PREGNANT WOMEN'S AWARENESS ABOUT PHYSIOTHERAPY SERVICES AT SELECTED MATERNITY HOSPITAL

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

PREGNANT WOMEN'S AWARENESS ABOUT PHYSIOTHERAPY SERVICES AT SELECTED MATERNITY HOSPITAL

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DECLERATION

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

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Acknowledgment

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Acronyms

ANC : Antenatal Care

APTA : American Physical Therapy Association

BANC : Basic Antenatal Care

BAVS : Bangladesh Association for Voluntary Services

BMRC : Bangladesh Medical Research Council

CAM : Complementary and Alternative Medicine

HDP : Hypertensive Disorder of Pregnancy

ICPD : International Conference on Population and Development

LBP : Low Back Pain

MDG : Millennium Development Goal

MHCS : Maternal Health Care Services

MMR : Maternal Morbidity Rate

PND : Post Natal Depression

SPD : Symphysis Pubis Dysfunction

SPSS : Statistical Package for Social Science

UNICEF : United Nations International Children's Emergency Fund

WCPT : World Confederation for Physical Therapy

WHO : World Health Organization

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Abstract

Purpose: To find out how mach the pregnant women were aware about Physiotherapy services in their pregnancy period. *Objective:* To know socio demographic (age, educational status) information, to find out awareness about physiotherapy, To determine factors that help to receive physiotherapy services and necessity of Physiotherapy services of pregnant women. *Methodology:* A cross-sectional study design was conducted to accomplish the study. 50 subjects were selected through convenient sampling technique from BAVS maternity Hospital, Mirpur-2, Dhaka and the data were collected by a structural questionnaire. *Result:* The mean age was 27.3 ± 4.3, Participants n=5 (10%) lives in rural area and n=45 (90%) in urban area, n=18 (36%) was Bachelor or above in their educational status, n=18 (36%) was complete higher secondary level n=7 (14%) was complete secondary and the rest were below secondary level, Among all the participants n=36 (72%) was housewife, n=37 (74%) did not aware about the Physiotherapy service during pregnancy only n=13 (26%) pregnant women's were aware about Physiotherapy service, n=41 (82%) pregnant women's have spine and/or other joint pain, n=27 (54%) women's have urgency of urination and n=15 (30%) women's have oedema, tingling sensation and muscle cramp for these factors physiotherapeutic treatment was necessary for them, n=40 (80%) pregnant women's have accessibility or opportunity to take Physiotherapy service, n=12 (24%) pregnant women were referred by their Physician to take Physiotherapy treatment, n=39 (88%) Pregnant women's perception was Physiotherapy treatment is a very necessary treatment for them. *Conclusion:* There is a need to increase awareness about physiotherapy services in the maternity hospital among pregnant women as well as health professionals. Besides this, professional Physicians must be able to refer pregnant mothers to physiotherapy for the appropriate musculoskeletal problems experienced during pregnancy. These can be achieved through awareness campaigns, health education and interaction with the health professionals.

CHAPTER-I INTRODUCTION

1.1 Background

Maternal mortality rates are high in developing and middle income countries of Africa and Asia where the population is predominantly rural. According to (Mudokwenyu-Rawdon, 2007), African women of reproductive age have the highest risk of death from antenatal causes than any other women in the world. Nearly half a million women, most of them from developing countries die from complications of pregnancy and child birth (UNICEF, 2007). About half of these deaths occur in sub-Saharan Africa and one third in South Asia. In developed countries, most of these deaths are due to other causes like complications from anesthesia and C-sections. A WHO report on 'Trends in maternal mortality 1990-2010' revealed the global Maternal Mortality Rate (MMR) in 2010 as 210 maternal deaths per 100000 live births. Sub-Saharan Africa had the highest MMR at 500 maternal deaths per 100000 live births, while Eastern Asia had the lowest at 37 maternal deaths per 100000 live births. South Asia has a higher maternal mortality than any other middle income countries. Therefore maternal health is an important public health priority for Asia. Maternal death is defined as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2009).

Maternal mortality rate (MMR) is defined as the number of maternal deaths in a given time period per 100,000 women of reproductive age. In Bangladesh maternal mortality rate is 240 deaths per 100000 live births. These researchers are of the opinion that poor maternal health services are mainly due to infections, quality gap in the provision of critical maternal health services and access to Emergency Obstetric Care poor administrative and financial management, poor quality of care, and lack of accountability. To this effect,(Pattinson, 2005) stated that the high proportion of still births is reflective of poor antenatal care. The cause of death could be prevented by proper antenatal care. The majority of these complications can be eliminated through preventive maternal health care services such as physiotherapy and health education. A recent health advancement is the use of Complementary and alternative medicine (CAM) which includes a broad group of health care systems, therapeutic practices and

products-acupuncture, chiropractic, naturopathy, herbal medicine and yoga is gaining popularity around the world (Adams et al., 2011).

Health professionals giving inadequate information on reproductive health. As a result, health professionals have to address patient communication barriers and inform women in appropriate ways so they understand the need for such services. Sometimes women and their families rely on the information they receive from the clinics. Therefore, all information should be accessible to illiterate women and health pamphlets should be designed in a language appropriate to the literacy levels (Singleton & Krause, 2009).

Maternal health is one of the main global health challenges and reduction of the maternal mortality ratios by three quarters by 2015 is the target for the Millennium Development Goal 5. Socio economic circumstances and educational levels are some of the factors for not accessing services rendered at hospitals. A key focus of maternal health policy is improving the health status of women by adequate referrals to other health teams and social support systems. (Pattinson, 2005)

1.2 Rational

Nearly half a million women, most of them from developing countries die from complications of pregnancy and child birth (UNICEF, 2007). About half of these deaths occur in Africa and one third in South Asia. In developed countries, most of these deaths are due to other causes like complications from anesthesia and C-sections. Therefore maternal health is an important public health priority for Asia. The Millennium Development Goal (MDG) 5 calls for a reduction in the Maternal Mortality Rate by three quarters between 1990 and 2015. Thus the UN's aim of reducing the maternal mortality rates to 75% by 2015 needs to be re-emphasized through antenatal interventions. The Basic Antenatal Care (BANC) Package is a quality improvement training package based on the Integrated Management of Pregnancy and Childbirth program of the WHO (WHO, 2005). It is also a way of training and upgrading the knowledge and skills of all the midwives and doctors involved in antenatal care. It establishes the minimum care that all pregnant women should receive. Most of the pregnant women suffered by various kind of musculoskeletal problem as changes in anatomical, physiological and hormonal changes of the body. Health care interventions are the key to reducing MMR. The appropriate interventions can largely prevent women from dying of pregnancy related complications. The majority of these complications can be eliminated through preventive maternal health care services such as physiotherapy and health education. Gynecological physiotherapy is a new area in Bangladesh. Therefore researcher wants to identify the awareness about physiotherapy services among the pregnant women. This research will give the current scenario about the knowledge and awareness of antenatal cares among pregnant women in our country perspectives and it will helps to re-think about the correction of our health care policies. As a health professional it improves our knowledge. Research makes the profession strongest. So there is no alternative option to do research as a professional to develop the profession.

1.3 Research Question:

Are pregnant women's aware about Physiotherapy services during pregnancy?

1.4 Study Objectives:

1.4.1 General objective: To find out pregnant women's awareness about physiotherapy services at selected maternity hospital.

1.4.2 Specific objectives:

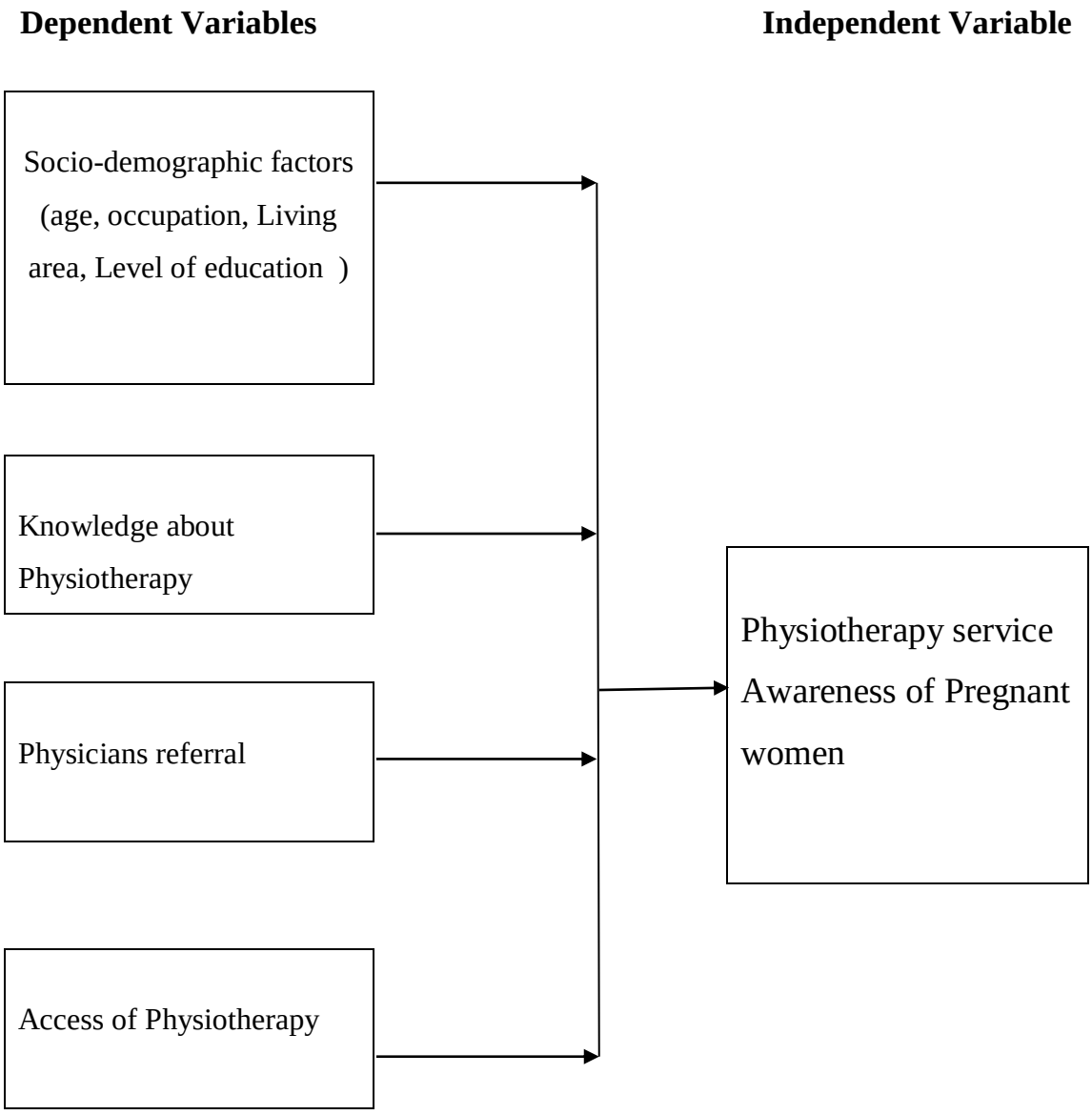
i. To know socio demographic (age, Living area, Educational status) information.

ii. To find out awareness about physiotherapy services among pregnant women.

iii. To determine factors that influence to receive physiotherapy services.

iv. To find out necessity of Physiotherapy services of pregnant women.

1.5 Conceptual Framework



CHAPTER-II LITERATURE REVIEW

Antenatal care (ANC) is named as one of the pillars of the Safe Motherhood Initiatives. It provides pregnant woman to interact to make appropriate choices and decisions that will contribute to optimum pregnancy outcome and care of the newborn. (Anya et al., 2008).

There are several complications that can occur during pregnancy. Hypertensive disorders are considered the most frequent causes of maternal mortality. (Moodley, 2008). Hypertensive disorders of pregnancy (HDP) represent a group of conditions associated with high blood pressure during pregnancy, proteinuria and in some cases convulsions. Eclampsia is usually a consequence of pre-eclampsia consisting of central nervous system seizures, which often leaves the patient unconscious; if untreated it may lead to death. Pre-eclampsia is a pregnancy specific disorder characterized by hypertension and excess protein excretion in the urine (Pennington et al., 2012). Through the antenatal programme, detection and treatment of high blood pressure to prevent eclampsia which indirectly causes stroke greatly can be avoided (McCaw-Binns et al., 2004). Furthermore, opportunities for preventive health services, such as prophylactic treatment of malaria and immunization against tetanus are also provided (Babalola & Fatusi, 2009).

