Awareness and Attitude towards Reproductive Health among Female Population in Bangladesh

A Project Report to be submitted in the Department of Pharmacy for the Partial Fulfillment of the Degree of Bachelor of Pharmacy.

Submitted By

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DECLARATION BY THE RESEARCH CANDIDATE

I, Fariha Tasnim, ID: 2013-1-70-028, hereby declare that the dissertation entitled **"Awareness and Attitude towards Reproductive Health among Female Population in Bangladesh''** submitted to the Department of Pharmacy, East West University, in the partial fulfillment of the requirement for the degree of Bachelor of Pharmacy (Honors) is a genuine & authentic research work carried out by me. The contents of this dissertation, in full or in parts, have not been submitted to any other institute or University for the award of any degree or Diploma of Fellowship.

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CERTIFICATION BY THE SUPERVISOR

This is to certify that the dissertation, entitled **"Awareness and Attitude towards Reproductive Health among Female Population in Bangladesh"** is a bona fide research work done by Fariha Tasnim (ID: 2013-1-70-028), in partial fulfillment of the requirement for the degree of Bachelor of Pharmacy under my supervision.

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DEDICATION

This research paper is dedicated to my beloved parents for their unconditional support.

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List of Abbreviation

STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
HIV	Human Immunodeficiency Virus
GnRH	Gonadotropin Releasing Hormone
FSH	Follicular Stimulating Hormone
LH	Luteinising Hormone
PMS	Premenstrual Syndrome
PCOS	Polycystic Ovary Syndrome

Abstract

Reproductive health is a major concern for the development of youth generation. Ensuring a better reproductive health is a basic right for the young generation. It is a big challenge for many under developed and developing country to protect the young people's reproductive health especially the female. Lack of information, education and knowledge are great hindrance to this. In Bangladesh the knowledge level among the adolescent girls about female reproductive health is not so good especially in slum area. The objective of the study was to assess the awareness and attitude of female towards their reproductive health in our country. A total of 259 females aged between 16 to 23 years age, both from non slum and slum area participated in the study representing the young generation of the nation. They responded to a structured questionnaires and having heard of the disease in question was defined as 'awareness' and having some opinions and understandings of some reproductive health issue was defined as 'knowledge'. The knowledge about the legal age of marriage for female across the entire population was (71.43%). More or less the respondents heard about some sexually transmitted diseases but mostly (62.16%) heard about HIV. The respondents were knowledgeable about different ways for prevention of sexually transmitted disease but (57.92%) commonly known about condom. Only 39% female have the knowledge of identifying the fertility period. About 78% had no idea about inadequate gap between pregnancies and only 15% had their conception correct. The knowledge among the method of contraception was highest for oral contraceptive pills (65.25%) and the second commonly known method was using condom (44.02%). The knowledge about the infertility caused by contraceptive pills was 54% among the respondents. From the result it was seen that the knowledge of the reproductive health was not at satisfactory level among the young generation of the country. Such awareness and knowledge could lead to better understanding and acceptance of the importance of the reproductive health and help to flourish the female sector of the society.

Key Words- Reproductive Health, Sexually Transmitted Disease, Contraception, Pregnancy, Infertility.

Chapter I

Introduction

1.1 Reproductive Health

According to WHO, reproductive health is the state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, it addresses the reproductive processes, functions and system at all stages of life. Reproductive health system is the most fragile system in the body. So it is essential to protect one's own reproductive system for future fertility. The decisions which one makes as a young person can affect the ability to have children later in life. By engaging in unprotected sex, one may put themselves at risk for sexually transmitted infections (STIs). If STIs go untreated they can cause fertility problems, particularly in women. A woman's reproductive system is a delicate and complex system in the body. It is a set of body parts that contributes to reproduction, such as ovulation and pregnancy. This system plays an important role in maintaining balance in the whole body through hormone production and interaction. So it is important to take steps to protect it from infections and injury, and prevent problems—including some long-term health problems. Taking care of oneself and making healthy choices can help protect one and her loved ones. Protecting the reproductive system also means having control of one's health, if and when, she becomes pregnant (Center for Disease Control and Prevention, 2015).

1.2 Importance of Reproductive Health Knowledge

Young people are particularly vulnerable to the adverse consequences of early sexual behavior and as such are widely recognized to be one of the most important groups for reproductive health interventions. This increased vulnerability is caused by a number of biological, behavioral, and psychological factors including hormonal changes at puberty, cervical anatomy, immunological naivety, inability to recognize symptoms of infection, sexual experimentation including experimentation with same sex partners, non-consensual sex, imperceptions of risk, immaturity of communication skills, contraception choice, poor health seeking behavior, and alcohol or illicit substance use. In addition, structural (societal) factors that facilitate HIV and STI spread are also well documented. Economic deprivation, sex inequalities and mobility, including

social disruption, are all important determinants of HIV /STI spread. So to reduce these adverse consequences and to improve the young people's health a minimum knowledge on reproductive health is necessary (Cowan, 2002).

1.3 Reproductive Health Topics

Reproductive health is a broad topic, intimately tied to every person's quality of life. It is about helping people navigate the hormonal changes in their bodies, whether in adolescence or in menopause. It is about choosing whether and when to be pregnant, and being able to have a safe and healthy pregnancy. It is about understanding ourselves as sexual beings and how our sexuality affects our relationships and our health. Reproductive health is about helping people live long and satisfying lives.

According to ARHP (Association of Reproductive Health Professionals), the reproductive health topics are:

- Abortion
- Adolescent Health
- Contraception
- Emergency Contraception
- Healthy Pregnancy
- HIV/AIDS
- Male Reproductive Health
- Menopause
- Reproductive Cancers
- Sex and Sexuality
- Sexually Transmitted Diseases/Infections
- Urologic and Gynecologic Disorders (Association of Reproductive Health Professionals, 2016).

1.4 Topics covered in Female Reproductive Health

Women's reproductive health covers different sectors. A woman has reproductive organs both inside and outside her body. All the organs play a role in the reproductive process, which includes:

a. Menstrual cycle—a woman's monthly cycle, which includes getting period

b. Conception—when a woman's egg is fertilized by a man's sperm

c. Pregnancy

d. Childbirth

1.4.1 Female Reproductive System

1.4.1.1 Major reproductive organs and their functions:

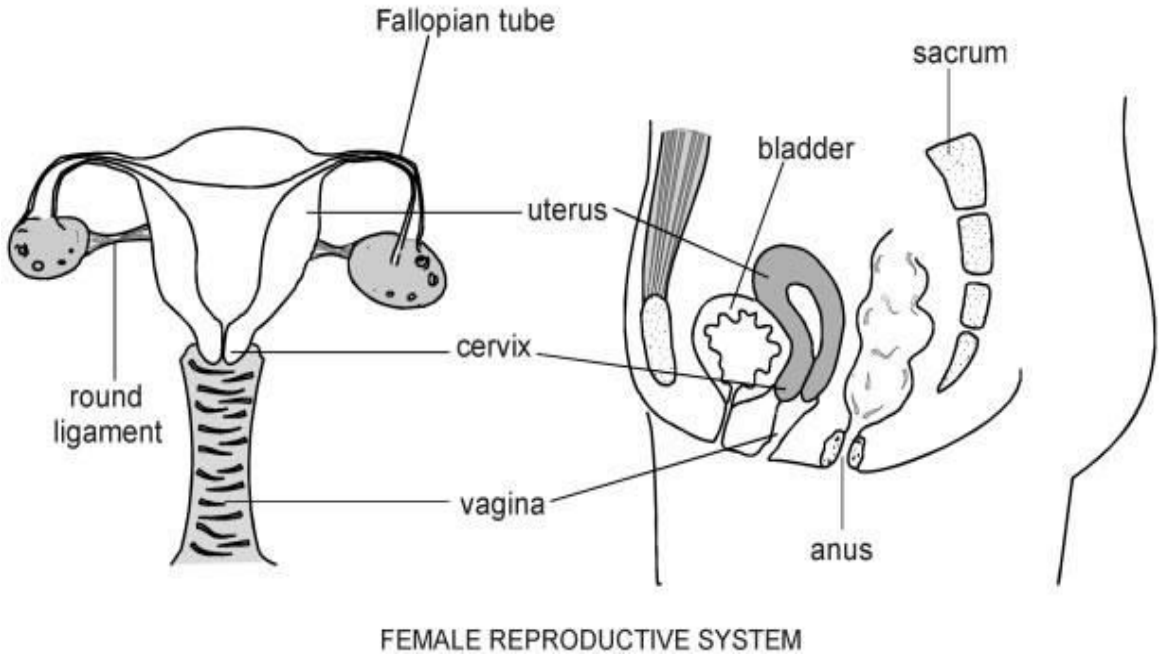

Fig 1.1: Female Reproductive System (Kenny, 2010)

