmenorrhea is described as lower abdominal cramping that happens just before or during a period but has no apparent pelvic disease. Nausea, vomiting, exhaustion, back pain, headaches, disorientation, and diarrhea are some of the secondary accompanying symptoms (Kannan & Claydon, 2014).Various studies on complementary and alternative treatments for dysmenorrhea are currently being conducted due to the high costs, complications, and contraindications of some drug therapies, as well as the accessibility and public desire for using complementary treatments. Regular exercise and physical activities have been introduced as effective methods for preventing and treating dysmenorrhea in the last 20-30 years (Elbandrawy & Elhakk, 2021).

Researcher noticed that, a different treatment option is physiotherapy, which involves engaging in physical activity to improve the functioning of the pelvic and extra pelvic organs by modifying metabolism, hydroelectric balance, hemodynamic conditions, and blood flow. This practice encourages a phenomenon known as analgesia by physical exercise (Rani et al., 2019). Pelvic organ prolapse (POP) is the descent of

the apex of the vagina, cervix, anterior vaginal wall (previously known as "cystocele"), or posterior vaginal wall (previously known as "rectocele"), or the vaginal vault after hysterectomy. Organs may emerge from the vaginal canal as the prolapse condition worsens. 94% of women have prolapse in some form, making this condition common (France et al., 2007). Investigator said that 98.5% of gynecologists were aware of the function of physical therapy in uterine prolapse (Tahir et al., 2017). Lifestyle counseling, isolated pelvic-floor muscle (PFM) training, biofeedback, and electrical stimulation are physical therapy interventions for POP. As stand-alone treatments for POP and urinary incontinence, these interventions are rarely associated with negative side effects and effectively improve symptoms, as well as quality of life and surgical outcomes (UI). It's crucial to remember, though, that many of these interventions only focus on PFM function (Kurz & France, 2017).

Individualized pelvic floor muscle training is provided to women with prolapse by many physiotherapists with expertise in women's health. Strength, endurance, and coordination of the pelvic floor muscles are improved through muscle training, which also aims to increase the pelvic organs' structural support (Hagen et al., 2014). Another survey founded that 261 (87%) of gynecologists agreed on the role of physiotherapy in pelvic pain (Munawar et al., 2013). According to several investigation, pregnancy-related postural changes are a very common problem for women and ultimately lead to low back pain. As we all know, posture refers to how one holds their body while standing, sitting, or lying down. Training the body to stand, walk, sit, and lie in positions that put the least amount of strain on the back is necessary for good posture during pregnancy. The center of gravity shifts forward and upward as the fetus grows, putting additional strain on postural muscles. The spine also shifts to maintain stability, putting a tremendous amount of strain on the lower back (Sarkar et al., 2022). During this time, performing antigravity actions like standing up and sitting puts an increasing amount of strain on the lower limbs. In order to improve postural control during pregnancy and encourage muscle activity that supports self-weight while being aware of wobble caused by the weight shift in the front, back, left, and right directions, anti-gravitational exercise is crucial. Additionally, these exercises should be done daily to allow for weight changes and center of gravity shifts that occur during pregnancy so that women can more easily perceive this time (Takeda et al., 2019).

Exercises and postural instruction are therefore essential for pregnant women to prevent fitness-related issues and manage pain brought on by postural imbalance during

pregnancy and after delivery. It is well known that exercising and taking various precautions regarding posture would seem to be important in addressing fitness-related health issues of pregnancy and postpartum period to reduce the long-term morbidity of women (Sarkar et al., 2022).

According to the survey, 138 (39.5%) and 193 (55.3%) of the participants had sufficient knowledge, a positive outlook, and good practice. Only 41 (37.9%) of the pregnant women who did prenatal exercise reported a satisfactory practice, out of the total 108 respondents (30.9). The most popular ante-natal exercise (ANEx) were brisk walking (90.7%), relaxation (38.9%), and breathing exercises (36.1%), whereas pelvic floor yoga poses 3 (2.8%) and 6 (5.6%) were the least popular. Vaginal bleeding (64.5%) and improving post-natal recovery (71%) were viewed as advantages and contraindications of ANEx, respectively (Janakiraman et al., 2021). Another study showed that, 259 (86.3%) gynecologists concurred on the subject of physiotherapy's significance in postural awareness (Munawar et al., 2013). women with pelvic floor muscle dysfunction (PFMD), urinary incontinence (UI), or pelvic organ prolapse are effective candidates for pelvic floor muscle exercise (PFME), which is regarded as the first-line conservative treatment. It is advised for treating UI in the general population and could shield women from developing the condition both during pregnancy and after giving birth. Women who practice PFME have a higher chance than those who do not of curing or improving their PFMD (Muhammad et al., 2018).

Pelvic floor physical therapy (PFPT) is thought to be a crucial component of treating pelvic floor hypertonicity (PFH) and consists of techniques to improve the function of the pelvic floor (PF), lumbopelvic, and spinal muscles as well as sexual, urinatory, and defecatory functions. PFPT aims to improve muscle relaxation, PF elasticity, and pain management while also enhancing awareness and proprioception. Education regarding PF and its symptoms, behavioral changes, and exercises combining soft-tissue manipulation and myofascial release with PF awareness and relaxation are all examples of interventions (Baggen et al., 2021). If a normal birth is not feasible, a section caesarean is a procedure for preserving the mother and the fetus. There are several complaints associated with section caesarean including discomfort at the incision site, infection, hemorrhage, uterine rupture, allergy, and disruption of breast milk supply. Following a section caesarean, the mother may have pain in the location of the incision as a side effect, which may interfere with her normal daily activities. The

prevalence of cesarean sections is rising by 22.28% year, according to a Surabaya state hospital (Yuliadarwati, 2017).

Researcher noticed that, women who have had a caesarean section (C-section) experience a different set of circumstances because of the abdominal wall cut and the subsequent wound. Their situation necessitates waiting until a later time to perform abdominal exercises. One of the most frequently performed surgeries on the abdominal cavity is the C-section. The current rate of C-section deliveries is thought to be around 40%. The abdominal muscles' tonic activity and stabilizing capacity are decreased after a C-section, which weakens and reduces their activity. Due to the fact that these muscles require more time to recover after this type of delivery, it is advised to delay beginning abdominal muscle exercises. There are currently few studies on the recommended exercises and physical activity for women following C-sections (this applies to both women after an uncomplicated C-section and women who suffer complications, such as diastasis recti or lower back pain) (Kuciel et al., 2020). As part of postpartum care, physical therapy is crucial. Early postoperative physical therapy helps patients walk more easily and get their bowels back to normal while also effectively reducing pain from their incisions. By the second postoperative day, it has been demonstrated that mobility exercises, breathing techniques, and postural care can lessen pain immediately related to the incision and difficulty performing functional activities (Weerasinghe et al., 2022).

According to the study, gynecologists were aware of physical therapy's importance for postpartum care (98.5%), antenatal care (82.1%), and parturition (56.7%) (Tahir et al., 2017). However, some studies also suggest that people with weak abdominal muscles or chronic back pain can benefit from core stabilization exercises. Proper load distribution throughout the spine, pelvis, and kinetic chain depends on core stability. Squats, pushups, sit-ups, and crunches are among the popular core exercises. Poor posture exacerbates postpartum low back pain; good posture improves the condition and relieves the pain. In the balanced position, the emphasis is primarily on maintaining a straight back, an elevated head, relaxed shoulders, and a tight stomach. Exercises that improve posture build muscle. The cervical retraction, breastbone lift, shoulder blade squeeze, and abdominal pull-in are a few examples of these exercises (Chaudry et al., 2013). According to researchers, the term "rectus abdominis muscle diastasis" (DRAM) refers to a separation of the two bands of these muscles that is wider than 2 cm. Extension and thinning of the abdominal wall are the primary mechanisms

of DRAM. Abdominal obesity, pregnancy, rapid weight loss, smoker's cough, diseases affecting collagen synthesis, soft tissue deterioration, improper exercise form, i.e. dysfunctional abdominal cramp, are risk factors for DRAM. DRAM is primarily seen in adult women, though it can also affect men and kids. In the third trimester of pregnancy and within the first week of delivery, a DRAM diagnosis is made in about 66% of women (Bobowik & Dabek, 2018).

Researcher noticed that, the treatment can be determined by the size of the enlarged inter-recti distance: a small diastasis can heal naturally, but a bigger one, which was not treated, can persist for a longer period of time and therefore can cause some other problems, such as decreased quality of life, poor posture, low back pain, and incontinence. The research recommends two optional therapeutic strategies to stop these consequences. The first one involves performing abdominal crunches while supine, which engages the rectus abdominis muscles. The internal oblique and transverse abdominal muscles are primarily engaged in the second exercise, the drawing-in exercise. This drawing-in exercise is more efficient and less demanding than the abdominal crunch, according to several researchers (Gitta et al., 2016). According to anecdotal evidence, regular activity before getting pregnant and during the prenatal stage appears to lower the likelihood of developing DRAM and decrease the size of DRAM, respectively. Postnatal women with DRAM are routinely offered abdominal workouts. Other common non-surgical treatments for women with DRAM include aerobic exercise, posture and back care instruction, and external support (Acharry & Kutty, 2015). The second most frequent surgical procedure performed on the female genital tract is a hysterectomy. Between 20% and 30% of women are likely to have this procedure performed at some point in their lives, making it the most common gynecological surgery in developed countries. Between January 2018 and March 2019, 127,624 hysterectomies were carried out in Brazil, 3,854 of which took place in Santa Catarina (Martins et al., 2020).

Constipation and urinary incontinence are complications after a total hysterectomy that can be treated with pelvic floor muscle training, abdominal contraction exercises, hip joint flexor and trunk active exercises, breathing exercises, colon massage, and education. Other complications include decreased muscle strength, joint range of motion, and functional ability, decreased muscle strength, and pain in the lower abdomen where the former surgical incision was (Puspitosari et al., 2021). Given this, physiotherapy is crucial to this process, using techniques like early walking,

minimizing postoperative (PO) pain and discomfort, preventing the development of adhesions in the incisional region, vascular complications, antalgic posture, pelvic floor muscle dysfunctions, abdominal weakness, as well as intensive respiratory therapy through the use of respiratory physiotherapy techniques and exercises, preventing atelectasis (Martins et al., 2020).

Widespread records show a rise in the percentage of women having hysterectomies before the age of 35. Healthcare issues related to post-hysterectomy conditions like obesity, urinary incontinence, and reduced quality of life become more important with an increase in life expectancy and longevity (Subramanian, 2017). In order to prevent and treat incontinence, the pelvic floor muscles can get stronger by repetitive pelvic floor muscle training and a progressive increase in repetition. According to earlier study, this is true. Exercises involving active motion, massage, and breathing techniques can also lessen discomfort, incontinence, anxiety, and increase activity capacity. It is advised to repeat exercises and massage strokes to prepare for the at-home program by practicing holding back urinating. Defecation retention or postponement is not permitted for patients. Additionally, it is advised to increase water intake and eat more fruit and vegetables (Puspitosari et al., 2021).