According to a report by Safe Motherhood, the elements of maternal health care services include antenatal care, delivery care and post-partum care. WHO defines safe motherhood as 'the provision of high quality maternal health services in pregnancy, delivery and in the postpartum period to ensure the health of the mother and infant". All women, whether their pregnancies are complicated or not, need good quality maternal health services during pregnancy, delivery and within the postpartum period to ensure their health and that of infants. Therefore high quality maternal health services must be accessible, affordable, efficient, convenient, acceptable and appropriate to women who need them. The National Department of Health states that the successful outcome of pregnancy depends on health care workers who make good decisions based on accurate and complete recorded information. However, (Mokhondo, 2010), states that there is a deficiency of knowledge from the part of

midwives. Policy Project have noted that, "in most developing countries, access to safe motherhood services in rural areas is more limited than in urban areas. Skilled birth attendance is a term which includes the health professionals (midwives, doctors, nurses etc.) during delivery as well as an enabling environment where there is adequate equipment, drugs and other supplies for efficient management of pregnancy related complications (Bell et al., 2006).

According to Human Rights principles, the health care system must provide health care services that are affordable, free from discrimination and ensure the active participation of women in decision making. World Health Organization contends that the immediate cause of maternal deaths is the absence, inadequacy or underutilization of health care system (WHO, 2009).

The following components are particularly important in reducing maternal mortality: Their studies concluded that often pregnant women are not equipped to make appropriate choices when faced with danger. So by offering information and services through ANC, the health of women and their infants improve remarkably (WHO, 2005). Besides this, antenatal care during pregnancy improves the utilization of postnatal services (Chakraborty et al., 2006).

Skilled birth attendants are health professionals trained to recognize the signs of complications early enough to intervene and manage the situation or make quick referrals to higher levels of care (Mpembeni et al., 2007). The presence of Skilled Birth Attendants at all birth is regarded as the single most critical intervention for reduced pregnancy related deaths and complications (Rai et al., 2012).

Postnatal care is the time immediately after birth to 40 days. In developing countries, the most common causes of maternal deaths are postpartum hemorrhage, infections and hypertensive disorders (Khan et al., 2006). A majority of the maternal complications occur during delivery and the postpartum period. Hence it is necessary to increase the availability of services especially in the rural areas where they are limited. Literature suggests that the utilization of maternal health services in developing countries can be influenced by factors such as socio-demographic characteristics of women, culture and availability (Chakraborty et al., 2006 and

Ntambue et al., 2012). It emerged that transportation cost, poor road conditions, lack of awareness about the importance of services, limited availability of health services were some of the perceived barriers (Titaley et al., 2010).

The factors include age, birth order, education, employment and place of residence:
A mother's age plays an important role in the utilization of maternal health services. Some studies like (Nangwanga, 2008), noted a higher utilization of maternal services among younger women than older women. In contrast to the above, certain other studies like (Navneetham, 2012) have shown that 16 years older women were more likely to utilize maternal health services. It was argued that older women were more confident and could have a higher decision making power than younger one (Reynolds, Wong and Tucker, 2006). Younger women are more likely to be experiencing first-order births which is in turn positively associated with maternal health service use, hence will appear to be using more services (Burgard, 2007).

There is a strong relationship between birth order and utilization of maternal health services. (Chakraborty et al., 2006). These researchers showed that a larger number of children can negatively affecting maternal health utilization. A larger family puts a considerable amount of strain on a woman thereby limiting access to health services. Certain other studies among Ethiopian women demonstrated that multiparous women often tend to use the services more than primiparous women (Simkhada, 2008). Education of women is a positive factor for utilization of antenatal services (Dhakal et al., 2007).

Maternal education studies have proved that maternal education is positively associated with health care usage (Chakraborty et al., 2006). Low antenatal care utilization was also associated with limited maternal education amongst Sudanese women according to (Ali et al., 2010) whereas the same study reports level of education to be significantly associated with use of antenatal care. Highly qualified women have more chances of utilizing maternal health services. Educated women are able to understand the importance of receiving antenatal care and are more likely to start ANC visits early than uneducated women. The earning ability of a woman determines her decision to utilize health services. Women who were employed often started ANC in India earlier than those who were unemployed (Navneetham, 2012).

Employment outside the home was a deciding factor in early initiation of ANC attendance, yet it was interesting to note that (Pallikadavath et al., 2008) as cited in (Simkhada, 2008), studies that the ANC uptake was higher among unemployed.

The location and quality of services are also important factors that enable women to utilize health services. Proximity and nearness to a health facility affects the use of MHCS especially in rural areas. For many, lack of transportation and the high transportation fees were mitigating factors and for others, it was more often poor quality service, long waiting times, opening and closing times, staff attitudes, availability of health workers (Chakraborty et al., 2006).

However, some researchers have also argued that other factors like socio economic constraints, physical accessibility, and husband's occupation (Gabrysch & Campbell, 2009), media penetration, cultural/traditional backgrounds (Edward, 2011) all play an important role in accessing maternal health services. One of the new concepts in health promotion is health literacy. Health education is directed towards improving health literacy. Therefore improving health literacy means transmitting information, developing skills to be able to read pamphlets and making appointments successfully (Nutbeam, 2010).

The World Health Organization (WHO) defines health literacy as follows:

'Health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use the information in ways which promote and maintain good health'. Health literacy means more than being able to read pamphlets and successfully make appointments by improving people's access to health information and their capacity to use it effectively, health literacy is critical to empowerment' (WHO, 2009).

Therefore maternal health literacy can be defined as the cognitive and social skills which determine the motivation and ability of women to gain access to, understand, and use information in ways that promote and maintain their health and that of their children. One of the most cited definitions presented in the Ottawa Charter for Health Promotion states that health promotion is 'the process of enabling people to increase control over, and to improve, their health' i.e. agents of health promotion are required to advocate, enable and mediate action. However some authors have argued for

incorporating other strategies like community health promotion by incorporating social marketing, mass communication, political action, community organization and organizational development (Merzel & Afflitti, 2011).

According to WHO the aim of health promotion is to foster the attainment of the highest achievable levels of health. The hospitals should provide health promotional services in the community so as to empower women with the required knowledge so as to improve their health. A multidisciplinary approach is appropriate to enhance women's health. Multiple studies point out that male partner could play a proactive role in the maternal health and wellbeing. Men need to be educated regarding antenatal care and share the responsibility in maternal care. The International Conference on Population and Development (ICPD), which took place in Cairo, recognized men's crucial role in reproductive health promotion. Mullany have proved that antenatal intervention involving men improved the postnatal care utilization among women compared with women who received antenatal education alone in Nepal. Men are key players in influencing the reproductive health outcomes positively or negatively. Therefore, ensuring men's involvement in reproductive and maternal health matters can promote a better partnership between men and women in both the household and community at large. The International Conference on Population and Development (ICPD) held in Cairo in 1994 reminded people that good reproductive health is the right of all people, men and women alike, and that together they share responsibility of making decisions about reproductive matters. (Mullany, 2007).

The scope of Physiotherapists is not only restricted to musculoskeletal injuries and ailments but also to the broader aspect of incorporating women's health. Physiotherapy is an independent self-regulated profession. Physiotherapy has been defined as "a healthcare profession concerned with human function and movement and maximizing potential". Today, it is usually understood as a practice that uses mainly physical approaches that intend to promote, maintain and restore physical, psychological and social well-being. In the Canadian Physiotherapy Association's vision for Canadian health care system, it is recognized that health care is broader than acute care and institutional services and must include self-care, health promotion, disease prevention, community support, and ambulatory primary care and rehabilitation services. Physiotherapy is an essential, core health service and

contributes to all these components of health care. According to (Harro, 2005), physical therapists have much to offer besides rehabilitation in terms of disease prevention and health promotion. The APTA (American Physical Therapy Association) Guide to Physical Therapist Practice, states that a part of physical therapists' practice is to provide prevention and promote health, wellness and fitness." Physical therapist's educational and practice guidelines have started emphasizing inclusion of health promotion. According to the APTA vision statement, by 2020, physical therapy services will be conducted by providers who are doctors of physical therapy and maybe board certified specialists. Consumers will have direct access to physical therapists in all environments for patient/clients management, prevention and wellness services. Physical therapists will be practitioners of choice in patients'/clients' health networks and will hold all privileges of autonomous practice (APTA, 2015).

Physiotherapists provide care and help reduce hospital costs as cited in Nangkwanga (2008). It is a relatively inexpensive treatment. Their expertise in assessment and treatment of musculoskeletal injuries has expanded the role for physiotherapists in many international jurisdictions. This low cost effective intervention in the antenatal clinics is what is emphasized through health education and promotion.

Physical therapists are called to be advocates (WCPT, 1999). Advocacy is a legal term which means the process of pleading for another person in court. The advocacy role of physiotherapists is mentioned in the Code of Conduct declaration for profession. They state that "adopting a community health education approach will expand the roles of physical therapists, improve effectiveness of physical therapy services, and positively influence patient outcomes". (WCPT, 1995).

(Nankwanga, 2008) studies have suggested that physiotherapists could contribute to women's health through health promotional programs and also specified the importance of pregnancy specific exercises in order to relieve back and pelvic pain. Hence a physiotherapist plays a vital role in health promotion. Mc Coma and Harris recommend physiotherapists to reconsider a model that includes the social, political and economic contexts of women. However, physiotherapists are not available in enough numbers and the geographical spread to provide the required access throughout the country. Besides the above, physiotherapists need to be aware of the

challenges faced by pregnant mothers to access health care facility. (Mc Coma & Harris, 2004)

The role of physiotherapist in obstetrics and gynecology is specified in international literatures. (Oduniaya et al., 2013) highlights inclusion of physiotherapy services in obstetrics and gynecology as pivotal to improving maternal service delivery. Their study that was designed among the obstetricians and gynecologists in Nigeria concluded underutilization of physiotherapy services due to their limited knowledge about the role of physiotherapy in delivery. The authors pointed out the need for better interaction and communication between the physiotherapists and obstetricians and gynecologists through clinical meetings, seminars and workshops. They had limited awareness of the physiotherapy profession as compared with their counterparts in the west. On the light of the above, antenatal physiotherapy can be considered as the best intervention to promote health education in close collaboration with the other health professionals working in the ante natal clinic (Oduniaya et al., 2013).

Exercise is important for healthy living throughout a woman's life and health care professionals carefully promote the benefits. Attitudes towards exercises during pregnancy have significantly changed over the years. Exercises have beneficial effects besides staying fit (Hopkins & Cut field, 2011). A supervised aerobic exercise or pregnancy specific exercise can be designed in the antenatal class. Physiotherapists have many services to offer to pregnant women which include providing postural reeducation, easing musculoskeletal ailments, teaching stress management etc. However, physical therapy is often underutilized because of lack of understanding of what physiotherapists can offer during pregnancy (Gleeson & Pauls, 2009).

Exercising during pregnancy and identified better schooling to knowledge about physical exercise. Recent studies have revealed that in most cases, exercise is safe for both the mother and fetus during pregnancy. According to Hopkins and Cut field (2011) regular aerobic exercise is essential for staying fit. The ACOG committee concludes that in less risky obstetric complications, 30 minutes of moderate exercise on most days can be recommended for pregnant women and in some cases the exercise programs can be modified. A study conducted by (Montoya, 2010) and coworkers concluded the health benefits of exercising where fifty women (16 to 20 week gestation) were subjected to a supervised aerobic exercise program. Therefore, a

physiotherapist can design an antenatal class by following the essential guidelines and absolute contraindications to aerobic exercise during pregnancy.

In the antenatal classes, a physiotherapist can educate women on training of pelvic floor muscles and incorporate a back care class. The bladder muscles, the detrusor tends to weaken with subsequent births and aging. Therefore, pelvic floor exercises, Kegel's exercises are very important to be emphasized even during the antenatal period.(Price et al., 2010) studies have also confirmed the beneficial effects of pelvic floor exercises in females with urinary incontinence. Similar studies concluded that antenatal pelvic floor exercises reduced the chances of urinary incontinence in late pregnancy and early post natal periods (Cooper & Cook, 2011). By increasing general awareness about pelvic floor weakness in the antenatal classes through physiotherapy, women would seek assistance and utilize the available programs in the prevention and treatment of urinary incontinence.

Low back pain (LBP) is the most common musculoskeletal complaint during pregnancy. (Kurup et al.,2012) identified the following risk factors for LBP which are increase in maternal age, decrease in height, increase in parity, gestational period and previous episodes of LBP. It is estimated that 50% of pregnant mothers will experience LBP at some time during pregnancy. Low back pain associated with pregnancy is not trivial, but literature suggests it is possible to reduce back pain with different conservative management strategies (Jain et al., 2006). The authors conclude that debilitating effects of symphysis pubis dysfunction (SPD) can be reduced if detected early in pregnancy. Pain in the joints at the front and back of the pelvis occurs commonly around 29-32 weeks. An elastic binder worn below the belly to support the pelvic joints while standing and walking provides significant relief. Women who have experienced back pain before pregnancy are at an increased risk of developing back pain during pregnancy. Therefore, physiotherapy is effective in the treatment of antenatal back and pelvic pain.