Ovaries—These two small glands contain eggs (ova) and make hormones. One of the ovaries releases an egg about once a month as part of the menstrual cycle. This is called ovulation.

Fallopian tube— narrow tubes that are attached to the upper part of the uterus. They serve as tunnels for the ova to travel from the ovaries to the uterus. The fertilisation of an egg by a sperm (conception) normally occurs in the uterine

tubes. The fertilised egg then moves to the uterus, where it implants into the lining of the uterine wall.

Uterus—The uterus, or womb, is a hollow, pear-shaped organ. The tissue that lines the uterus is called the endometrium. If a fertilized egg attaches itself to the lining of the uterus, it may continue to develop into a fetus. The uterus expands as the fetus grows. The muscular walls of the uterus help to push the mature fetus out during birth. If pregnancy does not occur, the egg is shed along with the blood and tissue that lines the uterus. This is menstruation, also called getting your period (Patient, 2015).

Cervix—This narrow entryway connects the vagina and uterus. The cervix is flexible so that it can expand to let a baby pass through during birth.

Vagina—Also called the birth canal, the vagina stretches during childbirth.

The external female genital organ is the vulva. The vulva has five parts: mons pubis, labia, clitoris, urinary opening, and vaginal opening.

Vulva— covers the entrance to the vagina.

Mons pubis —is the mound of tissue and skin above your legs, in the middle. This area becomes covered with hair when you go through puberty.

Labia— are the two sets of skin folds (often called lips) on either side of the opening of the vagina.

Labia majora— are the outer lips, and the **labia minora** are the inner lips. It is normal for the labia to look different from each other.

Clitoris— is a small, sensitive bump at the bottom of the mons pubis that is covered by the labia minora.

Urinary opening— below the clitoris, is where urine leaves the body.

Vaginal opening— is the entry to the vagina and is found below the urinary opening (Girlshealth.gov, 2014).

1.4.2 Menstrual Cycle

Hormones are key to reproductive health in all aspects of a woman's sexual life. They regulate menstruation, fertility, menopause, and sex drive (libido). The main hormones affecting the menstrual cycle and fertility are produced by glands in the brain and by the ovaries.

A part of the brain called the hypothalamus produces GnRH (gonadotropin-releasing hormone). GnRH is a hormone that triggers the pituitary—a pea-sized gland just below the hypothalamus—to release two other hormones: follicle stimulating hormone (FSH) and luteinizing hormone (LH). FSH and LH in turn start the process of ovulation (egg release) in the ovaries.

During this process, the ovaries also produce estrogen and progesterone, both of which help prepare the uterus for pregnancy. If pregnancy doesn't occur, menstruation, the shedding of the lining of the uterus, marks the end of the menstrual cycle. If any of the hormones involved in the menstrual cycle are out of balance, the result can be irregular or missed periods.

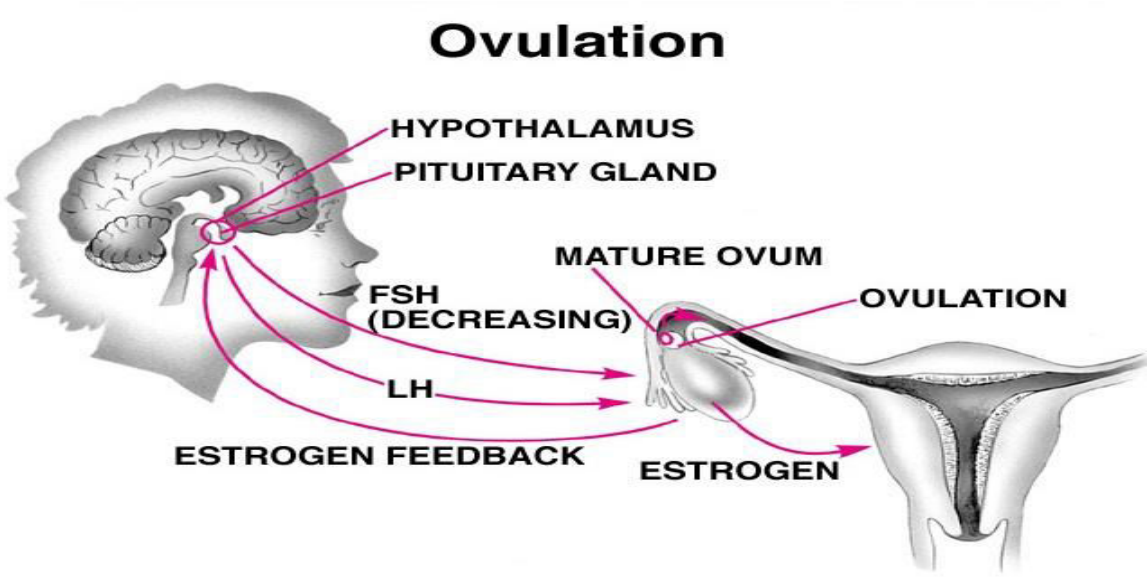

Figure 1.2: Regulation of Ovulation (Kelly Sexuality Today: The Human Perspective (1998).

During their reproductive years, women have regular monthly menstrual periods because they ovulate regularly each month. Eggs mature inside of fluid-filled spheres called "follicles." At the beginning of each menstrual cycle when a woman is having her period, a hormone produced in the pituitary gland, which is

located in the brain, stimulates a group of follicles to grow more rapidly on both ovaries. The pituitary hormone that stimulates the ovaries is called follicle-stimulating hormone (FSH). Normally, only one of those follicles will reach maturity and release an egg (ovulate); the remainder gradually will stop growing and degenerate. Pregnancy results if the egg becomes fertilized and implants in the lining of the uterus (endometrium). If pregnancy does not occur, the endometrium is shed as the menstrual flow and the cycle begins again. In their early teens, girls often have irregular ovulation resulting in irregular menstrual cycles, but by age 16 they should have established regular ovulation resulting in regular periods. A woman's cycles will remain regular, 26 to 35 days, until her late 30s to early 40s when she may notice that her cycles become shorter. As time passes, she will begin to skip ovulation resulting in missed periods. Ultimately, periods become increasingly infrequent until they cease completely. When a woman has not had a menstrual period for 1 full year, she is said to be in menopause.