An operation to remove the uterus completely is known as a total hysterectomy. Complications might result from the healing process following a medical operation and the consequences of bed rest. Offering physiotherapy interventions is therefore important. Training the pelvic floor muscles, contracting the abdominal muscles statically, engaging the hip joint flexors and trunk actively, breathing exercises, colon massage, and education can all help to alleviate complications that may have resulted from the complete hysterectomy procedure in this situation (Puspitosari et al., 2021). Additionally, according to the research, 70.1% of gynecologists were aware of the significance physical therapy plays in hysterectomy (Tahir et al., 2017). Author said that, the implantation of the gestational sac (GS) within the uterine scar from a previous cesarean section is known as cesarean scar pregnancy (CSP), which is a rare type of ectopic pregnancy. Myometrium and scar tissue's fibrous tissue surround and separate GS from the endometrial cavity. Although the true incidence of CSP is unknown due to its rarity, it is estimated to affect between 1 in 1800 and 1 in 2 000 pregnancies (Kim et al., 2018). Scarring is an unfavorable but typical side effect of wound healing. While keloid scars extend further beyond the wound's margins and remain elevated, hypertrophic scars typically stay within the border of the original wound and may

spontaneously regress over time. After a deep wound that penetrates the dermis and enters the subdermal tissue, scars are particularly likely to develop (Meaume et al., 2014). In similar study, for the prevention and treatment of scars, dermatologists now have a wide range of treatment options. These include both non-invasive therapies like silicone sheets or gels, tape, compression therapy, and physiotherapy as well as invasive therapies like cryotherapy, radiotherapy, laser therapy, and intralesional corticosteroid injections. These procedures can be used independently or in conjunction with other therapies. Since scars are frequently easier to prevent than to treat, early consultation with a dermatologist may frequently be more beneficial. A multidisciplinary team of 24 experts, including dermatologists, plastic and reconstructive surgeons, general surgeons, specialists in physical medicine, rehabilitation, and burns, as well as psychosocial and behavioral researchers, recently developed a set of practical guidelines for the prevention and treatment of hypertrophic scars and keloids in order to help doctors involved in scar management, such as dermatologists, choose the most appropriate course of action for their patients. After a previous set of scar management guidelines was published in 2002, these guidelines were created using the most recent clinical data on scar management strategies that have been reported (Meaume et al., 2014).

Despite the acceptance and advancement of physiotherapy on a global scale, medical doctors are not familiar with it. Some medical professionals might not be sufficiently knowledgeable about all physiotherapy services. The average medical intern knew 26% of the modalities used in physiotherapy. Responses to knowledge of the function of physiotherapy practice were conflicting (Mahto et al., 2021). According to the study, 80% of gynecologists strongly agreed that physiotherapists should be involved in treating pregnant patients with obstetric palsy, which was one of the 28 obstetric and gynecologic diseases included. The major management strategy for this illness, according to a prior report, is physiotherapy, which is supported by this data.8 Although it has already been noted that managing episiotomy requires more physical therapy than is currently believed, it is noteworthy that 43.4% and 41.8% of the participants, respectively, did not agree on the role of physiotherapy in the management of perineal tears and episiotomy care (Odunaiya et al., 2013).

The medical community's attitude toward and practice of physiotherapy has undergone significant development over the years. In the modern day, physiotherapists have begun collaborating with other practitioners to offer their patients the finest

options for healing and therapy. A physiotherapist can assist a patient in recovering in a better and quicker manner while a doctor can diagnose an ailment, treat symptoms with medication, carry out operations, and recommend the best course of action for a condition or injury (Mishra & Vidhyadhari, 2019). According to the researchers, 80.6% of gynecologists strongly agreed that physiotherapy would not be excessively expensive for patients. 50.7% and 6.0%, strongly agreed and agreed that physiotherapy is time-consuming (Odunaiy et al., 2013). Although gynecologists and obstetricians believe that exercise is generally beneficial during pregnancy, only a small percentage of them actually prescribe exercise to their patients. This is due to a lack of knowledge about the most recent recommendations and preconceived notions about potential complications as a result of exercise-induced increases in heart rate. Low birth weight babies, ignorance of the exercise, and lack of expertise to oversee an exercise are additional risks. The majority of women on the whole are open to attending the workshops to get updated information on the value of exercise during pregnancy (Sangrasi et al., 2016).

The researchers discovered that 94.0% and 1.5% of gynecologists highly agreed and agreed that physiotherapy service did not harm patients (Odunaiy et al., 2013). The low score for knowledge of the role of physiotherapy in pelvic inflammatory disease indicates that, while obstetricians and gynecologists had general knowledge of the role of physiotherapy service, they had limited knowledge with regard to specific conditions. 92.5% of participants strongly agreed that physiotherapy services cannot be replaced by medications and instructions and that physiotherapists are qualified to manage obstetric and gynecologic diseases. The majority of participants also strongly agreed that physiotherapy would not harm patients (Odunaiya et al., 2013). According to the researcher, 59 (19.6%) respondents do not believe that physical therapy is necessary, whereas 241 (80.3%) gynecologists and obstetricians view it as a necessary component of their rehabilitation team. 271 (90.3%) gynecologists agreed with the function of physiotherapist in gynecological problems and that 259 (86.3%) gynecologists were knowledgeable about the care of obstetric patients by physiotherapy (Munawar et al., 2013).

Another study showed that 11(14.7%) gynecologists do refer patients, 14(18.7%) do not refer at all, 28(37.3%) refer when required, and 22(29.3%) refer clients very rarely to the physiotherapy department (Nazar, 2021). The broad knowledge of physiotherapy services in obstetrics and gynecology is shared by

obstetricians and gynecologists in south-western Nigeria. Furthermore, they exhibit a favorable attitude regarding the use of physiotherapists in the treatment of patients with obstetrical and gynecologic diseases. However, they only have a limited understanding of the advantages of physiotherapy in particular diseases (Odunaiya et al., 2013).

CHAPTER-III METHODOLOGY

3.1 Study design:

It was a cross sectional type of descriptive study.

3.2 Study place:

The samples were collected from, Shaheed Suhrawardy Medical College and Hospital, Sher- E- Bangla Nagar, Dhaka- 1207, Bangabandhu Sheikh Mujib Medical University, Shahabag, Dhaka- 1000, OGSB Maternity Hospital, Mirpur-13, Dhaka, Delta Health care Mirpur Limited, Mirpur 11, Dhaka- 1216, Jatrabari General Hospital and diagnostic center, South Jatrabari, Dhaka 1204, Enam Medical College and Hospital, 9/3 Parboti Nagar, Thana Road, Savar Union 1340, Savar in Dhaka deviation. Shaheed Tajuddin Ahmed Medical College Hospital, Gazipur- 1712, Doctors Hospital, Baligaon Tongibari, Munshiganj.

3.3 Study area: The samples were collected from different renowned hospitals in Mirpur area of Dhaka city, Gazipur and Munshiganj sadar upazila.

3.4 Study period:

The duration of the study was 12 months from 1st July 2022 to 30th June 2023.

3.5 Study population:

Gynecologists who were practicing in different areas of Bangladesh.

3.6 Sample size:

We know that,

$n = \frac{z^2 pq}{d^2}$

Here,

n = required sample size

z = confidence level at 95% (standard value of 1.96)

p = P is the expected rate of prevalence, here researcher taken the prevalence rate of 0.86 from the previous published literature by (Nazar, 2021).

d = margin of error at 5% (0.05).

$n = \frac{z^2 pq}{d^2}$

$n = \frac{z^2(1-p)p}{d^2}$

$= \frac{(1.96)^2 \times (1-0.86) \times 0.86}{(0.05)^2}$

= 185

So, sample size 185

Researcher has collected 133 due to time limitation and unavailability of the participants.

3.7 Sample technique:

The participants for the study were collected by using convenience sampling. In this method the samples are chosen based on investigators feasibility and also according to the inclusion and exclusion criteria set by the researcher.

3.8 Eligibility criteria:

3.8.1 Inclusion criteria:

- Gynecologists who worked in the field for at least two years.
- Consultant gynecologists, post-graduate residents (PGR) or women medical officers (WMO) specialized in gynecology, senior registrars or assistant professors (AP) were included in the study.
- Subjects who were willingly participated.

(Nazar, 2021)

3.8.2 Exclusion criteria:

- Retired gynecologists.
- Others physicians.
- Who were not interested.
- Gynecologist's age above 60 years was excluded.

3.9 Procedure of data collection:

The data was collected through face to face interview. Data were collected after receiving permission from the ethical review board. A participant required around 15-20 minutes to gather responses to questions. The researcher also explained to all participants the goal of the study. Participants were guaranteed that their private information would never be disclosed. The questions were formulated in English. Both open and close ended questions were included in this questionnaire. The questionnaire consists of four parts: socio-demographic information, knowledge related information, attitude related information, and perception related information.

3.9.1 Tools of data collection:

A self-structured questionnaire was used to collect the data from the participants.

3.9.2 Data analysis:

Data were analyzed by using statistical package for the social science (SPSS) program (25 version), and used both descriptive (mean, standard deviation, frequency, percentage) and inferential statistics (eg: spearman correlation co-efficient test).

3.10 Ethical consideration:

- Bangladesh Medical Research Council (BMRC) and World Health Organization (WHO) guideline also were followed to conduct the study.
- The Research proposal was submitted to the ethical committee that ethical review board of Saic College of Medical Science and Technology (SCMST) approval was obtained from the Board.
- Written informed consent was taken at the time of enrolling the respondents.
- All respondents were informed that they are free to leave or to refuge to take part in this study at any time.
- The personal information of the respondents was kept totally confidential.

CHAPTER- IV: RESULTS

The study aimed to assess the level of knowledge, attitude and perception of gynecologists about physiotherapy for the gynecological and obstetric cases. Structured questions were used with close and open-ended questions in the questionnaire. The data were analyzed with the Microsoft office Excel 2019 with SPSS 25 version software program. In this study, researcher used tabular form and graph or pie chart to outline the results of this study. Because it is easier to make sense of data set.

Part A: Socio-Demographic Characteristic:

4.1 Age of the participants:

This study's participants mean and standard deviation of participants age, where mean ±SD= 38.22±5.820; about 50.4% (n=67) participants age below 38 years; 49.6% (n=66) participants age 38 and above years.

Table-1: Age of the participants:

Age	Frequency (n)	Percentage (%)	Mean ± SD
Below 38 years	67	50.4%	38.22 ± 5.820
38 and above years	66	49.6%	
Total	133	100%	

4.2 Religion of the participants:

The graph showed that, out of 133 participants, 93.2% (n=124) religion Islam; 6.8% (n=9) was Hindu.

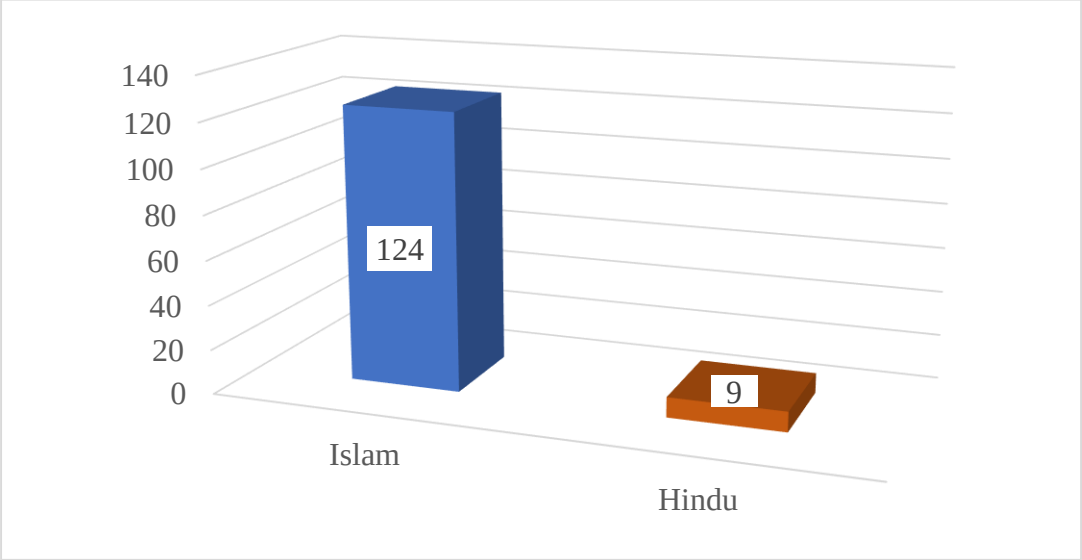


Figure-1: Religion of the participants.

4.3 Educational level of the participants:

In this study showed that 17.3% (n=23) was MCPS degree holder; 60.9% (n=81) was FCPS degree holder; 21.8% (n=29) was PGD.