The social support offered is very essential during the antenatal period. Group interactions where problems are addressed in ANC classes helps to lower stress. A study done by(Buultjens et al., 2013) identified depression as one of the key psychological risk factor due to poor relationship between the woman and her partner.

Poor support from the male partner contributes to maternal depression. The authors recommend this new developing area valuable for new and expectant fathers. Numerous studies indicate that stress and mood disturbances during pregnancy are associated with a number of negative infant outcomes like low birth weight, preterm birth and lower Apgar scores. So a bio psychosocial approach is required to manage perinatal depression. Postnatal depression (PND) begins in the early postpartum period. Recognition of PND and its treatment is highly essential for the well-being of the mother, baby and family. This area of social support is highlighted in literatures and recommends a priority for further research and interventions. The bio psychosocial model adopted by the WHO is helpful in understanding the health-related experience of a woman during the perinatal period. WHO recommends four antenatal visits for low risk pregnancy, Antenatal visits can minimize maternal related deaths by identifying pregnancy related complication early. (Bullough et al., 2005) reminds educating women on the danger signs experienced during pregnancy and to seek appropriate referrals to a maternity provider at the right time. Besides the routine fetal heart monitoring, urine analysis, assessment of maternal height and weight and measurement of fundal height, supplementation of iron and folic acid.

According to (Igwesi-Chidobe, 2012), physiotherapy is not very popular amongst the rural communities of Nigeria. Poor knowledge about the scope of physiotherapy among the health workers and unavailability of physiotherapy services in those rural areas were identified as some of the obstacles to utilizing physiotherapy. Similar studies conducted among the Anganwadi health workers in rural Karnataka, India reflected poor knowledge about physiotherapy (Johnsey et al., 2013).

Non-attendance of physiotherapy in antenatal clinics is related to lack of information and lack of awareness (Oduniaya et al., 2013). However, health professional's role in informing pregnant women on services offered at the antenatal clinic is also another contributing factor. A reports on health professionals giving inadequate information on reproductive health. As a result, health professionals have to address patient communication barriers and inform women in appropriate ways so they understand the need for such services. Sometimes women and their families rely on the information they receive from the clinics. Therefore, all information should be

accessible to illiterate women and health pamphlets should be designed in a language appropriate to the literacy levels (Singleton & Krause, 2009).

A recent health advancement is the use of Complementary and alternative medicine (CAM) which includes a broad group of health care systems, therapeutic practices and products-acupuncture, chiropractic, naturopathy, herbal medicine and yoga is gaining popularity around the world (Adams et al., 2011).

Several studies have investigated the barriers to utilization of health care services. A few significant barriers that prevent women from utilizing maternal health care services which are the following: lengthy distances and lack of transport, high costs, poor information, low self-esteem, socio-cultural factors, unable to decide for themselves etc. Similar studies have been confirmed by other researchers like (Cooper, 2011).

Rural areas have access problems compounded by transportation facilities, long distances from health care, understaffing, lack of skilled doctors etc. This makes women in rural areas underuse the available services due to lack of physical access. Non health sector activities, such as education, water and sanitation, roads and communication, agriculture and internal security are other factors influencing maternal outcomes. Poorly financed and unaccountable health systems, including weak referral systems, are a key determinant of maternal outcome (Rogo et al., 2006).

In most developing countries, access to safe motherhood services in rural areas is more limited than in urban areas. Lack of transportation is a major problem in the rural areas Majority depend on the public sector for health care. The Saving Mothers report shows that maternal mortality has increased compared to previous across all levels of health care. These deaths are mostly due to HIV and other non-pregnancy related infection (41%), obstetric hemorrhage (14%) and hypertension (14%).

Women should also have the opportunity to make informed decisions about their health and treatment, usually in collaboration with the health professionals. Most often, relationship between health care providers and patients is strained due to poor communication and interaction styles. (Mogren et al., 2010) suggest a team work among health professionals is emphasized.

A closer collaboration is essential between health professionals such as midwives, obstetricians, physiotherapists and social workers within the maternal health care system to manage pelvic pain in women. Hence good communication between health care professionals and women is highly essential (Lyndon et al., 2011)

CHAPTER-III METHODOLOGY

3.1 Study Design

The study was cross sectional in nature and was used to determine mother's awareness and utilization of antenatal services especially physiotherapy services in pregnancy. A cross sectional design is believed to be cost effective and time saving way to reach out to a large number of people. That's why cross sectional design was chosen to find out the awareness of Physiotherapy intervention among pregnant women.

3.2 Study Site

Data was collected from Bangladesh Association for Voluntary Services (BAVS) maternity Hospital, Mirpur-2, Dhaka. The organization providing a wide range of antenatal service to the pregnant women in low cost. They provide quality service and lots of pregnant women took treatment from there. They will provide gynecological Physiotherapy service in their organization in near future.

3.3 Study Population

The study population was those pregnant women who were attended at BAVS maternity hospital for antenatal services.

3.4 Sample size

The equation of sample size calculation are given below-

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

Here,

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

P= q= 1-p

=1-0.5

=0.5

d= 0.05

According to this equation the sample should be more than 384 people but due to time consuming the study was conducted with 50 patients.

3.5 Inclusion criteria

Pregnant women's age between 18-40 years who attended the BAVS maternity hospital. Because in Bangladeshi low marital age of a female is 18 and on the other hand from 18 years is the safe reproductive age for a female and after 40 years usually menopause occur and some degenerative changes starts within the body which may lead to create some musculoskeletal problem.

3.6 Exclusion criteria

Subjects who were not willing to participate in the study excluded because without permission data collection is unethical.

Subjects who had severe general illness were excluded because they can't provide correct information.

Pregnant women's age below 18 years and above 40 years was excluded because below 18 years is not ideal reproductive age, various gynecological problem may occur. After 40 years of age usually menopause occur and different musculoskeletal problem may start due to degenerative changes.

3.7 Sampling technique

50 participants were selected through convenient sampling technique from Bangladesh Association for Voluntary Services (BAVS) maternity Hospital, Mirpur-2, Dhaka.

Convenience sampling is a type of sampling where the first available primary data source has used for the research without additional requirements. In other words, this sampling method involves getting participants wherever can find them and typically wherever is convenient. In convenience sampling no inclusion criteria identified prior to selection of subjects. All subjects are invited to participate. The advantages of this type of sampling are the availability and the quickness with which data can be gathered. So, convenience sampling was chosen for this study to get the appropriate sample and to maintain the standard of the study.

3.8 Data collection procedure

A self-administered questionnaire was used to collect data. A close ended questionnaire was developed through literature review. Formal permission was taken from the authority of BAVS maternity hospital after that the data was collected by using question paper, consent form, pen, pencil and eraser. Before taking data participants were informed about the purpose of the study. Approximately 10 minutes was required from a participant to receive answer of questions. Section one included questions on demographics, such as age, residential area, educational status, profession of the participants; section two requested information on the information about Physiotherapy service in pregnancy and how they get informed about that; section three requested information on stage of pregnancy, having spine pain, urine urgency, muscle cramp & peripheral oedema, knowledge about role of physiotherapy service, accessibility of Physiotherapy service, referral by doctor and necessity of Physiotherapy service etc.

3.9 Data analysis

Data was analyzed with the software named Statistical Package for Social Science (SPSS) version 16.0. SPSS software mainly used to find out the frequencies.

3.10 Ethical Consideration

Participants were explained about his or her role in this study. Written consent including signature were received from every participants. The participants were informed clearly that their information would be kept confidential. Participants were assured that the study would not be harmful to them. The participants had the rights to withdraw consent and discontinue participation at any time. Information from this study was anonymously coded to ensure confidentiality. For conducting this research ethics committee have checked the proposal and allowed to carry out the research project. The formal permission was taken from the authority of BAVS hospital to collect the data. Data collection was started and complete within the allocated time frame. All the data was reviewed in strict secure and maintained confidentiality. The data files were strictly secured and it was not open in front others. BMRC and WHO guideline were followed. Institutional review board (IRB) of BHPI approval has been taken for conducting the study.

1. Sociodemographic Information

1.4.2.1 (i) Age range of the participants

Among n=50 participants the mean age of the participants was 27.3 ± 4.3 year. Minimum age was 20 year and maximum age was 37 years, n=13 (26%) was between 20-24 years, n=23 (46%) was between 25-29 years, n=11 (22%) was between 30-34 years and n=3 (6%) was between 35-39 years (Figure 1)

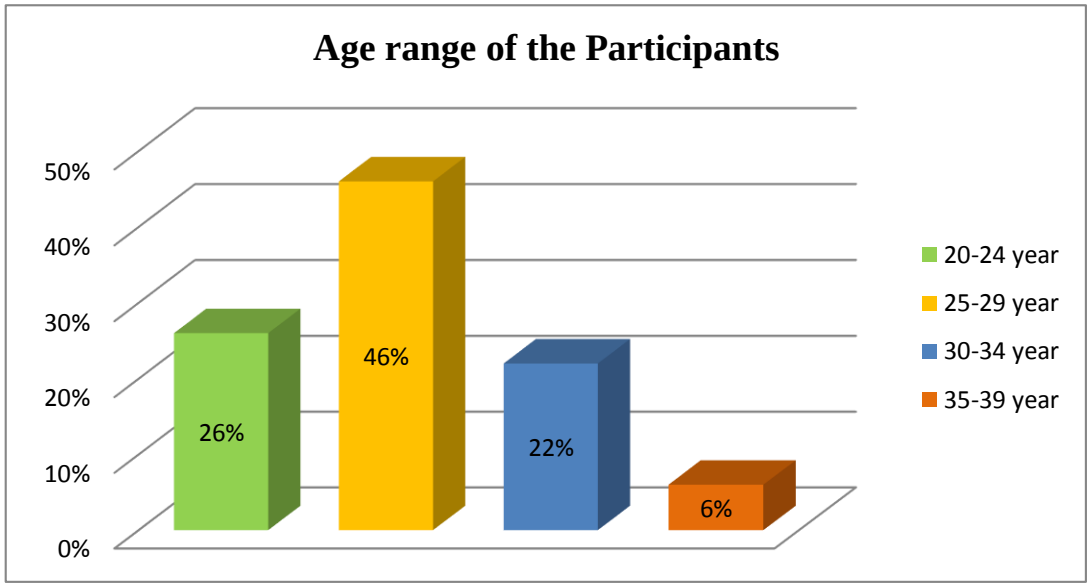


Figure-1: Age range of the participants.

1.4.2.1 (ii) Living area of participants

Study shows with 50 participants n=5 (10%) lives in rural area and n=45 (90%) lives in urban area (Figure 2).

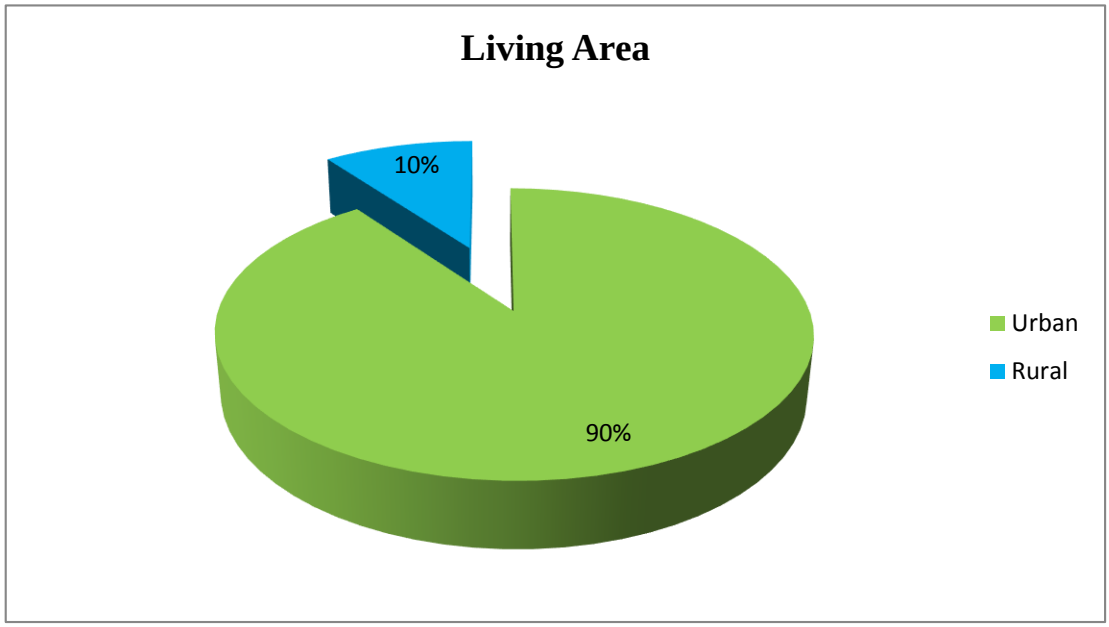


Figure-2: Living area of the participants.