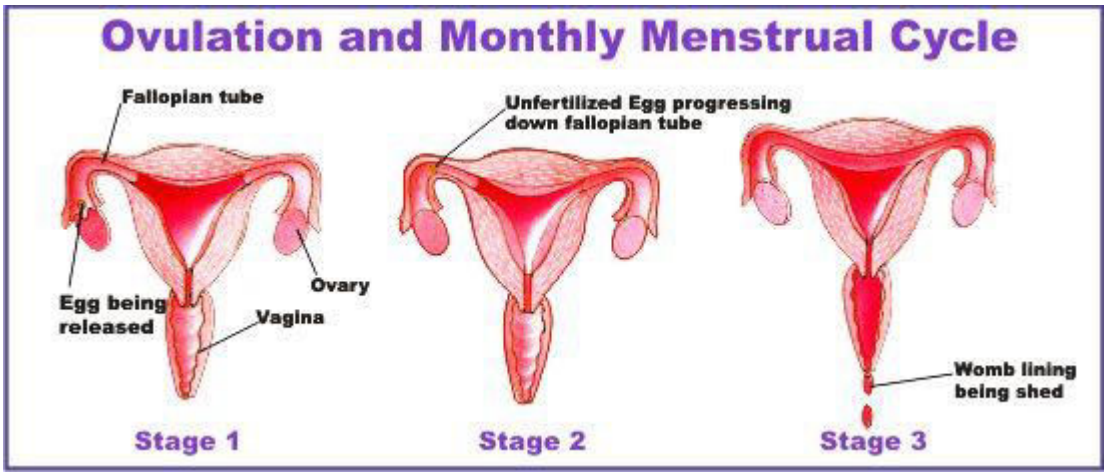

Figure 1.3: Ovulation and Monthly Menstrual Cycle (Pregnancy, 2015)

As women age, fertility declines due to normal, age-related changes that occur in the ovaries. Unlike men, who continue to produce sperm throughout their lives, a woman is born with all the egg-containing follicles in her ovaries that she will ever have. At birth there are about one million follicles. By puberty that number will have dropped to about 300,000. Of the follicles remaining at puberty, only about 300 will be ovulated during the reproductive years. The majority of

follicles are not used up by ovulation, but through an ongoing gradual process of loss called atresia. Atresia is a degenerative process that occurs regardless of whether one is pregnant, has normal menstrual cycles, use birth control, or are undergoing infertility treatment (American Society for Reproductive Medicine, 2016).

1.5 Normal Menstrual Cycle

1.5.1 Menarche

According to The American Congress of Obstetricians and Gynecologists the median age at menarche is relatively —between 12 years and 13 years. Studies have shown that a higher gain in body mass index during childhood is related to an earlier onset of puberty that may result from attainment of a minimal requisite body mass index at a younger age. Environmental factors, including socioeconomic conditions, nutrition, and access to preventive health care, may influence the timing and progression of puberty.

1.5.2 Cycle Length and Ovulation

Menstrual cycles are often irregular during adolescence, particularly the interval from the first cycle to the second cycle. Most females bleed for 2–7 days during their first menses. Immaturity of the hypothalamic–pituitary–ovarian axis during the early years after menarche often results in an ovulation and cycles may be somewhat long; however, 90% of cycles will be within the range of 21–45 days, although short cycles of less than 20 days and long cycles of more than 45 days may occur. By the third year after menarche, 60–80% of menstrual cycles are 21–34 days long, as is typical of adults (10-12) (The American Congress of Obstetricians and Gynecologists, 2015).

Box 1. Normal Menstrual Cycles in Adolescent Girls ⇦

Menarche (median age):	12.43 years
Mean cycle interval:	32.2 days in first gynecologic year
Menstrual cycle interval:	Typically 21–45 days
Menstrual flow length:	7 days or less
Menstrual product use:	Three to six pads or tampons per day

Figure 1.4: Normal Menstrual Cycle (The American Congress of Obstetricians and Gynecologists, 2015)

1.5.3 Premenstrual Syndrome

Approximately 85% of women who menstruate report changes in the days or weeks before their menstruation that cause problems that affect their normal lives. This is known as Premenstrual Syndrome (PMS). PMS is a term commonly used to describe a wide variety of physical and psychological symptoms associated with the menstrual cycle. About 30 to 40 percent of women experience symptoms severe enough to disrupt their lifestyles. There are more than 150 documented symptoms of PMS, the most common of which is depression. Symptoms typically develop about five to seven days before the period and disappear once period begins or soon after.

Physical symptoms associated with PMS include:

- bloating
- swollen, painful breasts
- fatigue
- constipation
- headaches
- clumsiness

Emotional symptoms associated with PMS include:

- anger
- anxiety or confusion
- mood swings and tension
- crying and depression
- inability to concentrate

PMS appears to be caused by rising and falling levels of the hormones estrogen and progesterone, which may influence brain chemicals, including serotonin, a substance that has a strong affect on mood.

PMS differs from other menstrual cycle symptoms because symptoms:

- tend to increase in severity as the cycle progresses
- are relieved when menstrual flow begins or shortly after
- are present for at least three consecutive menstrual cycles

Symptoms of PMS may increase in severity following each pregnancy and may worsen with age until they stop at menopause (Healthy Women, 2016).

1.5.4 Late or Missed Period

Sometimes a period may come late or be missed for the month. Frequently, a woman's first thought is that she is pregnant. Yes, that could be the case, but there are times when a woman may be late or miss her period for other unsuspected reasons.

These reasons include:

- Significant weight gain/loss
- Fatigue
- Hormonal problems
- Tension
- Stress
- Ceasing to take the birth control pill

- Breastfeeding
- Increase in exercise
- Illness
- Infections
- STD's (American PregnancyAssociation, 2015)

1.5.5 Menopause

Menopause is a normal change in a woman's life when her period stops. A woman has reached menopause when she has not had a period for 12 months in a row. This often happens between 45–55 years of age. Menopause happens because the woman's ovary stops producing the hormones estrogen and progesterone (Center for Disease Control and Prevention, 2015).

1.6 Menstrual Abnormalities

1.6.1 Abnormal Uterine Bleeding

Abnormal uterine bleeding includes very heavy or long-lasting periods (menorrhagia or irregular bleeding). Uterine fibroids are the most common cause of menorrhagia in adult women. Young teenage girls often have longer cycles until their reproductive system is fully mature. Also, periods may become irregular as one reaches near menopause (Womenshealth.gov, 2016). A number of medical conditions can cause abnormal uterine bleeding, characterized by unpredictable timing and variable amount of flow. Although a long interval between cycles is common in adolescence due to an ovulation, it is statistically uncommon for girls and adolescents to remain amenorrheic for more than 3 months or 90 days (the 95th percentile for cycle length). Girls and adolescents with more than 3 months between periods should be evaluated. Although experts typically report that the mean blood loss per menstrual period is 30 mL per cycle and that chronic loss of more than 80 mL is associated with anemia, this has limited clinical use because most females are unable to measure their blood loss. Menstrual flow requiring changes of menstrual products every 1–2 hours is

considered excessive, particularly when associated with flow that lasts more than 7 days at a time. Heavy menstrual bleeding can be common at various stages of one's life—during teen years when one first begin to menstruate and in late 40s or early 50s, as one get closer to menopause (The American Association of Obstetricians and Gynecologists, 2015).

Heavy menstrual bleeding can be caused by:

- hormonal imbalances
- structural abnormalities in the uterus, such as polyps or fibroids
- medical conditions

Certain medical conditions can cause heavy menstrual bleeding. These include:

- thyroid problems
- blood clotting disorders such as Von Willebrand's disease, a mild-to-moderate bleeding disorder
- idiopathic thrombocytopenic purpura (ITP), a bleeding disorder characterized by too few platelets in the blood
- liver or kidney disease
- leukemia
- medications, such as anticoagulant drugs such as Plavix (clopidogrel) or heparin and some synthetic hormones.