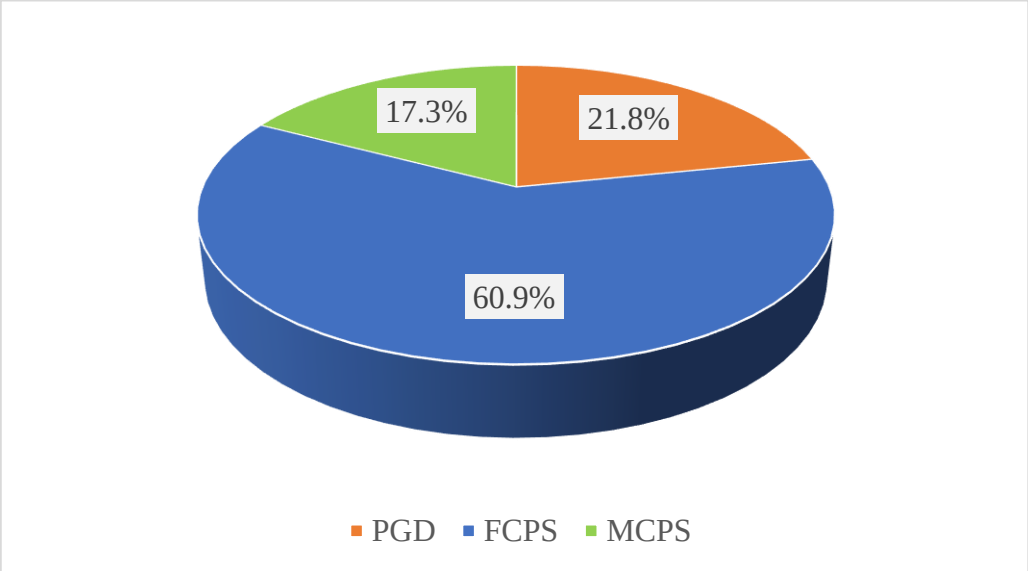


Figure-2: Educational level of the participants.

4.4 Working hospital of the participants:

In this pie chart showed that, out of 133 participants 39.8% (n=53) were worked in Government hospital; 49.6% (n=66) were worked in private hospital; 10.5% (n=14) were worked in maternity clinic.

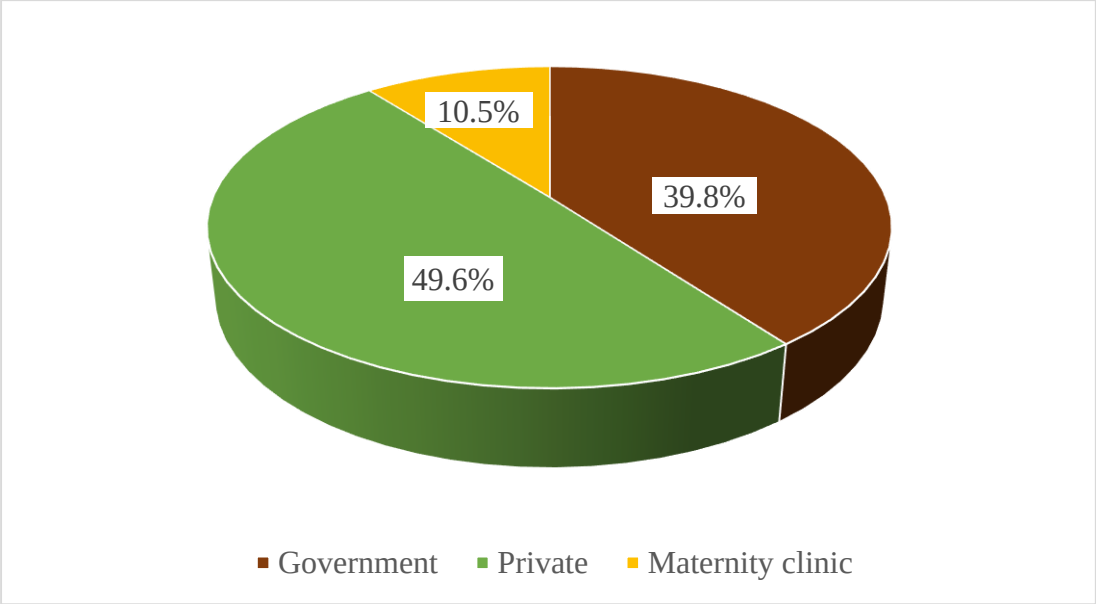


Figure-3: Working hospital of the participants.

4.5 Experience of the participants:

This study's participants mean and standard deviation of experience of participants, where mean ±SD= 9.12±3.846; their experience years was 3-8 years; 43.6% (n=58); 46.6% (n=62) participants experience 9-14 years; 9.8% (n=13) participants experience 15-20 years.

Table-2: Experience of the participants:

Experience	Frequency (n)	Percentage (%)	Mean ± SD
3-8 years	58	43.6%	9.12 ± 3.846
9-14 years	62	46.6%	
15-20 years	13	9.8%	
Total	133	100%	

4.6 Number of daily cases:

Their mean and standard deviation of participants number of daily cases, where mean ±SD= 17.50±5.432; their number of daily cases was 6-14; 21.8% (n=29); 65.4% (n=87) participants number of daily cases was 15-22; 12.8% (n=17) number of daily cases was 23-30.

Table-3: Number of daily cases:

Daily cases	Frequency (n)	Percentage (%)	Mean ± SD
6-14	29	21.8%	17.50 ± 5.432
15-22	87	65.4%	
23-30	17	12.8%	
Total	133	100%	

4.7 Working hours of the participants:

This table showed that, their working hours was 5-8; 73.7% (n=98); and 26.3% (n=35) participants working hours was 9-12. Their mean and standard deviation of working hours where mean ±SD= 7.84±1.787.

Table-4: working hours of the participants:

Work duration	Frequency (n)	Percentage (%)	Mean ± SD
5-8 hours	98	73.7%	7.84 ± 1.787
9-12 hours	35	26.3%	
Total	133	100%	

Part B: knowledge related information:

4.8: Gynecological and obstetric patients benefit from physiotherapy:

This study showed that, 91.0% (n=121) gynecologists believed that physiotherapy was beneficial for gynecological and obstetric patients and 9.0% (n=12) gynecologist was confused about that.

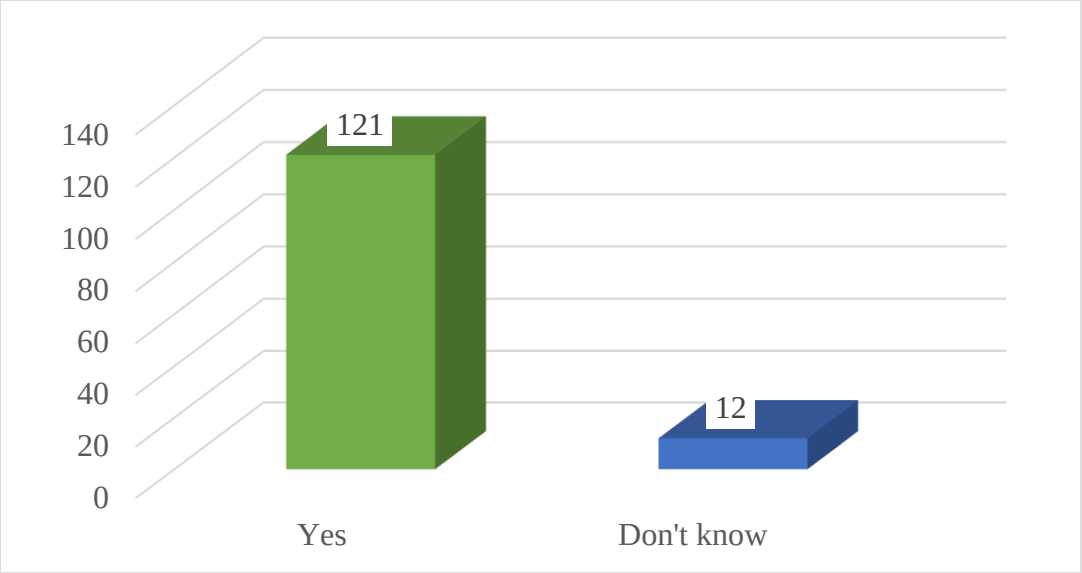


Figure-4: Gynecological and obstetric patients benefit from physiotherapy.

4.9: Include physiotherapy for postural correction during pregnancy:

In this table showed that, 76.7% (n=102) expressed positive response about physiotherapy for postural correction during pregnancy; 19.5% (n=26) expressed negative response and 3.8% (n=5) was confused about this.

Table- 5: Include physiotherapy for postural correction during pregnancy.

Postural correction	Frequency (n)	Percentage (%)
Yes	102	76.7%
No	26	19.5%
Don’t Know	5	38.5%
Total	133	100%

4.10: Lower back pain during pregnancy requires the inclusion of physiotherapy:

This graph showed that, 80.5% (n=107) gynecologists expressed positive response about physiotherapy for treatment of lower back pain; 15.8% (n=21) expressed negative response and 3.8% (n=5) was confused about that.

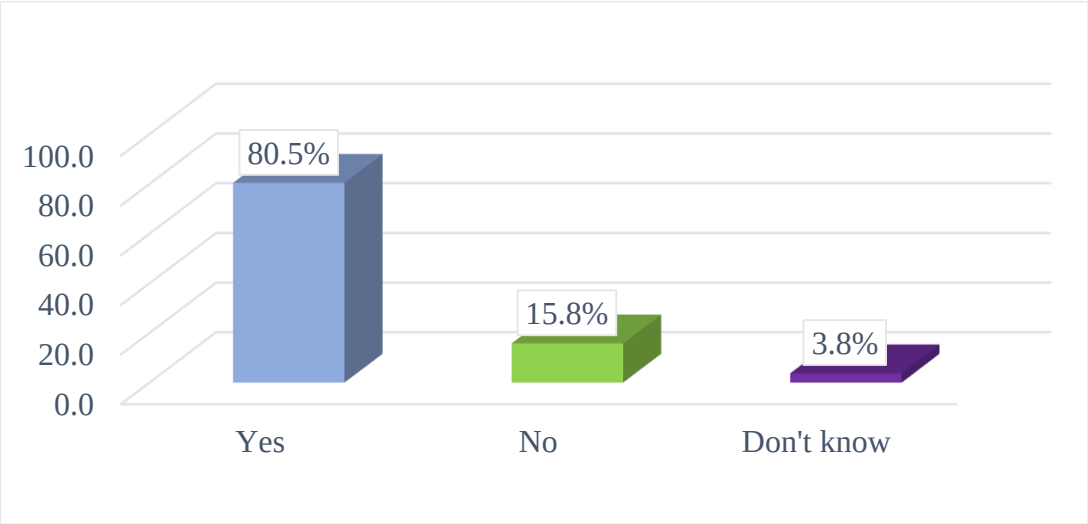


Figure-5: Lower back pain during pregnancy requires the inclusion of physiotherapy.

4.11: Physiotherapy play a role in facilitating normal delivery:

This study showed that, 96.2% (n=128) gynecologists had good knowledge about physiotherapy for facilitating normal delivery; 3.0% (n=4) had poor knowledge and 0.8% (n=1) said don't know about this.