1.4.2.1 (iii) Educational level of participants

This study find out that in all the pregnant women n=18 (36%) was Bachelor or above in their educational status, n=18 (36%) was complete higher secondary level, n=7 (14%) was complete secondary level of education, n=3 (6%) completed primary education, n=3 (6%) have some primary level education and n=1 (2%) have some secondary level of education (Figure 3).

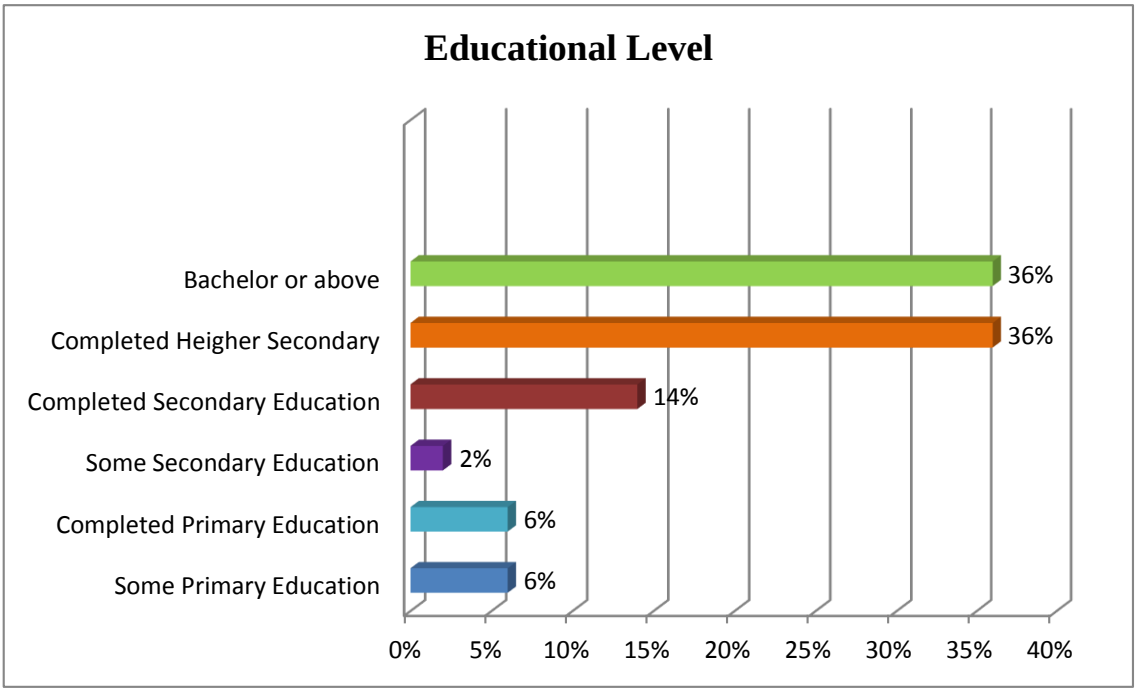


Figure-3: Educational level of participants.

1.4.2.1 (iv) Occupation of the participants

Study shows within all the participants n=36 (72%) was housewife, n=4 (8%) was student, n=3 (6%) are in Govt. job, n=3 (6%) are in private job, n=1 (2%) was teacher, n=1 (2%) was in business and n=2 (4%) are in others job like garments worker (Figure 4).

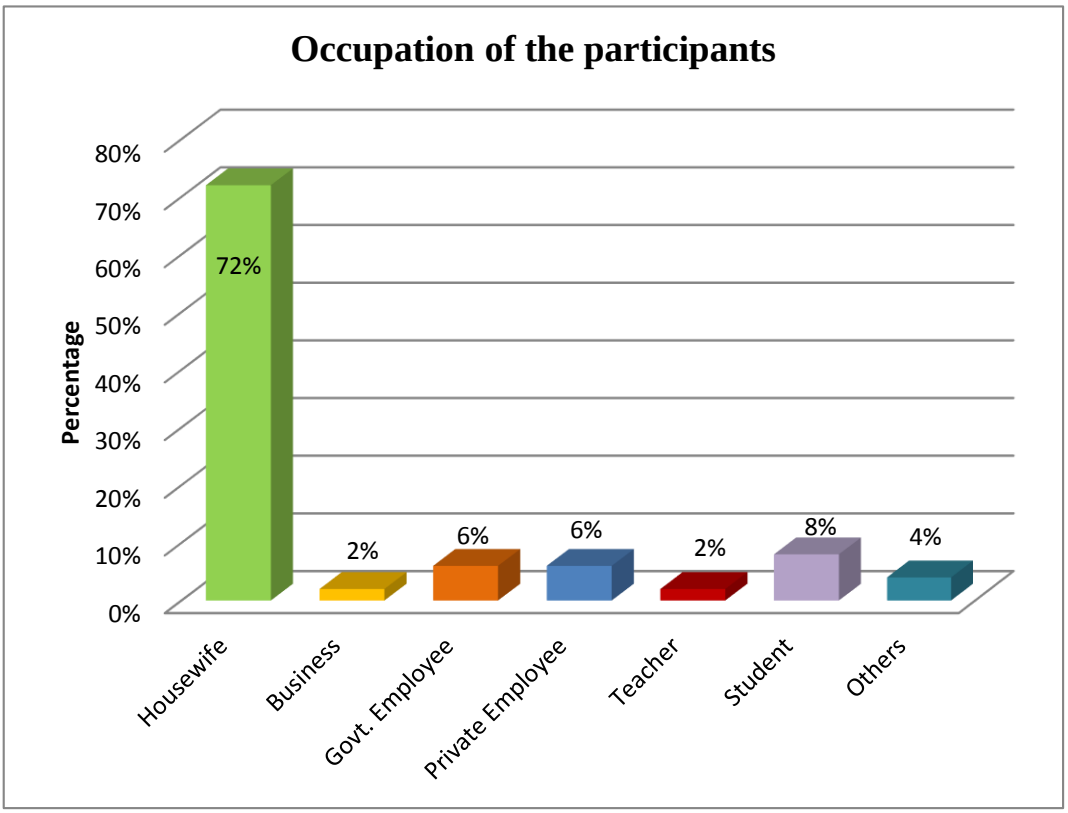


Figure-4: Occupation of the participants.

2. Awareness about Physiotherapy Service

1.4.2.2 (i) Knowledge about Physiotherapy service in pregnancy

Among the participants n=37 (74%) pregnant women does not know about the Physiotherapy service during pregnancy and n=13 (26%) pregnant women's have some knowledge about Physiotherapy service in pregnancy. Result shows that a large number of women do not know about the Physiotherapy service in pregnancy period (Figure 5).

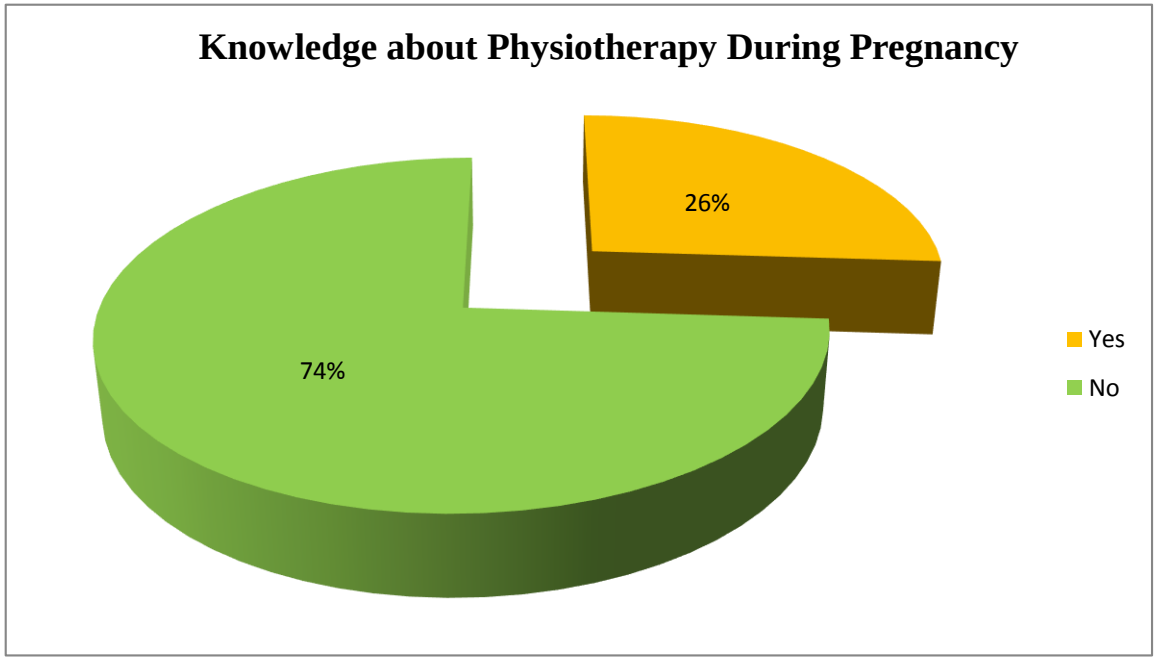


Figure-5: Knowledge about Physiotherapy service in pregnancy.

1.4.2.2 (ii) Information source of the participants

It was found that in all the participants n=37 (74%) does not know about physiotherapy service during pregnancy and only n=13 (26%) informed about physiotherapy service in pregnancy among them n=4 (8%) pregnant women was informed by their doctor, n=1 (2%) were informed by nurse and n=8 (16%) were informed about Physiotherapy service in pregnancy by different source like relatives, office colleague, neighbor, internet etc (Figure 6).

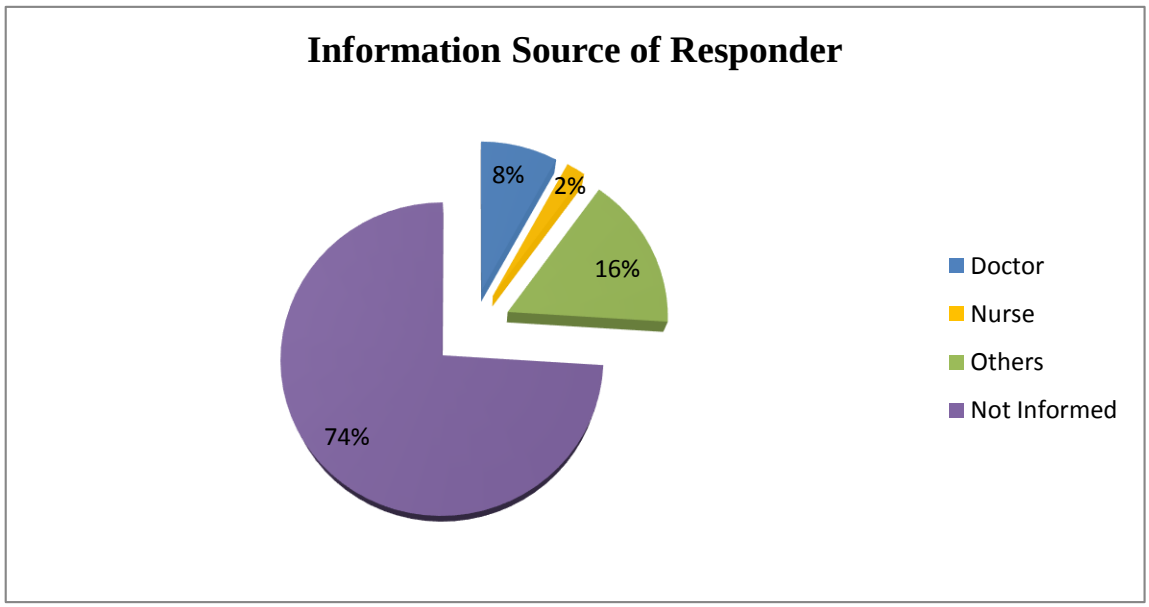


Figure-6: Information source of the participants about Physiotherapy service in Pregnancy.

1.4.2.2 (iii) Awareness about Physiotherapy for Existing Problem

In this study among the responder n=32 (64%) women do not know that Physiotherapy service is a very effective treatment for their spine and/or joint pain, urine urgency, oedema, tingling sentation and muscle cramp like symptom and only n= 18 (36%) pregnant women know that physiotherapy is a treatment option for their existing problem. Result shows that awareness about Physiotherapy service in pregnancy period is not satisfactory (Figure 7).