Other gynecologic conditions that may be responsible for heavy bleeding include:

- complications from an IUD
- fibroids
- miscarriage
- ectopic pregnancy, which occurs when a fertilized egg begins to grow outside your uterus, typically in your fallopian tubes

Other causes of excessive bleeding include:

- infections

- precancerous conditions of the uterine lining cells

1.6.2 Amenorrhea

The opposite problem of heavy menstrual bleeding— is no menstrual periods at all. This condition is called Amenorrhea, or the absence of menstruation occurs when a young woman hasn't started menstruating by age 16, or when a woman who used to have a regular period stops menstruating for at least 3 months. It is normal before puberty, after menopause and during pregnancy.

There are two kinds of amenorrhea: Primary and Secondary.

- Primary amenorrhea is diagnosed if one turns 16 and hasn't menstruated. It's usually caused by some problem in endocrine system, which regulates hormones. Sometimes this result from low body weight associated with eating disorders, excessive exercise or medications. This medical condition can be caused by a number of other things, such as a problem with ovaries or an area of brain called the hypothalamus or genetic abnormalities. Delayed maturing of pituitary gland is the most common reason.
- Secondary amenorrhea is diagnosed if one had regular periods, but they suddenly stop for three months or longer. It can be caused by problems that affect estrogen levels, including stress, weight loss, exercise or illness.

Additionally, problems affecting the pituitary gland (such as elevated levels of the hormone prolactin) or thyroid (including hyperthyroidism or hypothyroidism) may cause secondary amenorrhea.

Amenorrhea can be a symptom of disorders like:

- polycystic ovary syndrome,
- premature ovarian failure, or
- thyroid problems.

1.6.3 Dysmenorrhea

Dysmenorrhea is severe pain during a woman's period. The natural production of a hormone called prostaglandin can cause intense cramping. It is a problem found mainly in girls and young women. In women in their 20s, 30s, and 40s, a condition such as uterine fibroids or endometriosis may cause painful periods.

1.6.4 Premature ovarian failure (POF)

Premature ovarian failure (POF) is when a woman's ovaries stop working normally before she is 40. POF is not the same as early menopause. Some women with POF still get a period now and then. But getting pregnant is hard for women with POF. Women with POF also are more likely to develop certain conditions, including osteoporosis, low thyroid function, and an autoimmune disease called Addison's disease. No treatment will restore ovary function. But some symptoms of POF and the risk of bone loss can be helped by hormone therapy. The cause of POF is not known. But it appears to run in some families. POF also occurs in some women who carry the mutated gene that causes Fragile X syndrome. Women with POF should talk to their doctors about being tested to see if they are a carrier of this mutated gene.

1.6.5 Premature menopause

Premature menopause is when a woman's period stops completely before she is 40. This can occur naturally or because of medical treatment or surgery. Early menopause puts a woman at greater risk of heart disease and osteoporosis, but there are treatment options to lower these risks.

1.7 Some Common Disorders

1.7.1 Endometrial hyperplasia

- Endometrial hyperplasia occurs when the lining of the uterus grows too thick. It is not cancer. But if the cells of the lining become abnormal, it can lead to cancer of the uterus.

Signs and Symptoms

- Abnormal bleeding is the most common sign.

1.7.2 Endometriosis

- Endometriosis occurs when tissue that's like the uterine lining grows outside the uterus. It is very common, mainly affecting women in their 30s and 40s. It is one of the top three causes of infertility. Assisted reproductive technology (ART) helps many women with endometriosis become pregnant.

Signs and Symptoms

- Pelvic pain is the main symptom.
- Very painful periods
- Chronic pain in the belly, lower back, and pelvis
- Pain during sex
- Pain during bowel movements or while passing urine
- Difficulty becoming pregnant is another sign. Symptoms often improve after menopause.

1.7.3 Ovarian cysts

Ovarian cysts are fluid-filled sacs in the ovaries. In most cases, a cyst is completely normal: It does no harm and goes away by itself. Most women have them at some point in their lives. Often, a woman finds out about a cyst when she has a pelvic exam. Cysts are rarely cancerous in women younger than 50. See also, polycystic ovary syndrome.

Cysts may not cause any symptoms. Some cysts may cause pain, discomfort, and irregular periods—but not always. If sudden, severe pain in pelvis or abdomen or pain with fever or throwing up is seen, one must consult with doctor.

1.7.4 Painful sexual intercourse (dyspareunia)

Painful sexual intercourse (dyspareunia) can cause distress for a woman and her partner. Some causes of pain are:

- Vaginal dryness
- Infections
- Vaginismus—spasms of the muscles around the vagina
- Uterine fibroids
- Scar tissue

1.7.5 Pelvic floor problems

Pelvic floor problems occur when tissues that support the pelvic organs weaken or are damaged. This can happen because of pregnancy, childbirth, weight gain, surgery, and normal aging. In uterine prolapse, the uterus drops into the vagina. In some cases this causes the cervix to come out through the vaginal opening. In vaginal prolapse, the top of the vagina loses support and can drop through the vaginal opening.

One might notice a feeling of heaviness or pressure as if something is "falling" out of the vagina. It might also be hard to empty ones bladder completely. One might also get frequent urinary tract infections. Sometimes, urinary and anal incontinence are signs of pelvic support problems.

1.7.6 Pelvic pain

Pelvic pain can have a number of causes. Often, it is a symptom of another condition, or infection. Sometimes, the reason for pelvic pain is not found. Pain that lasts a long time can disrupt a woman's quality of life and lead to depression.

Signs and Symptoms

- Pain comes in many forms. Acute pain lasts a short time. Chronic pelvic pain lasts for more than 6 months and does not improve with treatment.

1.7.7 Polycystic ovary syndrome (PCOS)

Polycystic ovary syndrome (PCOS) is a hormone imbalance problem, which can interfere with normal ovulation. This can lead to irregular periods and multiple cysts on the ovaries. PCOS is the most common cause of female infertility. Women with PCOS also are at higher risk of diabetes, high blood pressure, metabolic syndrome, heart disease, and perhaps fibroids and depression.

Signs and Symptoms

- Irregular, infrequent periods
- Obesity
- Excess hair growth on the face, chest, stomach, thumbs, or toes
- Acne
- Trouble becoming pregnant

1.7.8 Uterine fibroids

Uterine fibroids are tumors or lumps that grow within the wall of the uterus. They are not cancer. Fibroids may grow as a single tumor or in clusters. A single fibroid can be 1 inch or less in size or grow to 8 inches across or more. Fibroids are very common, affecting at least one-quarter of all women. African American women and women who are overweight are at greater risk. Women who have given birth are at lower risk.

Signs and Symptoms

- Heavy bleeding or painful periods
- Bleeding between periods
- Feeling “full” in the lower abdomen
- Frequent need to pass urine
- Pain during sex
- Lower back pain
- Infertility, more than one miscarriage, or early labor

Most women with fibroids are able to become pregnant. Often, fibroids stop growing or shrink after menopause.

1.7.9 Vaginitis

Vaginitis is when the vagina is inflamed. It can happen for these reasons:

- Vaginal yeast infection—an overgrowth of fungus, such as candida, which is normally present in the vagina
- Bacterial vaginosis—an overgrowth of certain kinds of bacteria that are normally present in the vagina
- Sexually transmitted infections
- Allergy to douches, soaps, feminine sprays, spermicides, etc

Vaginitis may not always have symptoms.

Signs and Symptoms:

- Burning
- Itching
- Redness or puffiness
- Abnormal discharge with a "fishy" odor or change in the way it normally looks. Yeast infections often cause cottage cheese–like discharge.

1.7.10 Vulvodynia

Vulvodynia is chronic pain and discomfort of the vulva. It can make it hard to sit comfortably, be active, or enjoy a sexual relationship. Over time, coping with pain can lower self-esteem and lead to depression.

Signs and Symptoms

- Burning
- Stinging
- Rawness or aching even though the vulva might look normal.
- Pain might be felt all over the vulva or in a single spot.
- Pain can be constant or come and go
- Pain may feel only after touch or pressure, such as from using tampons, having sex, or riding a bike (Womenshealth.gov, 2016).