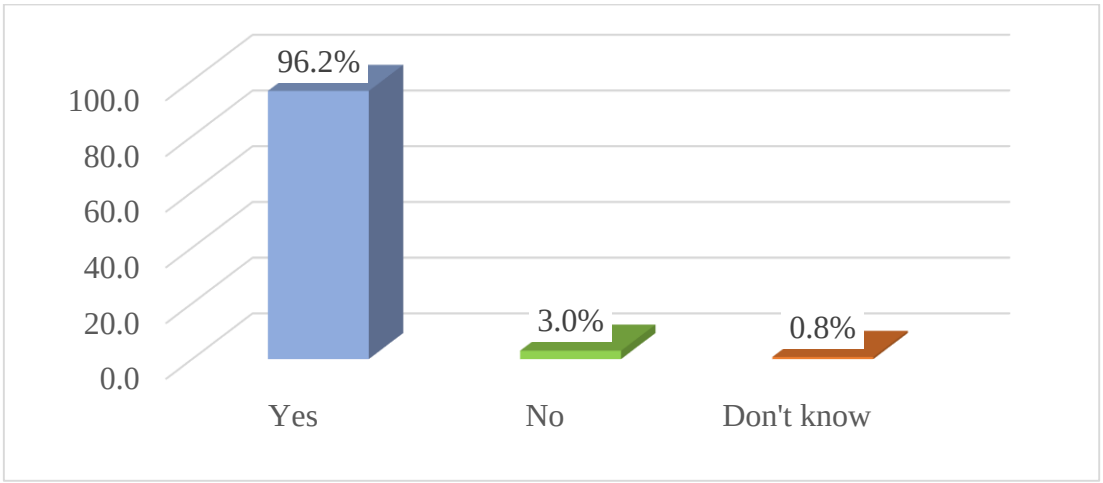


Figure-6: Physiotherapy play a role in facilitating normal delivery.

4.12: Exercise help in post-delivery recovery:

This table showed that, 94.0% (n=125) gynecologists belived that exercise helped in post delivery recovery; 3.0% (n=4) don't belived; 3.0% (n=4) said don't know.

Table- 6: Exercise helps in post-delivery recovery.

Post-delivery recovey:	Frequency (n)	Percentage (%)
Yes	125	94.0%
No	4	3.0%
Don't Know	4	3.0%
Total	133	100.0%

4.13: Physiotherapy effective for promoting core muscle strengthening after delivery:

This graph showed that, 96.2% (n=128) participants expressed positive response about effective of physiotherapy for promoting core muscle strengthening after delivery and 3.8% (n=5) gynecologists were confused about this.

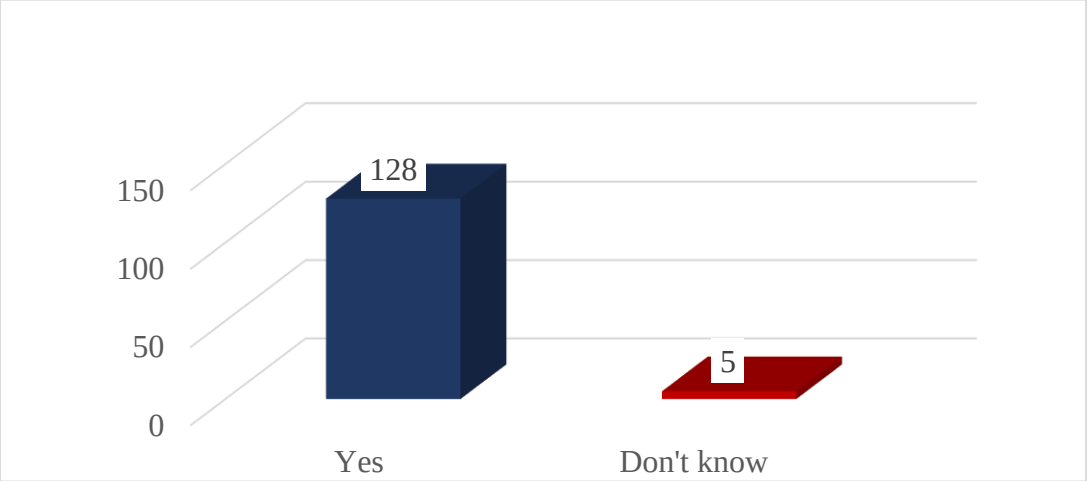


Figure-7: Physiotherapy effective for promoting core muscle strengthening after delivery.

4.14: Physiotherapy assist the healing of scars following cesarean section:

This study showed that, 33.8% (n=45) gynecologists believed that physiotherapy assist the healing of scars following cesarean section; 25.6% (n=34) don't believed; 40.6% (n=54) said don't know.

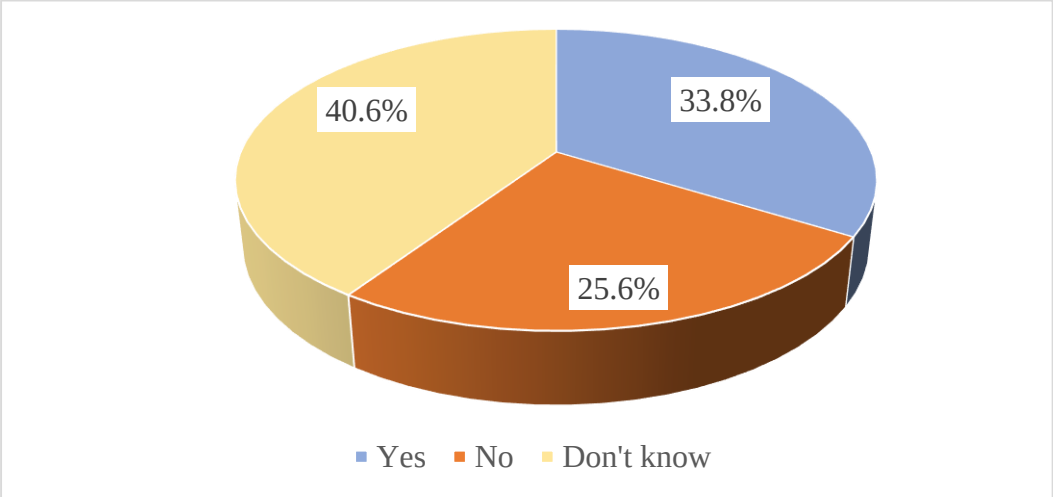


Figure-8: Physiotherapy assist the healing of scars following cesarean section.

4.15: Necessary physiotherapy of pelvic girdle pain:

This table showed that, 74.4% (n=99) participants believed that physiotherapy is necessary for pelvic girdle pain; 15.0% (n=20) don't believed and 10.5% (n=14) said don't know about this.

Table- 7: Necessary physiotherapy of pelvic girdle pain.

Pelvic girdle pain	Frequency (n)	Percentage (%)
Yes	99	74.4%
No	20	15.5%
Don't know	14	10.5%
Total	133	100.0%

4.16: Pelvic floor exercise effective in treating genital organ prolapse or herniation:

This pie chart showed that, 79.7% (n=106) participants had good knowladge about effective of pelvic floor exercise for treating genital organ prolapse or herniation; 13.5% (n=18) had poor knowladge and 6.8% (n=9) was confusd about this.

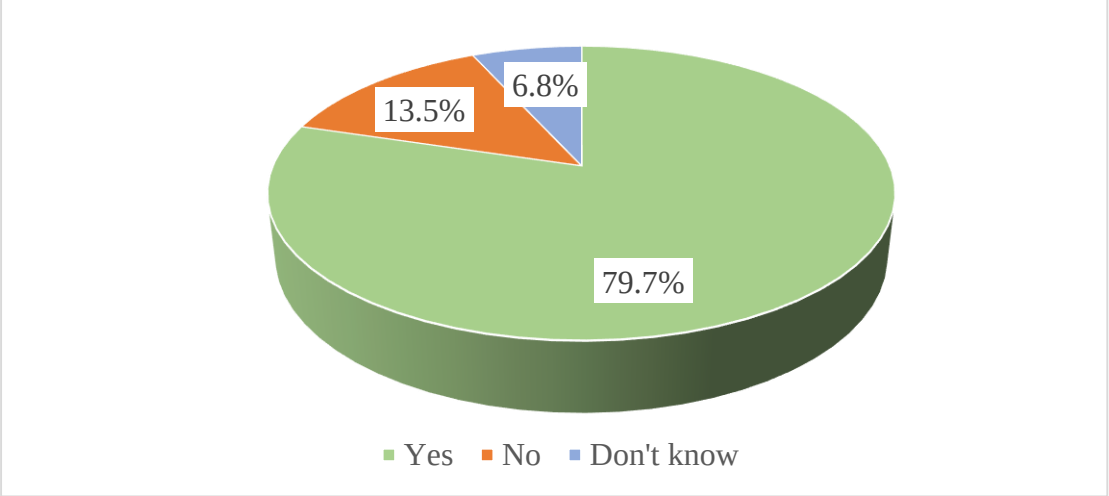


Figure-9: Pelvic floor exercise effective in treating genital organ prolapse or herniation.

4.17: Manage urinary incontinence through kegal exercise:

This table showed that, 96.2% (n=128) gynecologists expressed positive response about kegal exercise for manage urinary incontinence; 3.0% (n=4) expressed negative response; 0.8% (n=1) was confused.

Table-8: Manage urinary incontinence through kegal exercise.

Kegal exercise	Frequency (n)	Percentage (%)
Yes	128	96.2%
No	4	3.0%
Don’t know	1	0.8%
Total	133	100.0%

4.18: After hysterectomy, physiotherapy treatment required for manage pain and increase muscle strength:

This study showed that, 83.5% (n=111) participants had good knowladge about physiotherapy treatment for manage pain and increase muscle strength after hysterectomy; 7.5% (n=10) had poor knowladge and 9.0% (n=12) said don't know about this.

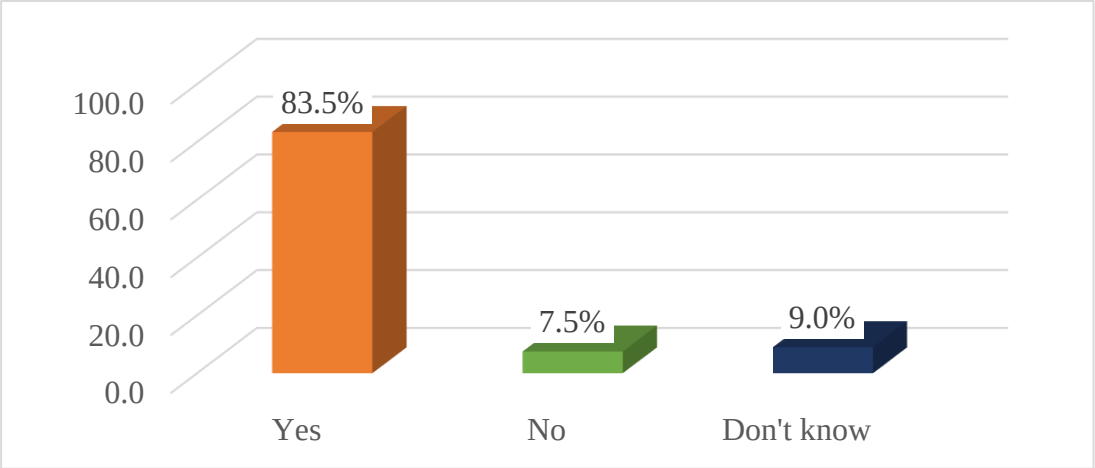


Figure-10: After hysterectomy, physiotherapy treatment required for manage pain and increase muscle strength.

4.19: Physiotherapy been used to treat diastasis recti:

This pie chart showed that, 47.4% (n=63) gynecologists believed that physiotherapy used to treat diastasis recti; 9.8% (n=13) don't believed and 42.9% (n=57) don't know about this.