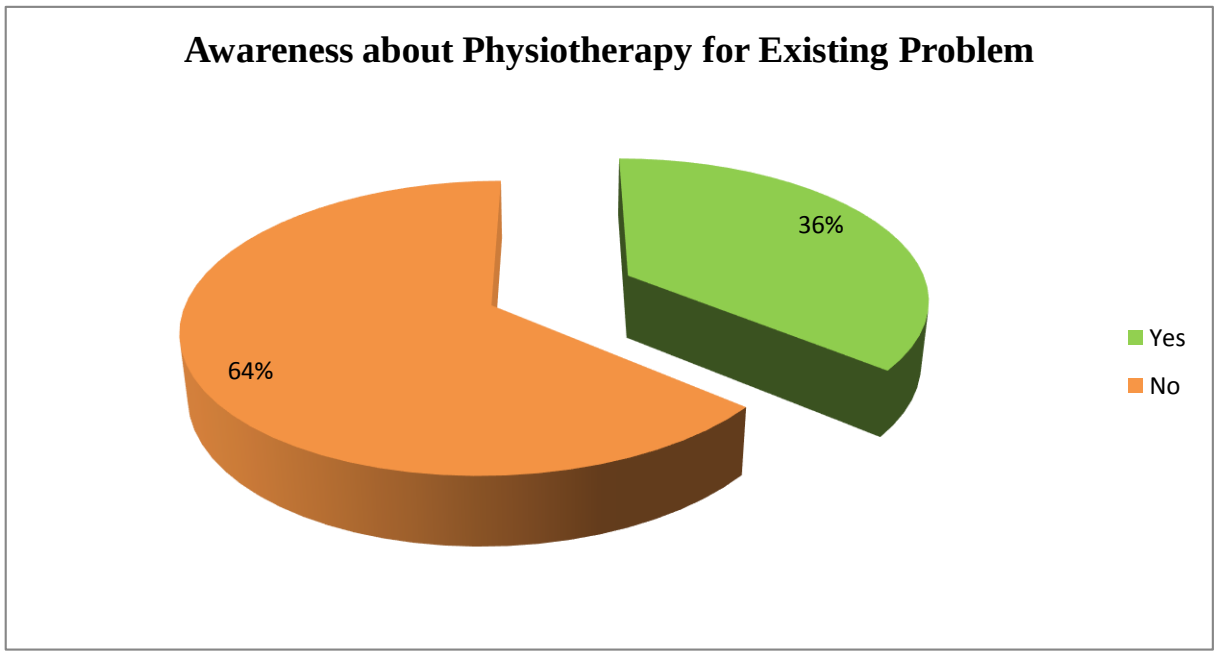


Figure-7: Awareness about Physiotherapy for Existing Problem.

1.4.2.2 (iv) Knowledge about Role of Physiotherapy in Pregnancy

Study shows in all the pregnant women only n=3 (6%) were have knowledge about role of physiotherapy service in pregnancy and the rest n=47 (94%) women's do not have any knowledge that Physiotherapy play vital role to minimize various symptom in pregnancy (Figure 8).

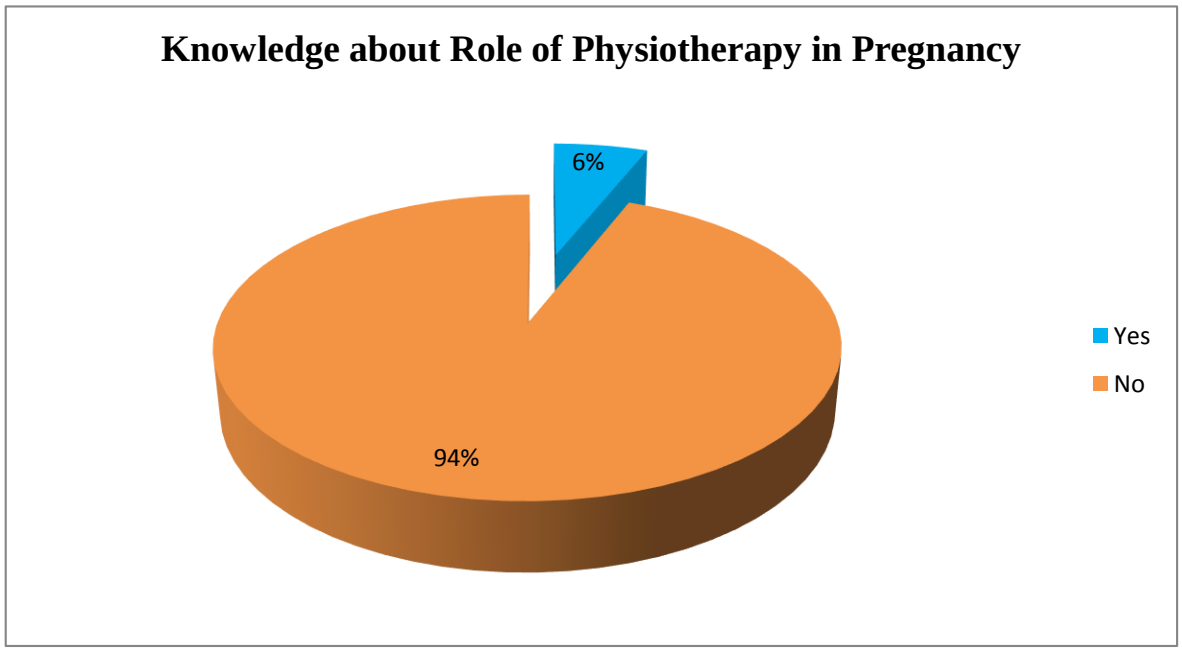


Figure-8: Knowledge about role of Physiotherapy in Pregnancy.

3. Factors Influence to Receive Physiotherapy Service

1.4.2.3 (i) Presence of Spine or joint pain

Result shows that in 50 pregnant women n=9 (18%) women's have no spine or other joint pain and n=41 (82%) pregnant women's have spine and/or other joint pain. Result shows that spine and/or joint pain are very common in pregnancy (Figure 9).

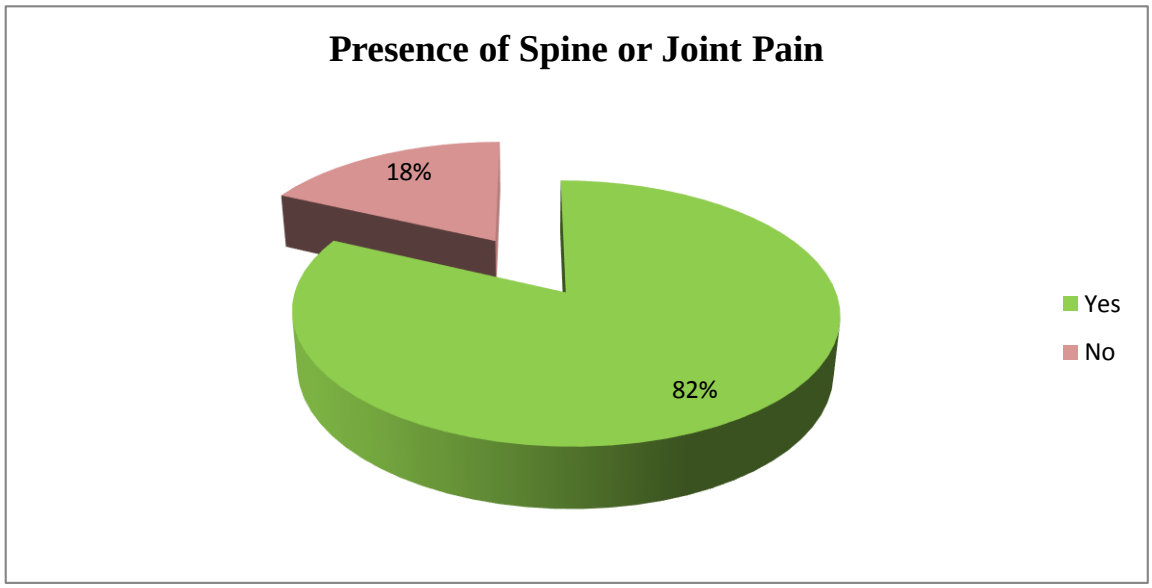


Figure-9: Presence of spine or joint pain.

1.4.2.3 (ii) Presence of urine urgency

Among all the participants n=27 (54%) women's have urgency of urination and n=23 (46%) women's have no urine urgency. Result shows that more or less urine urgency in pregnancy is a common observable fact (Figure 10).

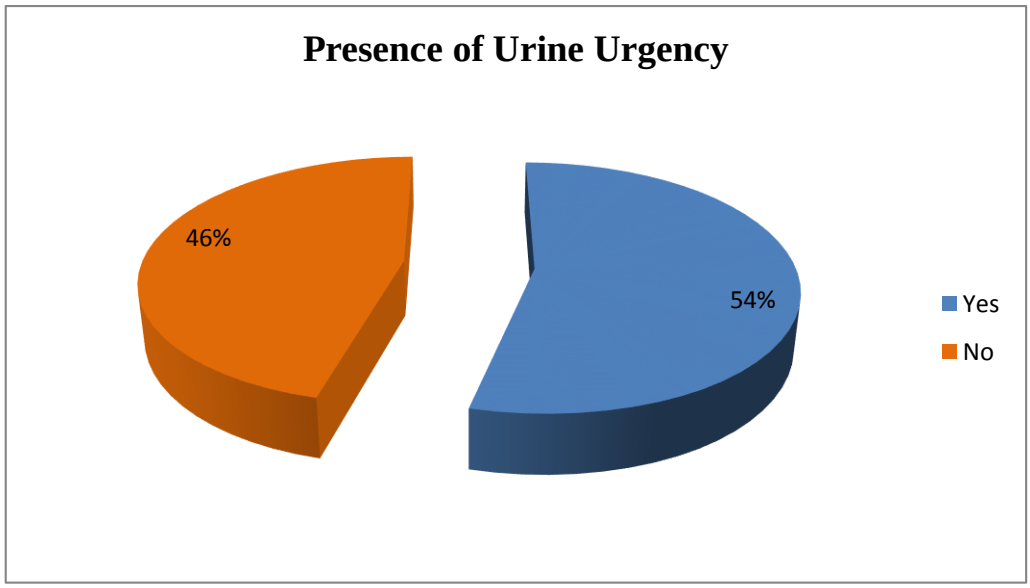


Figure-10: Presence of Urine urgency.

1.4.2.3 (iii) Presence of Oedema, Tingling Sensation and Muscle cramp

It was found within 50 participants n=15 (30%) women's have oedema, tingling sensation and muscle cramp and n=35 (70%) have no above mention symptom. Result shows that among all pregnant women 30% are suffer by peripheral oedema, tingling sensation and muscle cramp in their pregnancy period (Figure 11).

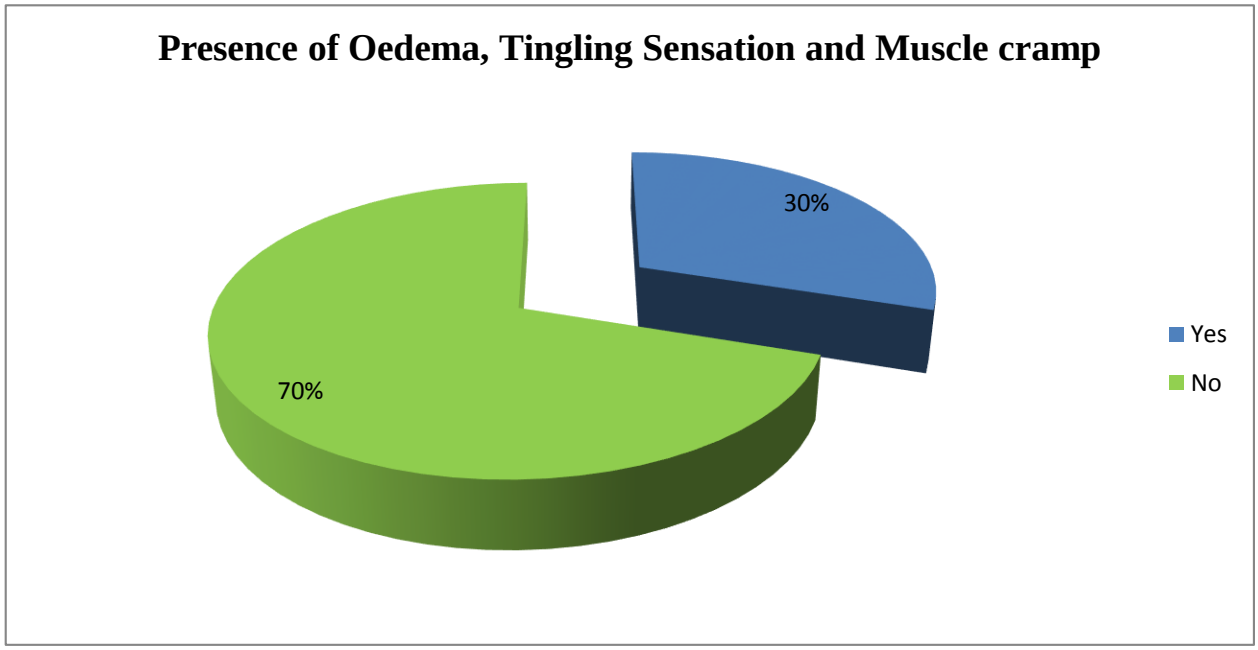


Figure-11: Presence of Oedema, tingling sensation and muscle cramp.