1.7.11 Sexually Transmitted Diseases

Sexually transmitted infections (STIs) or Sexually transmitted diseases (STDs) are major concern in reproductive health study. These are very common and easily get spreaded. They can damage reproductive organs and make it hard to get pregnant or cause problems during pregnancy. These infections get spreaded primarily through person-to-person sexual contact. There are more than 30 different sexually transmissible bacteria, viruses and parasites.The most common diseases they cause are gonorrhoea, chlamydial infection, syphilis, trichomoniasis, chancroid, genital herpes, genital warts, human immunodeficiency virus (HIV) infection and hepatitis B infection. Several, in particular HIV and syphilis, can also be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer (World Health Organization, 2015).STD can be prevented by abstainence, vaccination, reducing number of sex partners, mutual monogamy, using condoms (Center for Disease Control and Prevention, 2016).

1.8 Pregnancy

Pregnancy is the term used to describe the period in which a woman carries a fetus inside of her. In most cases, the fetus grows in the uterus.

Pregnancy usually lasts about 40 weeks, or just over 9 months, as measured from the last menstrual period to childbirth. Pregnancy is divided into three trimesters. The major events in each trimester are described below.

1.8.1 First Trimester (Week 1 to Week 12)

The events that lead to pregnancy begin with conception, in which the sperm penetrates the egg produced by an ovary. The zygote (fertilized egg) then travels through the woman's fallopian tube to the uterus, where it implants itself in the uterine wall. The zygote is made up of a cluster of cells formed from the egg and sperm. These cells form the fetus and the placenta. The placenta provides nutrients and oxygen to the fetus.

1.8.2 Second Trimester (Week 13 to Week 28)

- At 16 weeks, and sometimes as early as 12 weeks, a woman can typically find out the sex of her infant. Muscle tissue, bone, and skin have formed.
- At 20 weeks, a woman may begin to feel movement.
- At 24 weeks, footprints and fingerprints have formed and the fetus sleeps and wakes regularly.
- According to research from the NICHD Neonatal Research Network, the survival rate for babies born at 28 weeks was 92%, although those born at this time will likely still experience serious health complications, including respiratory and heart problems.

1.8.3 Third Trimester (Week 29 to Week 40)

- At 32 weeks, the bones are soft and yet almost fully formed, and the eyes can open and close.
- Infants born before 37 weeks are considered preterm. These children are at increased risk for problems such as developmental delays, vision and hearing problems, and cerebral palsy. According to the March of Dimes, as many as 70% of preterm births occur between 34 and 36 weeks—these are late-preterm births.
- Infants born in the 37th and 38th weeks of pregnancy—previously considered full term—are now considered "early term." These infants face more health risks than infants who are born at 39 weeks or later, which is now considered full term.
- Infants born at 39 or 40 weeks of pregnancy are considered full term. Full-term infants have better health outcomes than do infants born earlier or, in some cases, later than this period. Therefore, if the mother and baby are healthy, it is best to deliver at or after 39 weeks to give the infant's lungs, brain, and liver time to fully develop.

- Infants born at 41 weeks through 41 weeks and 6 days are considered late term.
- Infants who are born at 42 weeks and beyond are considered post term (Pregnancy: Condition information, 2013).

Chapter- II

Literature Review

2.1 Sexual behaviour and level of awareness on reproductive health among youths: Evidence from Harar, Eastern Ethiopia

A research was conducted by Korra and Haile in Harar, Ethiopia (1997) to assess the level of information on sexual behavior of youth and their level of awareness on reproductive health. A total of 900 males and females aged 14-29 years were randomly selected. Here the knowledge of female about reproductive health according to Korra and Haile are depicted. The survey result shows that about 15% of respondents had experienced unwanted pregnancies and a little over half of them know the time of ovulation and when pregnancy would occur. The findings further indicated that there is a substantial level of awareness of HIV/AIDS by the respondents (97.7 and 96.4% of males and females, respectively). A large proportion of the respondents were able to specify the common ways of transmission of the disease. Recommendations are made to strengthen the youth reproductive health program initiated in the area. The survey also collected information on respondents' opinion on ideal ages of marriage of women. 39.7% of females noted that a woman should first get married by the age of 20-24 years. Overall, the ideal age for a woman to marry should be 21.5 years according to female respondents. Respondents were further asked about the ideal age for a woman to have her first child and found that it follows the same pattern of the ideal age of marriage. On the average, the ideal age for the birth of the first child should be 23.3 years according to female respondents. Half of the respondents (58% of females) had stated that the exact fertile period of a woman is during ovulation. About 15% of females said the fertile period is right after her menses. About 15.4% of females did not know the exact fertile period of a woman. Accordingly, 69.6% of females noted that they got such information from schools and few from friends, magazines, and health institutions. The survey also indicated that 63.9% of females reported to have known, at least, one contraceptive method. Knowledge of, at least, one method has increased with age, and currently married respondents are more knowledgeable than others. The Pill and Condom were the most widely known contraceptive methods. Schools were the major single source of information about contraceptives, followed by mass media and friends. The survey has also shown that 96.4% of females have heard about HIV/AIDS. Regarding their knowledge on mode of transmission, the majority of respondents (95.2%) knew that transmission of HIV was primarily through sexual intercourse. Apparently, injection, razor, and blood transfusion

were cited as the major modes of HIV transmission. The result stated that the overall knowledge is not that good so recommendations were made to strengthen the youth reproductive health program initiated in that area (Korra and Haile,1997).

2.2 Reproductive Health Awareness of School-going, Unmarried, Rural Adolescents

Gupta *et al.* (1997) conducted a test to assess the awareness level of adolescents regarding venous reproductive health issues and to identify their knowledge, particularly on legal minimum age of marriage, number of children, male preference, contraceptive practices**,** about STIs/AIDS etc. It was a multicentre study, done in rural co-education/higher secondary schools of 22 districts of India. A sample of 8453 school going adolescents (aged 10-19 years) was surveyed. Awareness of legal minimum age of marriage was present to more than half of adolescents. Attitude towards marriage beyond 21 years in boys and 18 years in girls was favorable. Mean number of children desired was 2. Only 19 8% of adolescents were aware of at least one method of contraception. Only two-fifth (39. 5%) were aware of AIDS and less than one-fifth (18%) were aware of STDs and most of them thought it is same as AIDS. Awareness of all Reproductive Health matters was more in late teens (15-19). The study showed tremendous lacunae in awareness of all Reproductive Health (RH) matters. The result stated that there is a need for evolving transformation, education, and communication strategies to focus on raising awareness on RH and gender related issues (Gupta *et al.* 1997).

2.3 Sexual and Reproductive Health Knowledge Among Female College Students in Wuhan, China.

Zhang *et al.* (2010) conducted a research on Sexual and Reproductive Health Knowledge Among Female College Students in Wuhan, China. The purpose of this study was to explore demographic correlates of sexual and reproductive health knowledge among Chinese female college students. A total of 4769 participants of age group (16 – 27 years) were surveyed about sexual and reproductive health knowledge in 16 colleges and universities in Wuhan, China. It was found that the most common source of knowledge about sexual and reproductive health came from newspapers and magazines, accounting for 65.5%, followed by classmates or friends (41.5%), and formal school education (27.0%). Less common sources of knowledge included television (11.7%), parents (8.0%), and physicians (5.1%). The majority of participants (88.8%) believe that formal

reproductive health education is needed. A total of 8.8% of the sample scored more than 60 points out of 100 i.e. they had correct knowledge about sexual and reproductive health knowledge whereas 16.9% scored <30 points. It was found that knowledge was interrelated with different sociodemographic profiles and increased with age and grade level. Medical students scored higher than the other majors. Students who grew up in cities scored higher than those from towns and rural areas. Family economic conditions were positively associated with knowledge. Girls without siblings scored higher than those with siblings. In addition, results for the reproduction/contraceptives and STDs/AIDS subscales differed by similar demographic factors. In general, scores were higher for the STDs/AIDS subscale (50% correct) than for the reproduction/contraception scale (33% correct). The result stated that the knowledge is directly related to sociodemographic factor (Zhang *et al.* 2010).