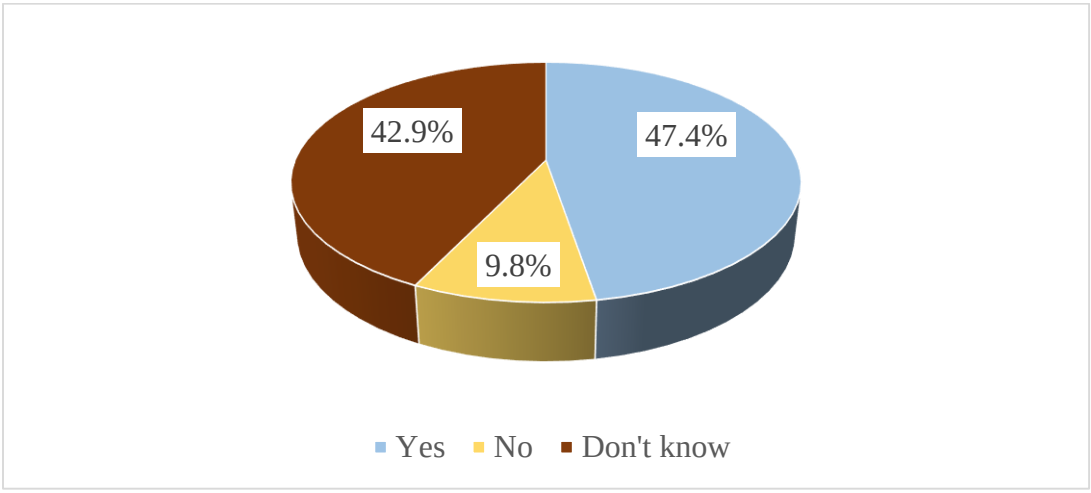


Figure-11: Physiotherapy been used to treat diastasis recti.

Part C: Attitude related information:

4.20: Physiotherapy is too expensive:

This table showed that, 15.0% (n=20) gynecologists strongly agree that physiotherapy is too expensive to be afforded by her patients; 40.6% (n=54) agree; 23.3% (n=31) neither agree nor disagree; 19.5% (n=26) disagree and 1.5% (n=2) strongly disagree.

Table-9: Physiotherapy is too expensive.

Physiotherapy is too expensive	Frequency (n)	Percentage (%)
Strongly Agree	20	15.0%
Agree	54	40.6%
Neither agree nor Disagree	31	23.3%
Disagree	26	19.5%
Strongly Disagree	2	1.5%
Total	133	100.0%

4.21: Physiotherapy is time consuming:

This graph showed that, 19.5% (n=26) strongly agree that physiotherapy is time consuming; 42.9% (n=57) agree; 17.3% (n=23) neither agree nor disagree; 18.0% (n=24) disagree and 2.3% (n=3) strongly disagree that physiotherapy is time consuming.

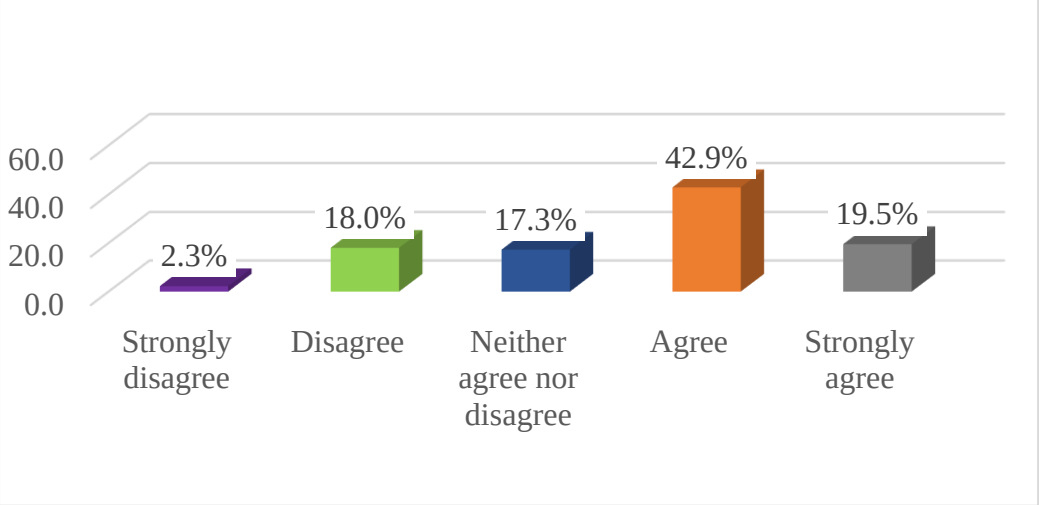


Figure-12: Physiotherapy is time consuming.

4.22: Exercise during pregnancy cause maternal or fetal problem:

This study showed that, 6.8% (n=9) gynecologists agree that exercise during pregnancy can cause maternal or fetal problem; 32.3% (n=43) neither agree nor disagree; 47.4% (n=63) disagree and 13.5% (n=18) strongly disagree about this.

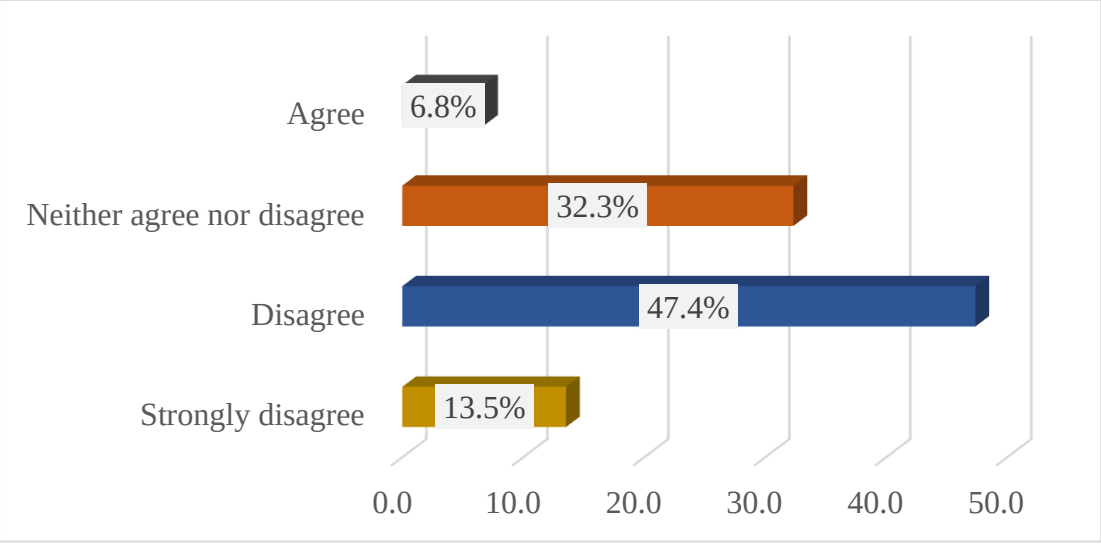


Figure-13: Exercise during pregnancy cause maternal or fetal problem.

4.23: Patients will be harmed by physiotherapy:

This graph showed that, 0.8% (n=1) gynecologists agree that their patients will be harmed by physiotherapy; 19.5% (n=26) neither agree nor disagree; 53.4% (n=71) disagree; 26.3% (n=35) strongly disagree about this.

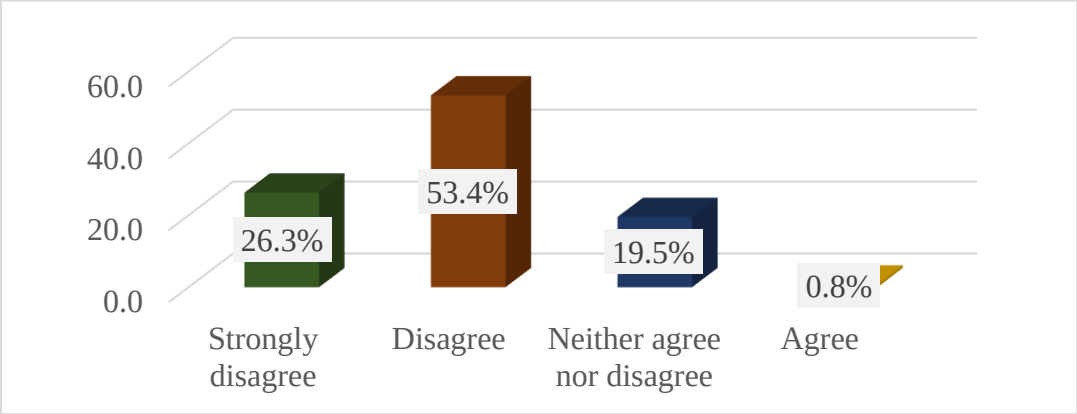


Figure-14: Physiotherapy will be harmed by physiotherapy.

4.24: Each hospital's physiotherapy department needs its own ward:

This table showed that, 20.3% (n=27) participants strongly agree that each hospital's physiotherapy department needs its own ward for managing gynecological and obstetrics cases; 38.3% (n=51) agree; 24.1% (n=32) neither agree nor disagree; 14.3% (n=19) disagree; 3.0% (n=4) strongly disagree about this.

Table-10: Physiotherapy department needs own ward.

Physiotherapy department need own ward.	Frequency (n)	Percentage (%)
Strongly Agree	27	20.3%
Agree	51	38.3%
Neither agree nor Disagree	32	24.1%
Disagree	19	14.3%
Strongly Disagree	4	3.0%
Total	133	100.0%

Part D: Perception related information:

4.25: Advice exercise during pregnancy:

This graph showed that, 51.1% (n=68) gynecologists always advice exercise during pregnancy; 18.0% (n=24) often, 24.1% (n=32) sometimes; 4.5% (n=6) rarely and 2.3% (n=3) gynecologist never advice exercise during pregnancy.

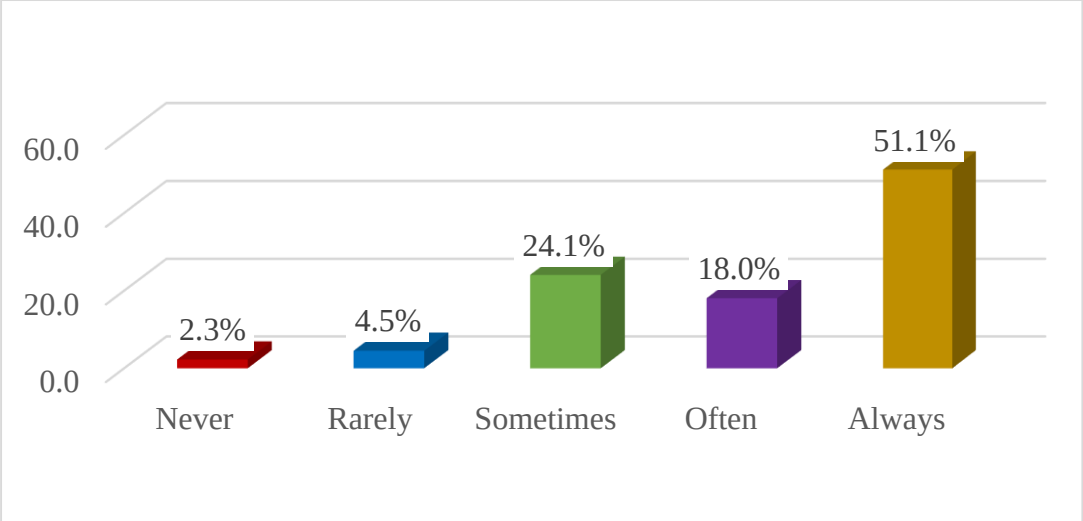


Figure-15: Advice exercise during pregnancy.

4.26: Routinely give exercise restriction to pregnant patients:

This study showed that, 2.3% (n=3) gynecologists always routinely give exercise restriction to pregnant patients; 6.0% (n=8) often; 43.6% (n=58) sometimes; 21.8% (n=29) rarely and 26.3% (n=35) never give exercise restriction to pregnant patients.