1.4.2.3 (iv) Stage of Pregnancy

Out of 50 pregnant women n=8 (16%) women were in first trimester, n=19 (38%) were in second trimester and n=23 (46%) pregnant women's were in third trimester in pregnancy (Figure 12).

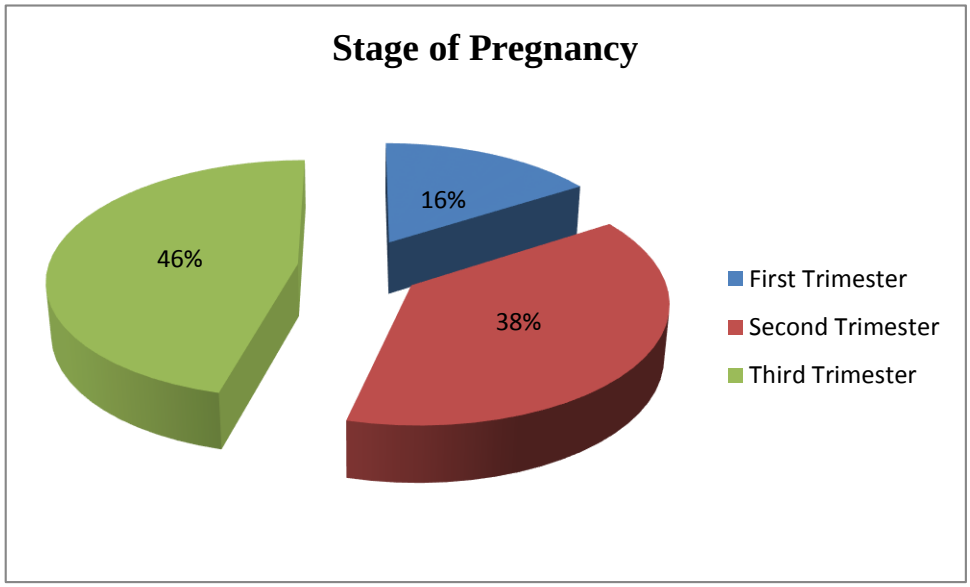


Figure-12: Stage of Pregnancy.

1.4.2.3 (v) Accessibility of Physiotherapy Service

Among all the pregnant women Physiotherapy service is not accessible for n=10 (20%) pregnant women and n=40 (80%) pregnant women's have accessibility or opportunity to take Physiotherapy service. Result shows that though maximum of the participants living in urban area but still they have no opportunity to take Physiotherapy service (Figure 13).

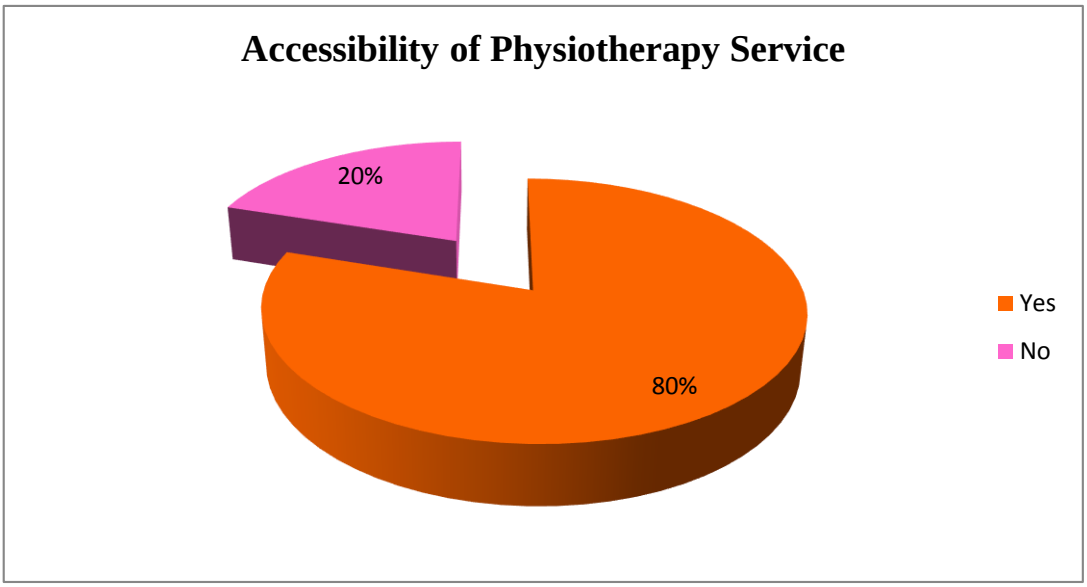


Figure-13: Accessibility of Physiotherapy Service.

1.4.2.3 (vi) Physicians Referral for Physiotherapy

Result shows that in all the participants only n=12 (24%) pregnant women were referred by their doctor to take Physiotherapy treatment for their existing problem and n=38 (76%) women were not referred or informed by their doctor that Physiotherapy service is an essential treatment in their pregnancy period. Result shows that a large number of pregnant women are not informed about Physiotherapy service by their doctor or health care provider (Figure 14).

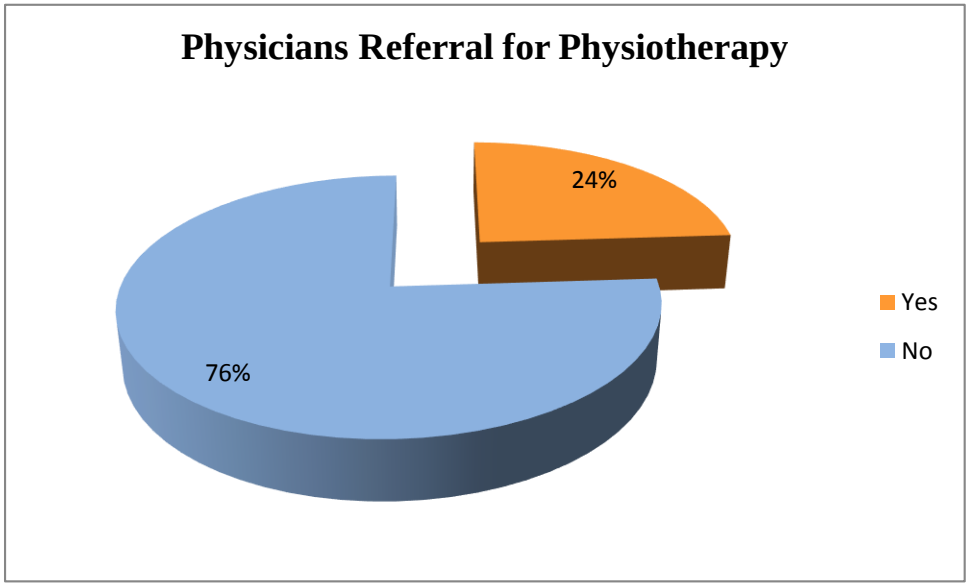


Figure-14: Physicians Referral for Physiotherapy.

1.4.2.3 (vii) Acceptance of Physiotherapy Service

It is found within all the participants n= 6 (12%) will not accept Physiotherapy service in their pregnancy period but rest n=39 (88%) pregnant women will take Physiotherapy service in their pregnancy period if it required for them without any harm (Figure 15).

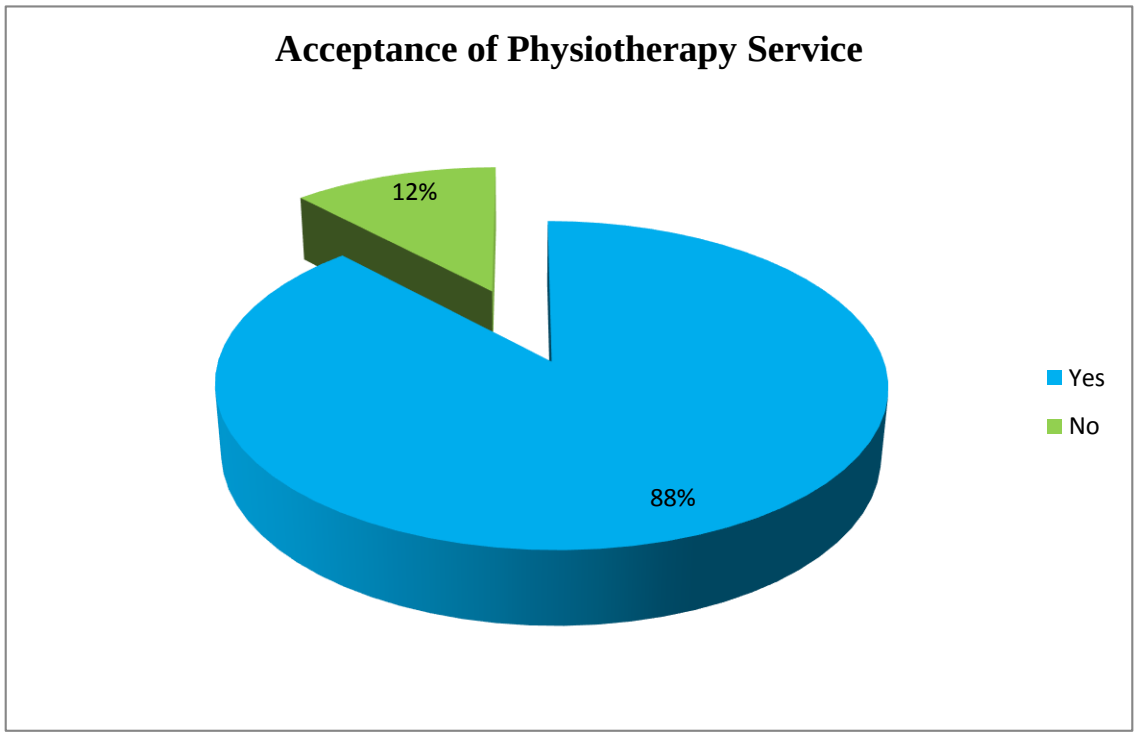


Figure-15: Acceptance of Physiotherapy Service.

4. Necessity of Physiotherapy Service

1.4.2.4 Perception about Necessity of Physiotherapy in Pregnancy

After informed by the researcher about role of Physiotherapy during pregnancy Maximum participant that is n=39 (88%) pregnant women think that Physiotherapy service is necessary for them to reduce their existing problem and rest n=6 (12%) pregnant women think that Physiotherapy service is not necessary for them during pregnancy period because of fear (Figure 16).

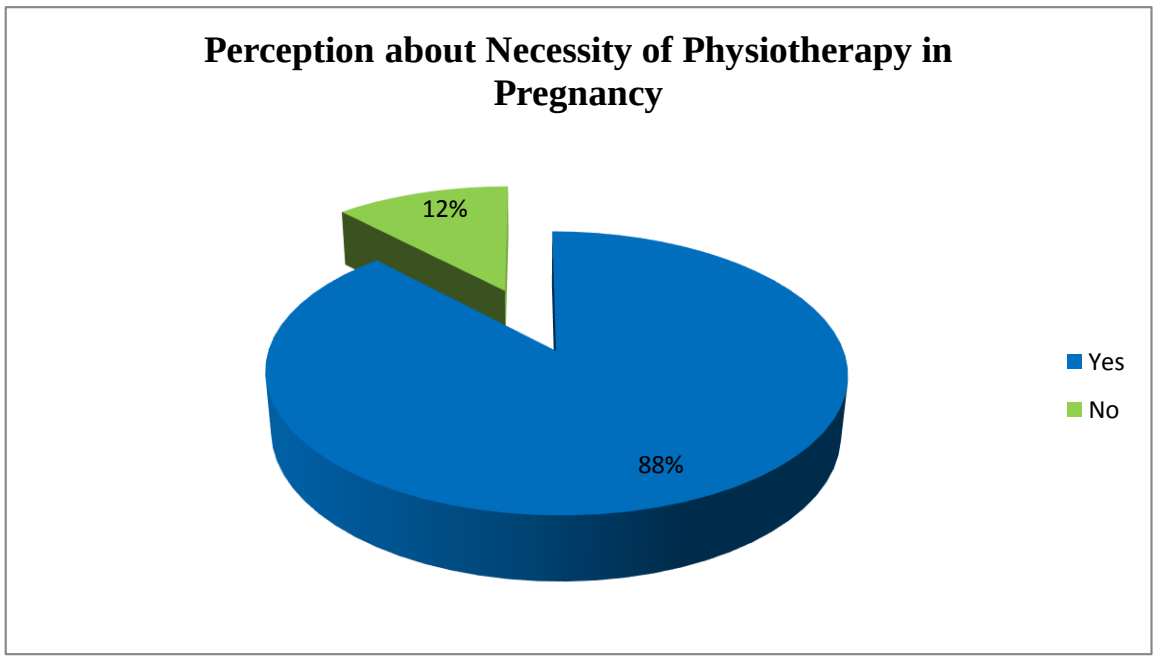


Figure-16: Perception about Necessity of Physiotherapy in Pregnancy.