2.4 Adolescent Sexuality and Fertility in Kenya: A Survey of Knowledge, Perceptions, and Practices

This is a survey conducted by Ajayi *et al.* (2014) in Kenya on the reproductive health knowledge, attitudes and practices among more than 3,000 unmarried Kenyan youth, students and nonstudents, between the ages of 12 and 19. The survey was designed to elicit information that would be useful in gauging the kinds of problems Kenyan adolescents face in order to design programs that meet their needs. The study shows that although a solid majority of adolescents appear to have received information reproductive health, the quality of the information generally low. Fewer than 8% could correctly identify the fertile period in a woman's menstrual cycle. A substantial proportion of the population surveyed, more than 50%, is sexually active, having initiated intercourse sometime between 13 and 14 years of age, on average. Inspite of a general disapproval of premarital sex (but approval of the use of contraceptives among the sexually active), most of the sexually active population 89% have never used contraceptives. The many contradictions between attitudes and practices pose serious questions and demonstrate the need to reexamine the programs (and policies) that provide access to reproductive health services to adolescents in Kenya (Ajayi *et al.* 2014).

2.5 Reproductive Health in Afghanistan: Results of a Knowledge, Attitudes and Practices Survey among Afghan Women in Kabul

A reproductive-health knowledge, attitudes and practices (KAP) survey was carried out by Egmond *et al.* (2004) among 468 Afghan women of reproductive age. Majority of the respondents said that the best age for a girl to marry was believed to be on average 20.2 years. And only 2% women preferred fewer children. Most of them didn't know about method of contraception. Only a few preferred modern contraceptive method — if all methods were easily available — was the intrauterine device (28 %). Other popular methods were contraceptive pills (21 %) and injectable hormones (21 %). Respectively, 11 and 9 % mentioned condoms and female sterilisation as the preferred family-planning method. Sex education for Afghan girls and adolescents is seriously lacking. Knowledge of STIs was equally poor: only 24 per cent of the interviewed women knew of any STI. Among the STIs they did know, HIV/AIDS was most frequently mentioned (72 %), followed by gonorrhoea. The main sources of information regarding STIs were health staff (43 %), relatives (18 %), radio (16 per cent), reading (9 %) and television (8 %). Even women who knew about STIs were badly informed about prevention methods. Fewer than 30% wrongly supposed they could avoid STIs through good general hygiene and bathing. The use of a condom was very rarely mentioned as a prevention method. When explicitly asked, 54 % of the women reported knowing what a condom was. Fewer than one-quarter of the respondents said they had used or would be willing to use a condom as protection against STIs. 36% of respondents had heard about HIV/AIDS and 80.5 % of those women claimed to know routes of HIV transmission. However, their real knowledge was quite low. Almost half of the women who claimed to know transmission routes wrongly believed one could be infected with HIV/AIDS through kissing and hugging and 42 % believed infection could occur through mosquito bites. Only 19% gave correct answers on this topic. The result showed very poor knowledge among women living in Kabul. To meet the reproductive-health needs of Afghan women, the socio-cultural aspects of their situation especially their decision-making abilities will need to be addressed (Egmond *et al.* 2004).

2.6 Bangladesh Demographic and Health Survey 1993-1994.

A research was conducted by Mitra *et al.* (1993-94) in Bangladesh. The survey showed rapid and accelerating fertility decline to 3.4 births during 1991-93, a drop of 21% from

1989-91. Levels of fertility varied by regions. Chittagong had a total fertility rate of 4.0 births per woman compared to Rajshahi and Khulna Divisions with 3.0 births. Fertility was about 30% higher in rural areas. Fertility was 3.8 for women with no formal education and 2.6 for women with at least some secondary education. Age at first birth averaged 18.3 years during 1993-94. 33% of women 15-19 years old were pregnant or have had their first birth. 56% of ever married women desired a 2-child family, and 24% desired a 3-child family. The percentage of women with two children who desired no more children increased from 39% in 1991 to 50% during 1993-94. 36% use modern method of contraception. Over 40% of teenage married women have already used a family planning method. Chittagong had low contraceptive use (29%). Knowledge about sources of supply was high throughout Bangladesh. Family planning messages were widespread throughout the media. The result showed that the condition of reproductive health had developed than the past but much awareness had to be built for adolescent reproductive health (Mitra *et al.* 1993-94).

Significance of the study

Bangladesh is a South Asian country. It is a very small country with a huge population. Almost half of its population is women who play an important role in its development. So ensuring good health to this large sector of population is essential. Female plays a vital role in reproduction so proper knowledge and practices regarding reproductive health is important. But the rate of child marriage and adolescent motherhood in Bangladesh is the highest in the world. Maternal mortality rates also remain extremely high. The reason behind this poor reproductive health is early marriage, women's malnutrition, a lack of access to and use of medical services and a lack of knowledge and information (UNICEF, 2010).

Child marriage is one of the most common malpractice in Bangladesh especially among the poor. The legal age of marriage is 18 for girls, however three-quarters of women aged 20-49 were married before age 18. The practice of arranging child marriages remains common, especially in rural areas and in urban slums, where many families believe that the onset of puberty signifies readiness for marriage (MICS, 2006).

Malnutrition is another significant contributor to complicated pregnancies and high maternal and infant mortality rates. Malnutrition transmits from one generation to the next. But the nutritional status of women in Bangladesh is very alarming. Almost one-third of women of reproductive age have a body mass index less than 18.5; this means they are very underweight (UNICEF, 2010).

These all are the result of lack of education and access to mass media. The MICS 2006 found that overall more than two thirds (70%) of Bangladeshi women aged 15-24 years are literate. Variations between geographic areas are marked with the slum areas reporting a literacy rate of 38% for women in the same age group (MICS, 2006). Access to information through the media is essential to increase people's knowledge and awareness of what is taking place around them. It is found that only 2 percent of women are exposed to TV, radio and newspaper. Close to half (45 percent) of women have no regular exposure to mass media (NIPORT, 2009). Such lack of information and lack of knowledge results different types of fatal sexually transmitted disease like AIDS, Syphilis, Gonorrhea, Hepatitis B etc.

There are several studies conducting and ongoing on awareness and knowledge assessment in different countries around the world like India, China, Africa etc. In our knowledge there is a

lower number of significant works in our country regarding this topic. One of the major reasons for choosing this topic for the study was to identify the current state of knowledge and awareness of the young-adult student population regarding awareness and attitude toward reproductive health in our country. The study is to quantify how much knowledge is among the population therefore calculating measures that should be taken to create mass awareness.

Aims and Objective

The aims and objectives of this study were to:

- To assess the awareness and knowledge level about reproductive health, menstruation, marriage, fertility, pregnancy, contraception and sexually transmitted disease.

Chapter- III

Methodology

3.1 Type of the Study

It was a survey based study.

3.2 Study Area

The survey was conducted in ten different college and universities in different areas inside Dhaka City and in some slum of two to three area. The universities and college were:

- East West University
- Viqarunnisa Noon School and College
- North South University
- Ahsanullah University
- Dhaka University
- Gulshan Commerce College
- Mirpur Bangla College
- Dhaka City College
- Bangladesh University of Business and Technology (BUBT)
- Bangladesh University of Professionals

Slum areas were:

- Modhubag, Rampura
- Tekpara, Aftabnagar
- Badda

3.3 Study Population

In this study, a total number of 259 female students of different departments and groups and some slum dweller from 2/3 areas were surveyed with a questionnaire in order to assess the awareness and attitude towards the reproductive health. Informed consent was obtained from the eligible participants before interviewed and participants who agreed to join the study provided the required information for the studies.