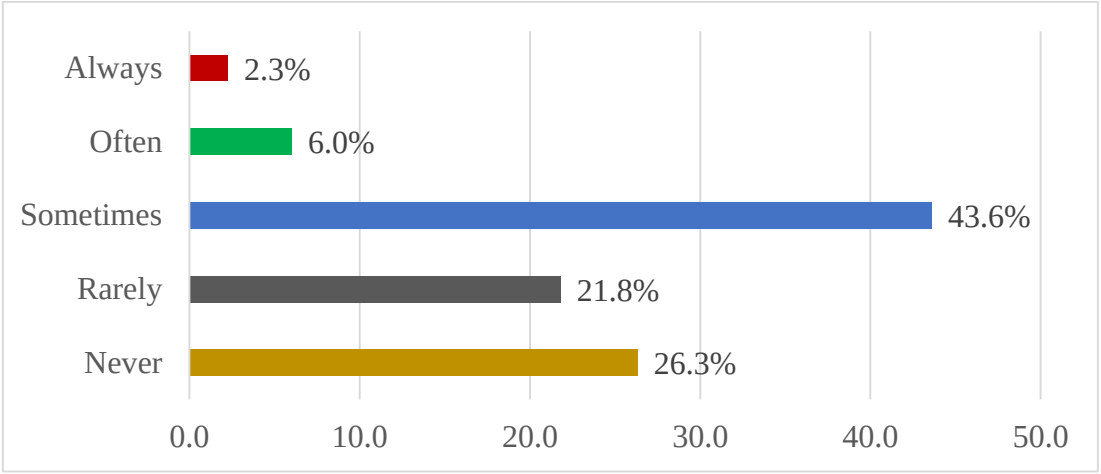


Figure-16: Routinely give exercise restrictions to pregnant patients.

4.27: Important for pregnant women to exercise undr the guidance of a physiotherapist:

This pie chart showed that, 8.3% (n=11) never; 14.3% (n=19) rarely; 36.1% (n=48) sometimes; 9.8% (n=13) often; 31.6% (n=42) always said that important for pregnant women to exercise under the guidance of a physiotherapist.

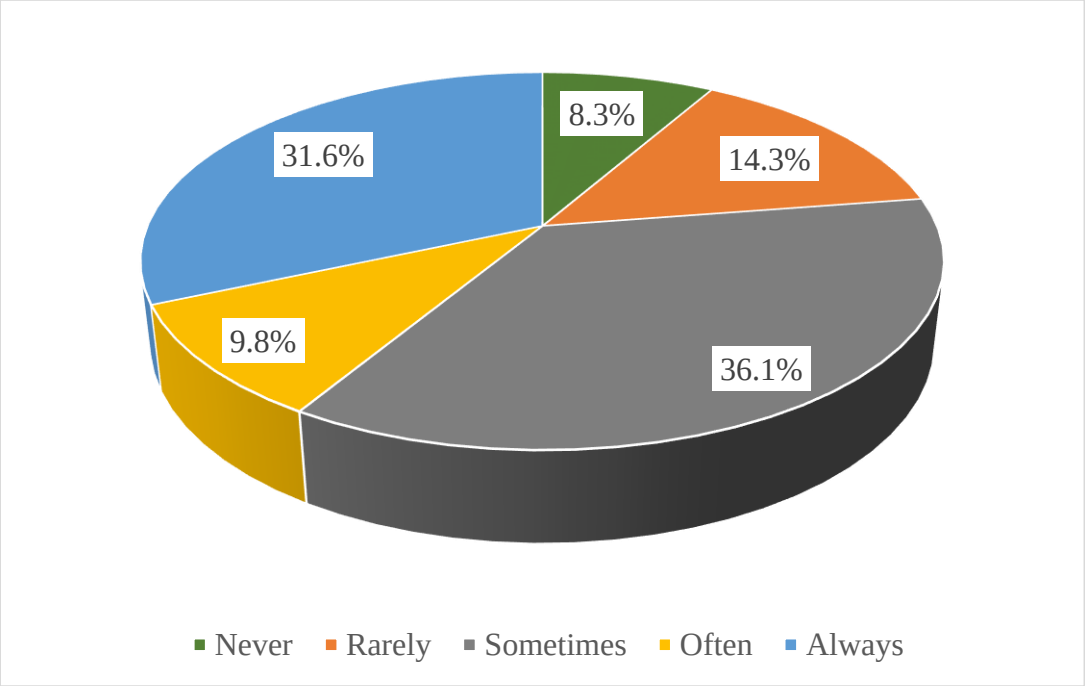


Figure-17: Important for pregnant women to exercise under the guidance of a physiotherapist.

4.28: Refer patient to undergo physiotherapy treatment:

This table showed that, 16.5% (n=22) gynecologists always refer patients to undergo physiotherapy; 9.0% (n=12) often; 9.0% (n=12) sometimes; 8.3% (n=11) rarely and 57.1% (n=76) never refer patients to undergo physiotherapy.

Table-11: Refer patient to undergo physiotherapy.

Refer patient to undergo physiotherapy.	Frequency (n)	Percentage (%)
Never	76	57.1%
Rarely	11	8.3%
Sometimes	12	9.0%
Often	12	9.0%
Always	22	16.5%
Total	133	100.0%

4.29: Correlation between experience of the participants and level of knowledge of the participants: (Spearman correlation co-efficient)

This table showed that, correlation between work experience of the participants with their level of knowledge revealed there was a negative correlation between them (r) = (-0.017) and (p) = (0.843). So, even though their experienced has increased, their knowledge level about physiotherapy has not increased that much.

Table-12: Relation between experience and level of knowledge of the participants:

Value	Correlation Coefficient (r)	P value
Experience / Knowledge level	-0.017	0.843

4.30: Correlation between experience of the participants and level of attitude of the participants: (Spearman correlation co-efficient)

This table showed that, correlation between work experience of the participants with their level of attitude revealed there was a positive correlation between them (r) = (0.103) and (p) = (0.239). That was, their attitude towards physiotherapy was increased with their experienced.

Table-13: Relation between experience and level of attitude of the participants:

Value	Correlation Coefficient (r)	P value
Experience / Attitude level	0.103	0.239

4.31: Correlation between experience of the participants and level of perception of the participants: (Spearman correlation co-efficient)

This table showed that, correlation between work experience of the participants with their level of perception revealed there was a negative correlation between them (r) = (-0.014) and (p) = (0.869). So, even though their experienced has increased, their perception level about physiotherapy has not increased that much.

Table-14: Relation between experience and level of perception of the participants:

Value	Correlation Coefficient (r)	P value
Experience / Perception level	-0.014	0.869

4.32: Correlation between working hours of the participants and level of knowledge score of the participants: (Spearman correlation co-efficient)

This table showed that, correlation between working hours of gynecologists with their level of knowledge revealed there was a positive correlation between them (r) = (0.012) and (p) = (0.888). The researcher found that working hours of gynecologist were positively correlated with their knowledge level of physiotherapy.

Table-15: Relation between working hours and level of knowledge of the participants:

Value	Correlation Coefficient (r)	P value
Working hours / Knowledge level	0.012	0.888

4.33: Correlation between working hours of the participants and level of attitude of the participants: (Spearman correlation co-efficient)

This table showed that, correlation between working hours of gynecologists with their level of attitude revealed there was a positive correlation between them (r) = (0.124) and p = (0.153). The researcher found that working hours of gynecologist were positively correlated with their Attitude of physiotherapy.

Table-16: Relation between working hours and level of attitude of the participants:

Value	Correlation Coefficient (r)	P value
Working hours / Attitude level	0.124	0.153

4.34: Correlation between working hours of the participants and level of perception of the participants: (Spearman correlation co-efficient)

This table showed that, correlation between working hours of gynecologists with their level of perception revealed there was a negative correlation between them (r) = (-0.052) and (p) = (0.555). The researcher found that working hours of gynecologist were negative correlated with their perception of physiotherapy.

Table-17: Relation between working hours and level of perception of the participants:

Value	Correlation Coefficient (r)	P value
Working hours / Perception level	-0.052	0.555

CHAPTER-V DISCUSSION

This study aims to assess the level of knowledge, attitude and perception of gynecologists about physiotherapy for gynecological and obstetric cases.

Among 133 participants, the most participants were attended from 28-36 years age group, where 40.6% (n= 54); 42.1% (n=56) participants age 37-44 years; 17.3% (n=23) participants age 45-52 years; the mean and standard deviation of the study was 38.22 ± 5.820; and out of 133 participants, 93.2% (n=124) religion Islam; 6.8% (n=9) was Hindu. The other study showed that, participants ranged in age from 31 to 50 years (Odunaiya et al., 2013). In this survey, 17.3% (n=23) was MCPS degree holder; 60.9% (n=81) was FCPS degree holder; 21.8% (n=29) was PGD. Another study showed that, 192 (64%) gynecologist completed their MBBS, 57 (19%) completed their FCPS, and 51 (17%) completed their MCPS (Munawar et al., 2013). This study showed that, out of 133 participants 39.8% (n=53) were worked in Government hospital; 49.6% (n=66) were worked in private hospital; 10.5% (n=14) were worked in maternity clinic. Another study stated that, gynecologists and obstetricians made up the study's 300-person total sample size. Out of them, 123 (41%) came from public hospitals and 177 (59%) from private facilities (Munawar et al., 2013).

This study's participants mean and standard deviation of experience of participants, where mean ±SD= 9.12±3.846; their experience years was 3-8 years; 43.6% (n=58); 46.6% (n=62) participants experience 9-14 years; 9.8% (n=13) participants experience 15-20 years. Their mean and standard deviation of participants number of daily cases, where mean ±SD= 17.50±5.432; their number of daily cases was 6-14; 21.8% (n=29); 65.4% (n=87) participants number of daily cases was 15-22; 12.8% (n=17) number of daily cases was 23-30 and their working hours was 5-8; 73.7% (n=98); and 26.3% (n=35) participants working hours was 9-12. Their mean and standard deviation of working hours where mean ±SD= 7.84±1.787. The other study showed that, regarding experience, 144 (48%) had more than 5 years of experience, while 156 (52%) had 3 to 5 years or more (Munawar et al., 2013). This research revealed that, 91.0% (n=121) gynecologists believed that physiotherapy was beneficial for gynecological and obstetric patients and 9.0% (n=12) gynecologist was confused about that. Another study revealed that, 271 (90.3%) gynecologists agreed with the function of physiotherapist in gynecological problems and that 259 (86.3%)

gynecologists were knowledgeable about the care of obstetric patients by physiotherapy (Munawar et al., 2013).

This research showed that, 76.7% (n=102) gynecologists expressed positive response about physiotherapy for postural correction during pregnancy; 19.5% (n=26) expressed negative response and 3.8% (n=5) was confused about this. Another study founded that, 259 (86.3%) gynecologists concurred on the subject of physiotherapy's significance in postural awareness (Munawar et al., 2013). This study showed that, 80.5% (n=107) gynecologists expressed positive response about physiotherapy for treatment of lower back pain; 15.8% (n=21) expressed negative response and 3.8% (n=5) was confused about that. Another study showed that, most gynecologists 285 (95%) agreed that physiotherapy is effective for back pain during and after pregnancy (Munawar et al., 2013). In this survey, 96.2% (n=128) gynecologists had good knowledge about physiotherapy for facilitating normal delivery; 3.0% (n=4) had poor knowledge and 0.8% (n=1) said don't know about this. Other study showed that, 199(66.3%) participants said that every women need physiotherapy during antenatal period for normal delivery (Munawar et al., 2013).

This study stated that, 94.0% (n=125) gynecologists belived that exercise helped in post delivery recovery; 3.0% (n=4) don't belived; 3.0% (n=4) said don't know and 33.8% (n=45) gynecologists believed that physiotherapy assist the healing of scars following cesarean section; 25.6% (n=34) don't believed; 40.6% (n=54) said don't know. Another study revealed that, gynecologists were aware of physical therapy's importance for postpartum care (98.5%) (Tahir et al., 2017). This research showed that, 96.2% (n=128) participants expressed positive response about effective of physiotherapy for promoting core muscle strengthening after delivery and 3.8% (n=5) gynecologists were confused about this and 47.4% (n=63) gynecologists believed that physiotherapy used to treat diastasis recti; 9.8% (n=13) don't believed and 42.9% (n=57) don't know about this. Another research showed that, concerning the advantages of physiotherapy, 258 (86%) gynecologists agreed that physiotherapy activities are beneficial for strengthening pelvic floor muscles (Munawar et al., 2013). In this survey, 74.4% (n=99) participants believed that physiotherapy is necessary for pelvic girdle pain; 15.0% (n=20) don't believed and 10.5% (n=14) said don't know about this. Another survey founded that, 261 (87%) of gynecologists agreed on the role of physiotherapy in pelvic pain (Munawar et al., 2013).