CHAPTER-V DISCUSSION

Maternal mortality is a major challenge for developing countries. Most of these mortalities are preventable through access to and utilization of maternal health care services, as evidenced by many studies (Babalola & Fatusi, 2009). However, certain factors have been documented to affect access to and utilization of such services (Mekonnen & Mekonnen, 2007). This chapter discusses the findings of the study that was aimed at establishing pregnant women's awareness about antenatal physiotherapy services.

50 Pregnant women were studied where their mean age was 27.3 years and SD was 4.3, maximum pregnant were between 25-29 years. 90% of the participant of this study lives in urban area and only 10% of the participant lives in rural area. A large number of pregnant women are housewife (72%) here in my study and the educational level of the participants shows 36% were studied bachelor or above and 36% completed higher secondary level of education. Here result shows that only 26% of participant has knowledge about Physiotherapy services in pregnancy and rest of the participant that is 74% have no knowledge about Physiotherapy service in pregnancy. A research by Marly Sajan about awareness of Physiotherapy interventions among pregnant females in antenatal clinics, Buffalo city municipality, Eastern Cape, South Africa in 2013 shows that about 90% of pregnant women's are aware about antenatal services where as only 35.5% women knows about Physiotherapy service in pregnancy (Sajan, 2013).

In this study a huge number of participants that is 74% were not informed about Physiotherapy services in pregnancy where as 26% of the participants were informed by different source among them only 8% were informed by doctor, only 2% informed by nurse and the rest 16% were informed by other sources like by relatives, by colleague or by internet. A research published in June 2010 about Internet Use in Pregnancy Informs Women's Decision Making: A Web-Based Survey shows that most women (97%) used search engines such as Google to identify online web pages to access a large variety of pregnancy-related information and to use the Internet for pregnancy-related social networking, support, and electronic commerce. Nearly half

of the respondents reported dissatisfaction with information given by health professionals (48.6%) and lack of time to ask health professionals questions (46.5%) as key factors influencing them to access the Internet. Statistically, women's confidence levels significantly increased with respect to making decisions about their pregnancy after Internet usage ($p < 0.05$) (Lagan et al., 2010).

Current study shows that only 36% of the pregnant women were aware about Physiotherapy service for their existing problem and the rest 64% were not award about Physiotherapy service for their existing problem. Only 6% of the participants have knowledge about the role of Physiotherapy service during pregnancy and rest 94% participant do not have any knowledge about the role of Physiotherapy service in Pregnancy. A research by Marly Sajan about awareness of Physiotherapy interventions among pregnant females in antenatal clinics, Buffalo city municipality, Eastern Cape, South Africa in 2013 shows that only 35.5% pregnant women were aware about antenatal Physiotherapy services The high rate of awareness about the various antenatal services in this study could possibly be due to the source of dissemination of information and educational programs offered at the antenatal clinics. Over one third of respondents (35.5%) were aware of physiotherapy services. Midwives and nurses were the main sources of information (31.13%) of antenatal services. This was followed by family or friends who make up 0.35% of the source of information. When participants were asked if they are aware of physiotherapy in relation to antenatal care, overwhelming majority (64.5%) indicated not aware and over 35.5% were aware. Moreover, awareness of the antenatal services was associated with the educational level of the mothers. All of the mothers with a tertiary qualification were aware of the antenatal services as compared to the 84.8% mothers who had primary education. This finding therefore highlights the need for awareness to be focused with mothers with lower educational levels. A notable high number of participants, 242 out of 258, agreed that they received health information on health practice. However, the majority of the mothers (81.0%) did not receive or attend a physiotherapy health educational talk. This could be attributed to the fact that only 13.2% of the mothers were informed about physiotherapy services (Sajan, 2013).

Here in the study most of the pregnant women's that is 82% have spine and/or joint pain and the rest 18% have no spine or joint pain. A study held in Sweden 1988 about Low back pain during Pregnancy shows that among 862 participants about half of them developed some degree of low back pain, Seventy-nine women who were unable to continue their work because of severe low back pain were referred to an orthopedic surgeon for an orthoneurologic examination. The most common reason for severe low back pain was dysfunction of the sacroiliac joints (Berg et al., 2004). In 2012 study by Shimul Chanda about Prevalence of pregnancy related low back pain among the pregnant women at the selected hospital in Bangladesh shows that 51% pregnant women suffered by low back pain and mostly it occurred more than 26 year old pregnant women (Shimul, 2012).

Here in this study among 50 participants 54% pregnant women's have urine urgency and the rest 46% of the participant have no urine urgency and 30% of pregnant women's have oedema, tingling sensation and muscle cramp and the rest 70% of the participant have no symptom like that. A study in Bangladesh by Nusrat Sultana about Common Pregnancy Related Musculoskeletal Complaints Arising among the Women during Prenatal Period at Selected Hospitals in Bangladesh shows that 63.3% pregnant women suffered by low back pain, 54.4% of pregnant women have pelvic girdle pain, 44.4% participants have ankle pain and 37.8% pregnant women reported about leg muscle crimping and 14.4% participant have urinary incontinence (Nusrat, 2012).

Another study in Norwegian Institute of Public Health about Urinary incontinence during pregnancy shows that the prevalence of incontinence increased from 26% before pregnancy to 58% in week 30. The cumulative incidence was 46%. Stress urinary incontinence was the most common type of incontinence in week 30 of pregnancy, experienced by 31% of nulliparous and 42% of porous women (Wesnes et al., 2007).

Current study shows that 80% of the participants have access of Physiotherapy service as most of the participants lives in Dhaka city and the rest 20% of the participants have no access of Physiotherapy service though only 24% of participant were referred by doctor for Physiotherapy service for their existing problem whereas 76% of the

participant were not referred by doctor. 88% of the pregnant women think that Physiotherapy treatment is necessary treatment for pregnant women and they will receive Physiotherapy service if it required for them. A study in Pakistan about Awareness of Obstetricians/ Gynecologists Regarding the Role of Physiotherapy Services in Managing Obstetric Patients shows that among 300 participants that means among 300 Obstetrician or Gynecologist 41(13.7%) participants advised most of the time, 203(67.7%) occasionally and 56(18.7%) never advised their patients. Out of total, 194(64.7%) had an awareness about pre-natal physiotherapy exercises sessions but only 56(18.7%) refer their patients for the antenatal classes (p-value 0.001). From total 204(68.0%) answered yes regarding the role of postnatal exercise sessions but out of them only 60(20.0%) refer for the post-natal physiotherapy sessions regularly and 74(24.7%) occasionally (Munawar et al., 2013).

Another study about Use of complementary and alternative medicines by a sample of Australian women during pregnancy shows that Seventy-three per cent of women had used at least one kind of complementary therapy in the prior eight weeks of pregnancy. Over one-third of the women had visited at least one alternative medicine practitioner during pregnancy. Approximately one-third of the women reported taking CAM to alleviate a specific physical symptom, with 95.7% of these women reporting they either got completely better or a little bit better with use of CAM; one quarter reported planning to use an alternative therapy to assist with labour preparation. Age, number of physical symptoms experienced, income level and level of education were not associated with greater use of CAM ($P < 0.05$); however, women reporting more physical symptoms were more likely to consult a CAM practitioner (Skouteris et al., 2008).

Though the expected sample size was 384 for this study but due to resource constrain researcher could manage just 50 samples which is very small to generalize the result for the wider population of pregnant women. There are a few literatures about Physiotherapy and women's health in the perspective of Bangladesh so it is difficult to compare the study with the other research. In this study the researcher was able to collect data only from BAVS maternity hospital for a short period of time which will affect the result of the study to generalize for wider population. The questionnaire was

developed only through searching sufficient literature but considering the context of the demography of the population a pilot study would substantial before developing questionnaire.

CHAPTER-VII CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Musculoskeletal problem is very common during pregnancy. Proper physiotherapy could be helpful to minimize this problem and prevent other pregnancy related complications also but our pregnant mothers are not aware about existing physiotherapy services. So, in respect of Bangladesh, it is important to introduce physiotherapy service in every hospital as well as maternal health care center. The referral system among inter professionals in health sector is very poor in our country. It is very necessary to minimize gaps and lacks between them by frequently arrange workshop, seminars, congress etc to share knowledge and idea among them and build a good relationship. This study found poor level of awareness about Physiotherapy services during pregnancy. So, we need to raise awareness program for gynecological physiotherapy treatment and recommended for further study on postnatal musculoskeletal complaints.

6.2 Recommendation

The study highlighted the poor utilization of physiotherapy services, only one forth of participants has some knowledge about Physiotherapy service for pregnant women. It is important to ascertain further why antenatal physiotherapy services are low. Awareness should be created in the community to motivate pregnant women to attend antenatal care as well as physiotherapy service for their musculoskeletal problem as well as gynecological problems. However, physiotherapy services should be available in the Thana level so that rural people can get Physiotherapy service from there. Based on the results of the study, the following recommendations for improving Physiotherapy services during pregnancy were made that Regular basis workshop/seminars with gynecologist need to be arranged to share and viewed inter professional idea and knowledge among Physiotherapist and Gynecologist. So that they can refer patient to each other properly, Awareness campaigns need to be conducted by multidisciplinary teams to promote women's health through outreach programs, use of radio and broadcasting messages and educational sessions targeting the whole community about the role of Physiotherapy services during pregnancy. There must be established criteria for referral system. Professional doctors must be able to refer pregnant mothers to Physiotherapist for the appropriate musculoskeletal problems experienced during pregnancy. All health professionals should be given all the necessary skills to execute a holistic approach. Staff should be encouraged to update their skills and knowledge through courses, in services, workshops, seminars and congresses. In order to improve maternal health services, a multidisciplinary health team including the doctors, midwives, nurses, social workers, physiotherapists, and dieticians should promote health education in the surrounding clinics and communities. Further research can be done like specific problem in specific trimester of pregnancy, risk factors of developing musculoskeletal problems in pregnancy, Perception of gynecologist about Physiotherapy services in pregnancy, Quality of Physiotherapy service for treating pregnancy related problem and barrier to receive Physiotherapy service in pregnancy etc.

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APPENDIX

BANGLADESH HEALTH PROFESSIONS INSTITUTE

বাংলাদেশ হেলথ প্রফেশন্স ইনষ্টিটিউট (বিএইচপিআই)

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)

(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 7745464-5, 7741404 , Fax: 7745069

BHPI-Mirpur Campus, Plot-A/5, Block-A, Section-14, Mirpur, Dhaka-1206. Tel: 8020178,8053662-3, Fax: 8053661

সিআরপি-বিএইচপিআই/০৯/১৫/৬১ তারিখ ঃ ১৩.০৯.২০১৫

প্রতি
প্রশাসক
বাংলাদেশ এসোসিয়েশন ফর ভলান্টারী সার্ভিসেস মেটারনিটি হাসপাতাল
মিরপুর, ঢাকা।

বিষয় ঃ রিসার্চ প্রজেক্ট এর জন্য আপনার প্রতিষ্ঠান সফর ও তথ্য সংগ্রহ প্রসঙ্গে।

জনাব,

আপনার সদয় অবগতির জন্য জানাচ্ছি যে, পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্রে-সিআরপি'র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেলথ্ প্রফেশনস্ ইনষ্টিটিউট (বিএইচপিআই) ঢাকা বিশ্ববিদ্যালয় অনুমোদিত বিএসসি ইন ফিজিওথেরাপি কোর্স পরিচালনা করে আসছে।

উক্ত কোর্সের ছাত্রছাত্রীদের কোর্স কারিকুলামের অংশ হিসাবে বিভিন্ন বিষয়ের উপর রিসার্চ ও কোর্সওয়ার্ক করা বাধ্যতামুলক।

বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন ফিজিওথেরাপি কোর্সের ছাত্রী ফারহানা আফরোজ তার রিসার্চ সংক্রান্ত কাজের তথ্য সংগ্রহের জন্য আপনার সুবিধামত সময়ে আপনার প্রতিষ্ঠানে সফর করতে আগ্রহী। তার রিসার্চ শিরোনাম

" Pregnant Womes's awareness about Physiotherapy services in selected maternity hospital."