3.4 Study Period

The duration of the study was about three months starting from July to September in 2016.

3.5 Questionnaire Development

The pre-tested questionnaire was specially designed to collect the simple background data and the needed information. The questionnaire was written in simple English in order to avoid unnecessary semantic misunderstanding. The questionnaire was pilot tested to ensure it was understandable by the participants. Extra space was however, allowed after some questions for the participants' comments; and in most cases, these were used as qualifying remarks which aided considerably in giving answers to specific questions and in providing additional information which assisted the interviewers in drawing up conclusions.

3.6 Sampling Technique

In this study purposive sampling technique was followed.

3.7 Data Analysis

After collecting, the data were checked and analyzed with the help of Microsoft Excel 2010. The result was shown in bar, pie and column chart and calculated the percentage of the awareness and attitude towards the reproductive health among female students.

Chapter IV

Result

4.1 Age distribution of female

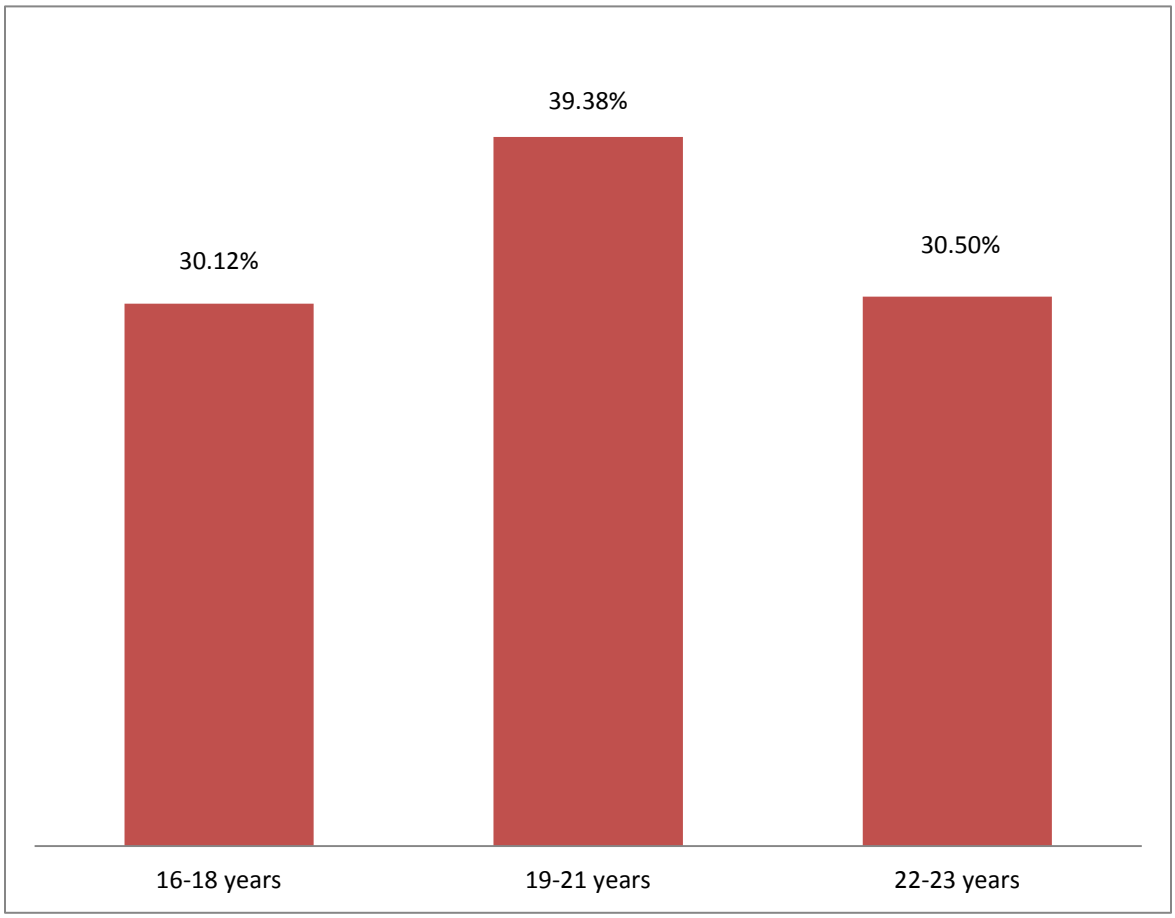

Fig 4.1: **Age distribution of female**

Majority (39.38%) of the students among 259 female respondents were in the age group of (19-21) years. Almost about same number of student (30%) from the age group of (16-18) and (22-23) participated in the study.

4.2 Different religions of the female respondents

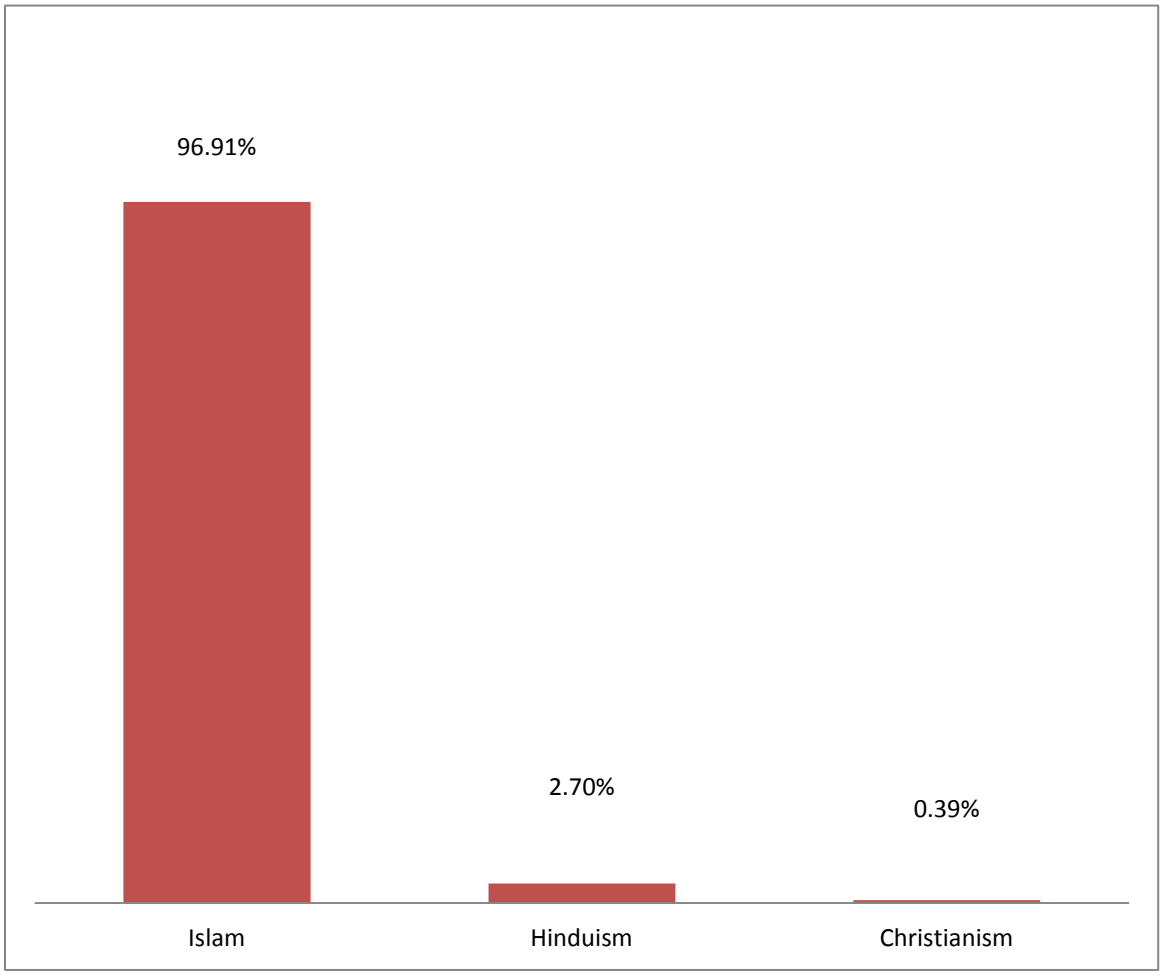

Fig 4.2: Different religions of the female respondents

As Bangladesh is a Muslim country so majority of the people living here is from the religion Islam. About 97% female respondents were from the religion Islam and 2.70% from Hindu.