This study researcher noticed that, 79.7% (n=106) participants had good knowladge about effective of pelvic floor exercise for treating genital organ prolapse or herniation; 13.5% (n=18) had poor knowladge and 6.8% (n=9) was confusd about this. Other study revealed that, 98.5% of gynecologists were aware of the function of physical therapy in uterine prolapse (Tahir et al., 2017).In this study showed that, 96.2% (n=128) gynecologists expressed positive response about kegal exercise for manage urinary incontinence; 3.0% (n=4) expressed negative response; 0.8% (n=1) was confused. Another study showed that, in order to deal with urine incontinence during the prenatal period, 243 (81%) gynecologists agreed that physical therapy is beneficial (Munawar et al., 2013). In this survey, 83.5% (n=111) participants had good knowladge about physiotherapy treatment for manage pain and increase muscle strength after hysterectomy; 7.5% (n=10) had poor knowladge and 9.0% (n=12) said don't know about this. Other study showed that, 70.1% of gynecologists were aware of the significance physical therapy plays in hysterectomy (Tahir et al., 2017). This research revealed that, 15.0% (n=20) gynecologists strongly agree that physiotherapy is too expensive to be afforded by her patients; 40.6% (n=54) agree; 23.3% (n=31) neither agree nor disagree; 19.5% (n=26) disagree and 1.5% (n=2) strongly disagree.

Another study revealed that, 80.6% of gynecologists strongly agreed that physiotherapy would not be excessively expensive for patients (Odunaiya et al., 2013). This study found that, 19.5% (n=26) strongly agree that physiotherapy is time consuming; 42.9% (n=57) agree; 17.3% (n=23) neither agree nor disagree; 18.0% (n=24) disagree and 2.3% (n=3) strongly disagree that physiotherapy is time consuming. Other study found that, 50.7% and 6.0% gynecologists strongly agreed and agreed that physiotherapy is time-consuming (Odunaiy et al., 2013). This study researcher noticed that, 6.8% (n=9) gynecologists agree that exercise during pregnancy can cause maternal or fetal problem; 32.3% (n=43) neither agree nor disagree; 47.4% (n=63) disagree and 13.5% (n=18) strongly disagree about this. Another study showed that, 62% gynecologists believe that sedentary women with uncomplicated pregnancies should be encouraged to exercise, 47% believe chronic conditions should continue exercise throughout pregnancy, 64% agreed on strength training participation, and 91% believe that the maternal and fetal risks of exercise during pregnancy are minimal (Sangrasi et al., 2016). Another study indicated that, 94.0% and 1.5% of gynecologists highly agreed and agreed that physiotherapy service did not harm patients (Odunaiy et al., 2013). In this study indicated that, 0.8% (n=1) gynecologists agree that their patients will be

harmed by physiotherapy; 19.5% (n=26) neither agree nor disagree; 53.4% (n=71) disagree; 26.3% (n=35) strongly disagree about this. This study revealed that, 20.3% (n=27) gynecologists strongly agree that each hospital's physiotherapy department needs its own ward for managing gynecological and obstetrics cases; 38.3% (n=51) agree; 24.1% (n=32) neither agree nor disagree; 14.3% (n=19) disagree; 3.0% (n=4) strongly disagree about this. Other study showed that, 59 (19.6%) respondents do not believe that physical therapy is necessary, whereas 241 (80.3%) gynecologists and obstetricians view it as a necessary component of their rehabilitation team (Munawar et al., 2013). Another study found that, it was determined only (67%) of the FCPS, trainee FCPS, and other post-graduate obstetricians and gynecologists in both sub-specialty groups advised their patients to exercise during pregnancy (Sangrasi et al., 2016). This study found that, 51.1% (n=68) gynecologists always advice exercise during pregnancy; 18.0% (n=24) often, 24.1% (n=32) sometimes; 4.5% (n=6) rarely and 2.3% (n=3) gynecologist never advice exercise during pregnancy.

Other study revealed that, 69% of respondents do not frequently place limitations on exercise, and 15% think that low-intensity exercise is sufficient to have a positive impact on health (Watson et al., 2015). This study revealed that, 2.3% (n=3) gynecologists always routinely give exercise restriction to pregnant patients; 6.0% (n=8) often; 43.6% (n=58) sometimes; 21.8% (n=29) rarely and 26.3% (n=35) never give exercise restriction to pregnant patients. In this survey, 8.3% (n=11) never; 14.3% (n=19) rarely; 36.1% (n=48) sometimes; 9.8% (n=13) often; 31.6% (n=42) always said that important for pregnant women to exercise under the guidance of a physiotherapist. Other study showed that, 85.8% participants were agree that it is important to perform exercise under the guidance of health care professionals and 14.2% participants were disagree about this (Ashraf & Ahmad, 2019).

Another study showed that, 11(14.7%) gynecologists do refer patients, 14(18.7%) do not refer at all, 28(37.3%) refer when required, and 22(29.3%) refer clients very rarely to the physiotherapy department (Nazar, 2021). This study showed that, 16.5% (n=22) gynecologists always refer patients to undergo physiotherapy; 9.0% (n=12) often; 9.0% (n=12) sometimes; 8.3% (n=11) rarely and 57.1% (n=76) never refer patients to undergo physiotherapy. In this study showed that, correlation between work experience of the participants with their level of knowledge revealed (r) = (-0.017) and (p) = (0.843), and Correlation between work experience of the participants with their level of attitude revealed (r) = (0.103) and (p) = (0.239), relation between work experience of

the participants with their level of perception revealed (r) = (-0.014) and (p) = (0.869), This study also showed that the correlation between working hours of gynecologists with their level of knowledge (r) = (0.012) and (p) = (0.888), working hours of gynecologists with their level of attitude correlation revealed (r) = (0.124) and p = (0.153), and correlation between working hours of gynecologists with their level of perception revealed (r) = (-0.052) and (p) = (0.555).

CHAPTER-VI LIMITATIONS

- There was no standard questionnaire with which to measure the level of knowledge, attitude, and perception of gynecologists about physiotherapy.
- Since data collection were through structured questionnaire, it was not possible to add more question due to lack of sufficient articles.
- Due to time constraints of gynecologists, 133 data collections were possible despite a sample size of 185.

CHAPTER-VII CONCLUSION AND RECOMMENDATION

7.1 Conclusion:

The aim of the study to assess the level of knowledge, attitude and perception of gynecologists about physiotherapy for gynecological and obstetric cases. In this study researcher found that, most of the gynecologists believed that, gynecology and obstetrics patients benefitted from physiotherapy and physiotherapy effective for postural correction, treating lower back pain during pregnancy. Maximum gynecologists were agreed that, physiotherapy helped in facilitating normal delivery, post-delivery recovery and core muscle strengthening after delivery. Some of the gynecologists expressed negative response about Physiotherapy for assist the healing of scars following cesarean section. The researcher found that, gynecologists agreed that, physiotherapy was effective in treating genital organ prolapse or herniation and treating pelvic girdle pain. More than half of gynecologists expressed positive response about kegal exercise for manage urinary incontinence and required physiotherapy after hysterectomy. Some of the gynecologists disagreed about role of physiotherapy to treat diastasis recti. Maximum gynecologists were agreed that, physiotherapy was time consuming and too expensive. Maximum gynecologists' advice their patients on exercise, where only a fewer gynecologists refer their patients to physiotherapists. In this case, the researcher found out the result that the knowledge about physiotherapy did not increase with the experience of gynecologist, so they need to be informed about the role of physiotherapy about gynecology and obstetrics cases. By the correlating their attitude with experience, the researcher found that their attitude about physiotherapy is positive, and perception was negative. The researcher also found that, the correlation between working hours and level of knowledge was positive; that means, their knowledge about physiotherapy had increased with working hours. By the correlating their attitude and perception with working hours, the researcher found that their attitude about physiotherapy is positive, and perception was negative.

7.2 Recommendations:

- The researcher encourages that, if a future qualitative study can be conducted in this particular area, the level of knowledge, attitude and perception of gynecologists on physiotherapy treatment can be an attractive theme to work on.
- A similar study with large sample size and study area can bring better results on the knowledge, attitude and perception level of gynecologists.

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Appendix-A

Institutional Review Board (IRB) Permission Letter

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY
Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref : *Date :* .....

Ref.No: *SCMST/PT/ERB-2017-18/1-2023/22*

3rd January'2023

To

Raihana Akter Khosbu

4th Professional B.Sc. in Physiotherapy

Saic College of Medical Science and Technology (SCMST)

Mirpur-14, Dhaka-1216.

Sub: Permission to collect data

Dear Khosbu,

Ethical review board (ERB) of SCMST pleased to inform you that your proposal has been reviewed by ERB of SCMST and we are giving you the permission to conduct study entitled "Knowledge, attitude and perception of a gynecologist about physiotherapy for gynecological and obstetric cases" and for successful completion of this study you can start data collection from now.

Wishing you all the best.

Thanking You,

11.01.23
Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

11.01.23
Principal
Saic College of Medical Science and Technology
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Appendix-B

Permission letter for data collection

25 FEB 2023

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Date : 20.2.2023

Ref : Ref.No: *SCMST/PT/ERB-2017-18/1-2023/22*

Forwarded to Pro VC (R&D) for valuable guidelines

Brig. Gen. Dr. Md. Rezaur Rahman
Director (Hospital)
Bangabandhu Sheikh Mujib Medical University
Shahbag, Dhaka.

6th February'2023

To

Director,

Bangabandhu Sheikh Mujib Medical University,

Shahabag, Dhaka-1000.

Brig. Gen. Dr. Md. Rezaur Rahman
Director (Hospital)
Bangabandhu Sheikh Mujib Medical University
Shahbag, Dhaka

Allowed

Sub: Permission to collect data

Dear Mam/Sir,

Ethical review board (ERB) of SCMST pleased to inform you that Raihana Akter Khosbu of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "Knowledge, attitude and perception of a gynecologist about physiotherapy for gynecological and obstetric cases" which has been reviewed by ERB of SCMST and we are giving permission to his to conduct this study.

I hope you will give kind permission to her to collect data to complete her study successfully and oblige thereby.