তাই তাকে আপনার প্রতিষ্ঠান সফর এবং প্রয়োজনীয় তথ্য প্রদান সহ সার্বিক সহযোগীতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

মোঃ ওবায়দুল হক
সহযোগী অধ্যাপক ও বিভাগীয় প্রধান
ফিজিওথেরাপি বিভাগ
বিএইচপিআই, সিআরপি।

BANGLADESH ASSOCIATION FOR VOLUNTARY STERILIZATION (BAVS)
DHAKA CLINIC

Plot # 7/5, Main Road, Section-2, Mirpur, Dhaka, Phone # 9002012 , 9002162, E-mail: bavs@dhaka.net

সূত্র ঃ বিএভিএস/ঢাঃ-ক্লি/২০১৫/৫৪ তারিখ ঃ ০৩/১০/২০১৫ইং

মোঃ ওবায়দুল হক
সহযোগী অধ্যাপক ও বিভাগীয় প্রধান
ফিজিওথেরাপী বিভাগ
বি.এইচ.পি.আই, সিআরপি।

বিষয়: Pregnant Women's awareness about Physiotherapy Services in selceted Maternity Hospital.

আদিষ্ট হয়ে জানানো যাচ্ছে যে উপরোক্ত উল্লেখিত বিষয়ে আপনাদের প্রয়োজনীয় ও সার্বিক সহযোগীতা দেয়ার ব্যবস্থা নেয়া হয়েছে। বিএসসি ইন ফিজিওথেরাপী কোর্সের ছাত্রী ফারহানা আফরোজ তাঁর রিসার্স সংক্রান্ত কাজের জন্য মোট কত দিনের ও কি কি বিষয়ে এই প্রতিষ্ঠানে সাহায্য সহযোগীতার প্রয়োজন তার একটি বিশদ বিবরণ নিম্ন সাক্ষরকারীর নিকট পেশ করতে বলা হচ্ছে।

ধন্যবাদান্তে

03/10/15

ডাঃ জোবাইদুল ইসলাম ভূঁইয়া
জেলা ব্যবস্থাপক
ঢাকা ক্লিনিক।
মিরপুর, ঢাকা।

অনুলিপিঃ-
১। প্রশাসক, বিএভিএস, প্রধান কার্যালয় - সদয় অবগতির জন্য।
২। অফিস কপি।

Leter DM

VERBAL CONSENT STATEMENT

(Please read out to the participant)

Assalamualaikum, my name is Farhana Afroz, 4th year B. Sc in Physiotherapy student of Bangladesh Health Professions Institute (BHPI), University of Dhaka. I am conducting this study for partial fulfillment of Bachelor degree. The title of the study is "**Pregnant women's awareness about Physiotherapy services in selected maternity hospital**." I would like to know about some personal and other related questions about service during pregnancy. This will take approximately 15 - 20 minutes.

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

If you have any query about the study, you may contact with me or my supervisor Md. Obaidul Haque, Associate professor and Head of the Physiotherapy department, BHPI, CRP, Savar, Dhaka-1343.

Do you have any questions before I start?

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

YES ☐

NO ☐

Signature of the Patient/Attendance……

Signature of the Interviewer…….

Signature of the witness.....

সম্মতিপত্র

(অংশগ্রহনকারীকে পড়ে শোনাতে হবে)

আসসালামুআলাইকুম,

আমার নাম ফারহানা আফরোজ, আমি এই গবেষণা প্রকল্পটি বাংলাদেশ হেলথ্ প্রফেশনস ইনষ্টিটিউট (বিএইচপিআই)-এ পরিচালনা করছি যা আমার ৪র্থ বর্ষ বি এসসি ইন ফিজিওথেরাপী কোর্সের অধিভুক্ত। আমার গবেষণার শিরোনাম হল-"ফিজিওথেরাপি চিকিৎসা সম্পর্কে গর্ভবতী নারীদের সচেতনতা" ।আমি এক্ষেত্রে আপনাকে কিছু ব্যক্তিগত এবং আনুষঙ্গিক প্রশ্ন করতে চাচ্ছি। এতে আনুমানিক ৫-১০ মিনিট সময় নিবো।

আমি আপনাকে অনুগত করছি যে, এটা আমার অধ্যয়নের অংশ এবং যা অন্য কোন উদ্দেশ্যে ব্যবহৃত হবে না। গবেষক সরাসরি এই অধ্যয়নের সাথে অন্তর্ভূক্ত নয়। তাই এই গবেষনায় আপনার অংশগ্রহণ বর্তমান ও ভবিষ্যৎ চিকিৎসায় কোন প্রকার প্রভাব ফেলবে না। আপনি যে সব তথ্য প্রদান করবেন তার গোপনীয়তা বজায় থাকবে এবং আপনার প্রতিবেদনের ঘটনা প্রবাহেএটা নিশ্চিত করা হবে যে এই তথ্যের উৎস অপ্রকাশিত থাকবে।

এই অধ্যয়নে আপনার অংশগ্রহণ স্বেচ্ছাপ্রণোদীত এবং আপনি যে কোন সময় এই অধ্যয়ন থেকে কোন নেতিবাচক ফলাফল ছাড়াই নিজেকে প্রত্যাহার করতে পারবেন। এছাড়াও কোন নির্দিষ্ট প্রশ্ন অপছন্দ হলে উত্তর না দেয়ার এবং সাক্ষাৎকারের সময় কোন উত্তর না দিতে চাওয়ার অধিকারও আপনার আছে।

এই অধ্যয়নে অংশ গ্রহণকারী হিসেবে যদি আপনার কোন প্রশ্ন থাকে তাহলে আপনি আমাকে অথবা/এবং মোঃ ওবায়দুল হক, সহযোগী অধ্যাপক, ফিজিওথেরাপি বিভাগীয় প্রধান, বি এইচ পিআই, সিআরপি, সাভার, ঢাকা-১৩৪৩-তে যোগাযোগ করতে পারেন।

সাক্ষাৎকার শুরু করার আগে আপনার কি কোন প্রশ্ন আছে?
আমি আপনার অনুমতি নিয়ে এই সাক্ষাৎকার শুরু করতে যাচ্ছি।

হ্যাঁ ☐
না ☐

১। অংশগ্রহনকারীর স্বাক্ষর এবং তারিখ.....

২। সাক্ষাৎগ্রহনকারীর স্বাক্ষর এবং তারিখ.....

৩।অভিভাবকের স্বাক্ষর এবং তারিখ.....

Pregnant women's awareness about Physiotherapy services at selected maternity hospital

Identification number:	Date of Interview:
Start time:	End time:
Name of the Patient:	
Name of the Interviewer:	
Consent Taken : Yes No	
Name and signature of witness	

Section 1: Demographic Questions:

QN	Questions and filters	Responses	Code
1.	May I know your age?	__|__| yrs	
2.	Address and conduct number:		
3.	Your residential area?	□ Urban □ Rural	01 02
4.	What is your educational qualification?	□ Never attended school □ Some primary education □ Completed primary education □ Some secondary education □ Completed secondary education □ Higher secondary □ Bachelor or above □ Other (Specify):----------	01 02 03 04 05 06 07 08
5.	What is your profession (occupation)?	□ Housewife □ Self employed □ Govt. employee □ Private employee □ Student □ Other (Specify): _____	01 02 03 04 05 06

Section 2: Awareness of antenatal care:

QN	Questions and filters	Responses	Code

1.	Do you know about the Physiotherapy services during pregnancy?	□ Yes □ No	01 02
2.	How do you get to know about that service?	□ Doctor □ Nurse □ Midwife □ Others.....	01 02 03 04

Section 3: Question about necessity of Physiotherapy services:

QN	Questions and filters	Responses	Code
1.	What is the Stage of your pregnancy?	□ First trimester □ Second trimester □ Third trimester	01 02 03
2.	Do you have Back pain, Neck pain and/or joint pain?	□ Yes □ No	01 02
3.	Do you have urine urgency?	□ Yes □ No	01 02
4.	Do you have oedema, tingling sensation, muscle cramp of hand and leg?	□ Yes □ No	01 02
5.	Do you know that Physiotherapy can help for these conditions?	□ Yes □ No	01 02
6.	Do you know about the role of Physiotherapy in pregnancy?	□ Yes □ No	01 02
7.	Are the Physiotherapy services accessible?	□ Yes □ No	01 02
8.	Are you ever attended or referred by a Doctor to Physiotherapy for any of physical problems experienced during pregnancy?	□ Yes □ No	01 02
09.	Will you go for physiotherapy	□ Yes	01

	services if it were recommended?	□ No	02
10.	Do you think that Physiotherapy service is necessary for Pregnant women?	□ Yes □ No	01 02

“ফিজিওথেরাপি চিকিৎসা সম্পর্কে গর্ভবতী নারীদের সচেতনতা”

ধাপ-১: আর্থ-সামাজিক বিষয়ক প্রশ্নসমূহ:

প্রশ্ন নং	প্রশ্নাবলী/প্রশ্নসমূহ	সম্ভাব্য উত্তর	কোড
১।	আপনার বয়স জানতে পারি?	.....বৎসর	
২।	ঠিকানা ও মোবাইল/ ফোন নাম্বারঃ		
৩।	আপনার আবাসিক এলাকা কি?	☐ শহর ☐ গ্রাম	০১ ০২
৪।	আপনার শিক্ষাগত যোগ্যতা?	☐ নিরক্ষর ☐ কিছু প্রাথমিক শিক্ষা ☐ প্রাইমারি স্কুল পাস ☐ কিছু মাধ্যমিক শিক্ষা ☐ এস এস সি পাস ☐ এইচ এস সি পাস ☐ স্নাতক বা এর অধিক ☐ অন্যান্য	০১ ০২ ০৩ ০৪ ০৫ ০৬ ০৭ ০৮
৫।	আপনার পেশা কি?	☐ গৃহিনী ☐ ব্যবসায়ী ☐ সরকারী চাকুরী ☐ বেসরকারী চাকুরী ☐ শিক্ষাকতা ☐ ছাত্রী ☐ অন্যান্য	০১ ০২ ০৩ ০৪ ০৫ ০৬ ০৭

ধাপ-২: গর্ভকালীন চিকিৎসা সচেতনতা বিষয়ক প্রশ্নসমূহ:

প্রশ্ন নং	প্রশ্নাবলী/প্রশ্নসমূহ	সম্ভাব্য উত্তর	কোড

১।	আপনি কি গর্ভবতী নারীদের ফিজিওথেরাপি চিকিৎসা সম্পর্কে অবহিত/জানেন?	☐ হ্যাঁ ☐ না	০১ ০২
২।	আপনি কিভাবে এই চিকিৎসা সম্পর্কে জানতে পারলেন?	☐ ডাক্তার ☐ সেবিকা ☐ দাই/ধাত্রী ☐ অন্যান্য	০১ ০২ ০৩ ০৪

ধাপ-৩: ফিজিওথেরাপি চিকিৎসার প্রয়োজনীয়তা বিষয়ক প্রশ্নসমূহ:

প্রশ্ননং	প্রশ্নাবলী/প্রশ্নসমূহ	সম্ভাব্য উত্তর	কোড
১।	আপনার গর্ভাবস্তার ধাপ কোনটি?	☐ প্রথম ধাপ ☐ দ্বিতীয় ধাপ ☐ তৃতীয় ধাপ	০১ ০২ ০৩
২।	আপনার কোমর ব্যাথা, ঘাড় ব্যাথা বা এবং অন্য কোন জয়েন্ট ব্যাথা আছে কি?	☐ হ্যাঁ ☐ না	০১ ০২
৩।	আপনার কি প্রসাব ধরে রাখতে কষ্ট হয় বা বেগ আসলে দ্রুত টয়লেটে যেতে হয়?	☐ হ্যাঁ ☐ না	০১ ০২
৪।	আপনার কি হাত পায়ে পানি আসে, শিরশির করে বা হাত পায়ের মাংসপেশীতে কামড়ায় বা চাবায়?	☐ হ্যাঁ ☐ না	০১ ০২
৫।	আপনি কি জানেন আপনার উক্ত সমস্যায় ফিজিওথেরাপি একটি কার্যকরী চিকিৎসা সেবা?	☐ হ্যাঁ ☐ না	০১ ০২
৬।	গর্ভকালীন অবস্থায় ফিজিওথেরাপি চিকিৎসার ভূমিকা সম্পর্কে আপনি কি জানেন?	☐ হ্যাঁ ☐ না	০১ ০২
৭।	ফিজিওথেরাপি চিকিৎসা কি আপনার জন্য সহজপ্রাপ্য?	☐ হ্যাঁ	০১ ০২

		□ না	
৮।	গর্ভকালীন অবস্থায় কোন সমস্যার জন্য আপনি কি কখনো ফিজিওথেরাপি গ্রহন করেছে বা আপনার ডাক্তার কি ফিজিওথেরাপি চিকিৎসার জন্য পরামর্শ দিয়েছেন?	□ হ্যাঁ □ না	০১ ০২
৯।	আপনি কি ফিজিওথেরাপি চিকিৎসা গ্রহণ করবেন, যদি এটা আপনার জন্য প্রয়োজনীয় হয়?	□ হ্যাঁ □ না	০১ ০২
১০।	আপনি কি মনে করেন ফিজিওথেরাপি চিকিৎসাগর্ভবর্তী নারীদের জন্য প্রয়োজন?	□ হ্যাঁ □ না	০১ ০২