Thanking You,

Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

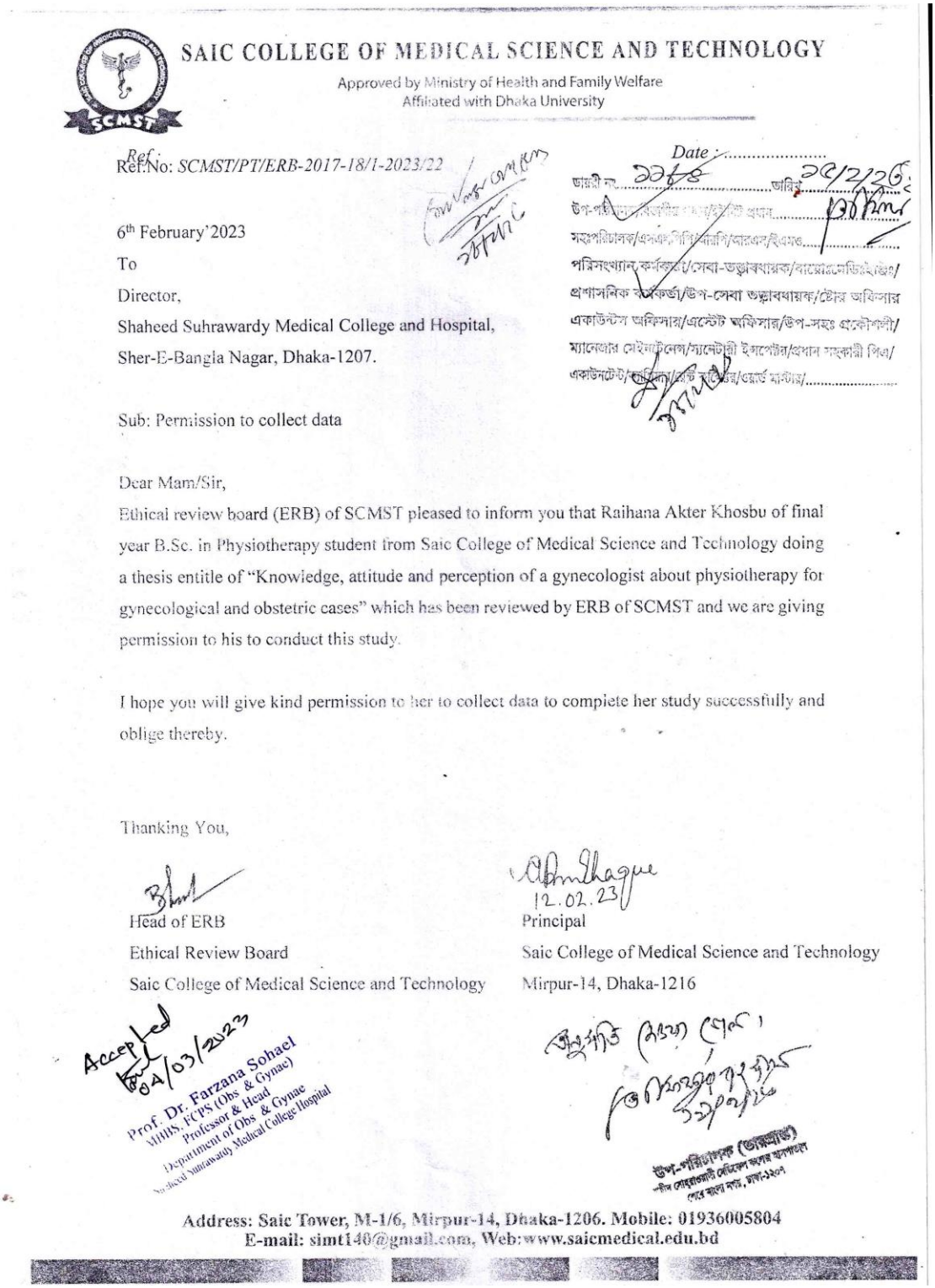
12.02.23

Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216

Pro VC (R&D)

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1206. Mobile: 01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

Permission letter for data collection



SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref.No: SCMST/PT/ERB-2017-18/1-2023/22

Date: 12/2/23

6th February'2023

To

Director,
Shaheed Suhrawardy Medical College and Hospital,
Sher-E-Bangla Nagar, Dhaka-1207.

Sub: Permission to collect data

Dear Mam/Sir,

Ethical review board (ERB) of SCMST pleased to inform you that Raihana Akter Khosbu of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "Knowledge, attitude and perception of a gynecologist about physiotherapy for gynecological and obstetric cases" which has been reviewed by ERB of SCMST and we are giving permission to his to conduct this study.

I hope you will give kind permission to her to collect data to complete her study successfully and oblige thereby.

Thanking You,

Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

12.02.23
Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216

Accepted
04/03/2023
Prof. Dr. Farzana Sohael
MBBS, FCPS (Obs & Gynae)
Professor & Head
Department of Obs & Gynae
Shaheed Suhrawardy Medical College Hospital

উপ-পরিচালক (ভারপ্রাপ্ত)
শহীদ সোহরাওয়ার্দী মেডিকেল কলেজ হাসপাতাল
শেরে বাংলা নগর, ঢাকা-১২০৭

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1206. Mobile: 01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

Permission letter for data collection

SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY

Approved by Ministry of Health and Family Welfare
Affiliated with Dhaka University

Ref. No: *SCMST/PT/ERB-2017-18/1-2023/22* (f)

Date : .....

15th February'2023

To

The Director
OGSB Maternity Hospital
Mirpur-13, Dhaka.

Permitted
16/2/23

Sub: Permission to collect data

Dear Sir/Mam,

Ethical review board (ERB) of SCMST pleased to inform you that Raihana Akter Khosbu of final year B.Sc. in Physiotherapy student from Saic College of Medical Science and Technology doing a thesis entitle of "Knowledge, attitude and perception of a gynecologist about physiotherapy for gynecological and obstetric cases" which has been reviewed by ERB of SCMST and we are giving permission to her to conduct this study. Her data collection area is fire service and civil defense unit in Dhaka, so she wants to take data from your department.

I hope you will give kind permission to her to collect data to complete her study successfully and oblige thereby.

Thanking You,

Head of ERB
Ethical Review Board
Saic College of Medical Science and Technology

16.02.23
Principal
Saic College of Medical Science and Technology
Mirpur-14, Dhaka-1216

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1206. Mobile: 01936005804
E-mail: simt140@gmail.com, Web:www.saicmedical.edu.bd

Appendix-C

মৌখিক সম্মতিপত্র

প্রিয় অংশগ্রহণকারী,

আমি **রায়হানা আক্তার খুশবু** । ঢাকা বিশ্ববিদ্যালয় অধিভুক্ত সাইক কলেজ অফ মেডিকেল সায়েন্স অ্যান্ড টেকনোলজি (এসসিএমএসটি) বিএসসি ইন ফিজিওথেরাপি বিভাগের একজন ছাত্রী। আমি একটি গবেষনা করছি যা হলো **"স্ত্রীরোগ ও প্রসূতি ক্ষেত্রে ফিজিওথেরাপি সম্পর্কে স্ত্রীরোগ বিশেষজ্ঞের জ্ঞান, মনোভাব এবং উপলব্ধি"** শিরোনামের অধ্যয়নটি পরিচালনা করছি। আপনার পূরণ করার জন্য প্রয়োজনীয় প্রশ্নের তালিকা রয়েছে যার মধ্যে রয়েছে সামাজিক-জনসংখ্যা, জ্ঞান সম্পর্কিত, মনোভাব সম্পর্কিত এবং উপলব্ধি সম্পর্কিত প্রশ্ন। মুখোমুখি সাক্ষাতকারে অংশ নিতে আপনার ১০-১৫ মিনিটের মতো সময় ব্যয় হতে পারে। প্রশ্নাবলীর তালিকা রয়েছে এবং আপনাকে প্রতিটি উত্তর পূরণ করতে হবে। এই প্রশ্নাবলী থেকে প্রাপ্ত তথ্য একাডেমিক উদ্দেশ্যে ব্যবহার করা হবে এবং গোপন রাখা হবে। এই অধ্যয়ন আপনার অংশগ্রহণ সম্পূর্ণ স্বেচ্ছায় এবং যেকোনো মুহূর্তে কোনো ব্যাখ্যা ছাড়াই আপনার সাক্ষাতকার থেকে প্রত্যাহার করার অধিকার রয়েছে। আপনি আপনার উত্তর জানতে গবেষককে অধ্যয়ন সম্পর্কিত যে কোনও প্রশ্ন জিজ্ঞাসা করতে পারেন। আপনার সদয় সহযোগিতা কামনা করছি।

অংশগ্রহণকারীর ঘোষণা

আমাকে এই সাক্ষাতকারে অংশগ্রহণের জন্য আমন্ত্রণ জানানো হয়েছে। উপরোক্ত সমস্ত নির্দেশনাবলি আমি পড়েছি এবং আমার স্বেচ্ছায় উত্তর দিয়েছি। আমি সম্পূর্ণ স্বেচ্ছায় উক্ত সাক্ষাতকারে অংশগ্রহণ করেছি এবং আমি চাইলেই যেকোন কারণবশতঃ সাক্ষাতকার শেষ করতে পারি। আমি এই গবেষণায় অংশগ্রহণকারী হতে স্বেচ্ছায় আমার সম্মতি দিচ্ছি।

উত্তরদাতার নাম: সাক্ষীর নাম:

স্বাক্ষর এবং তারিখ: স্বাক্ষর এবং তারিখ:

Consent Paper

Dear participant,

I am Raihana akter khosbu, student of B.Sc. in physiotherapy program in the Department of SAIC College of Medical Science & Technology (SCMST) which is affiliated by University of Dhaka. I am conducting the study entitled **"Knowledge, Attitude and Perception of Gynecologist about Physiotherapy for Gynecological and Obstetric Cases"** as a part of my thesis work for the partial fulfilment of B.Sc. in physiotherapy degree. There are the lists of question you need to fill-up which is include socio-demographic, Knowledge related, Attitude related and Perception related questions. For spending your time to participate in face-to-face interview which will take around 5-10 minutes. There is list of questionnaires and you need to fill up each answer. The information gained from this questionnaire will be used to academic purposes and will be kept confidential. Your participation in this study is totally voluntarily and you have the right to withdraw from the interview without any clarification at any moment. You can ask any question to the researcher regarding the study to meet up your quarry. Looking forward your kind cooperation.

Declaration of the participant

I have been invited to participate in this survey. The foregoing information has been read to me and that have been answered to my satisfaction. I have noticed participation in this study is totally voluntary and I have the right to withdraw from the interview at any clarification. I give my consent voluntarily to be participants in this study.

Respondent name: Witness name:

Signature and date: Signature and date:

Appendix-D

QUSTIONNAIRE (ENGLISH)

KNOWLEDGE, ATTITUDE AND PERCEPTION OF A GYNECOLOGIST ABOUT PHYSIOTHERAPY FOR GYNECOLOGICAL AND OBSTETRIC CASE.

Respondent ID: ……

Date ……/……/……..

Name of respondent: ……

Address: …….....

Mobile number: ……

Email address: ……..

Part A: Socio Demographic Related Question:

Number	Question	Response
1	Age	…….. years
2	Religion	1. Islam 2. Hindu 3. Buddhist 4. Christian
3	Educational level	1. PGD 2. FCPS 3. MCPS
4	Working hospital	1. Government 2. Private 3. Maternity Clinic
5	Experience	……...years
6	Number Of daily cases	……
7	Working hours	…… hours

Part B: Knowledge related information:

Kindly express your answer with fill up marks.

Question number	Question	Yes	No	Don't know
8	Can gynecological and obstetric patients benefit from physiotherapy?			
9	It is necessary to include physiotherapy for postural correction during pregnancy?			
10	Treatment of lower back pain during pregnancy requires the inclusion of physiotherapy?			
11	Can physiotherapy play a role in facilitating normal delivery?			
12	Can exercise helps in post- delivery recovery?			
13	Is physiotherapy effective for promoting core muscle strengthening after delivery?			
14	Can physiotherapy assist the healing of scars following cesarean section?			
15	Considering the care of pelvic girdle pain, do you believe physiotherapy is necessary?			
16	Is pelvic floor exercise effective in treating genital organ prolapse or herniation?			
17	It is possible to manage urinary incontinence through Kegal exercise?			
18	After hysterectomy, is physiotherapy treatment required for management of pain and increase muscle strength?			
19	Has physiotherapy been used to treat diastasis recti?			

Part C: Attitude related information:

Kindly express your answer with fill up marks:

Question number	Question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
20	Physiotherapy is too expensive to be afforded by my patient.					
21	Physiotherapy is time-consuming.					
22	Exercise during pregnancy can cause maternal or fetal problem.					
23	My patients will be harmed by physiotherapy.					
24	Each hospital's physiotherapy department needs its own ward for managing gynecological and obstetrics cases.					

Part D: Perception related information:

Kindly express your answer with fill up marks.

Question number	Question	Never	Rarely	Sometimes	Often	Always
25	I usually advice exercising during pregnancy.					
26	Do you routinely give exercise restrictions to your pregnant patients?					
27	It is important for pregnant women to exercise under the guidance of a physiotherapist?					
28	I refer my patient to undergo physiotherapy treatment.					