4.3 Educational status of the female respondents

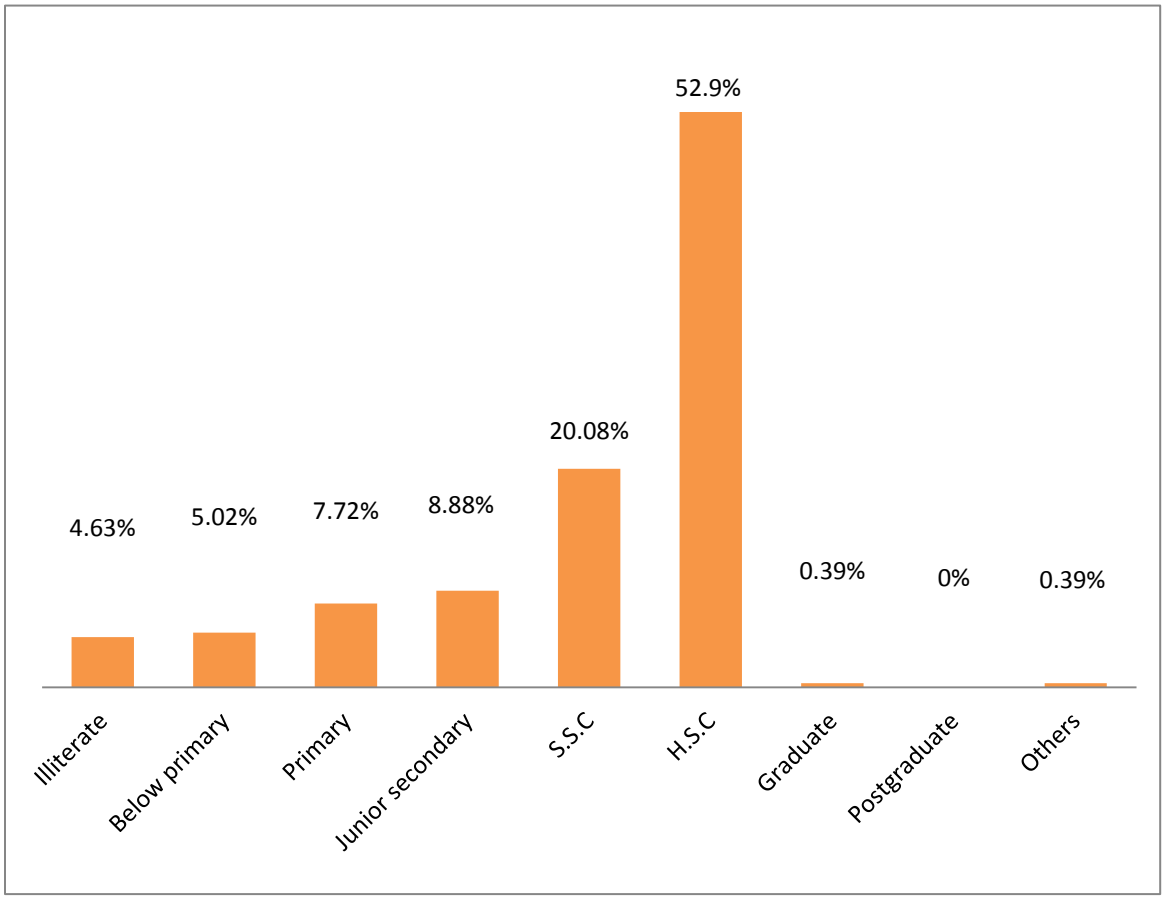

Fig 4.3: Educational status of the female respondents

Almost 53% female respondents who participated in this study had completed their H.S.C. level of education. About 4.63% were illiterate who were from slum area.

4.4 Area distribution of the female respondents

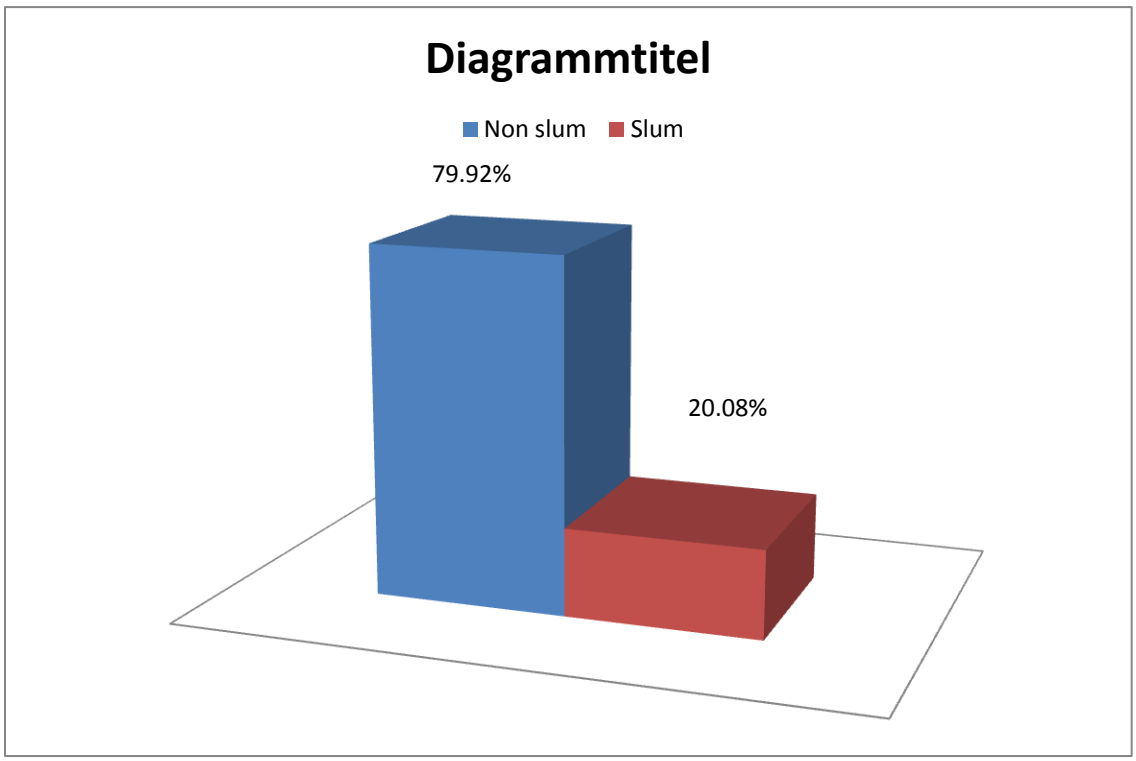

Fig 4.4: Area distribution of the female respondents

We divided the area of female respondents into two sectors one is non slum area and other is slum area. In the study 79.92% people were from non slum area and 20.08% were from slum area.

4.5 Marital status of female respondents

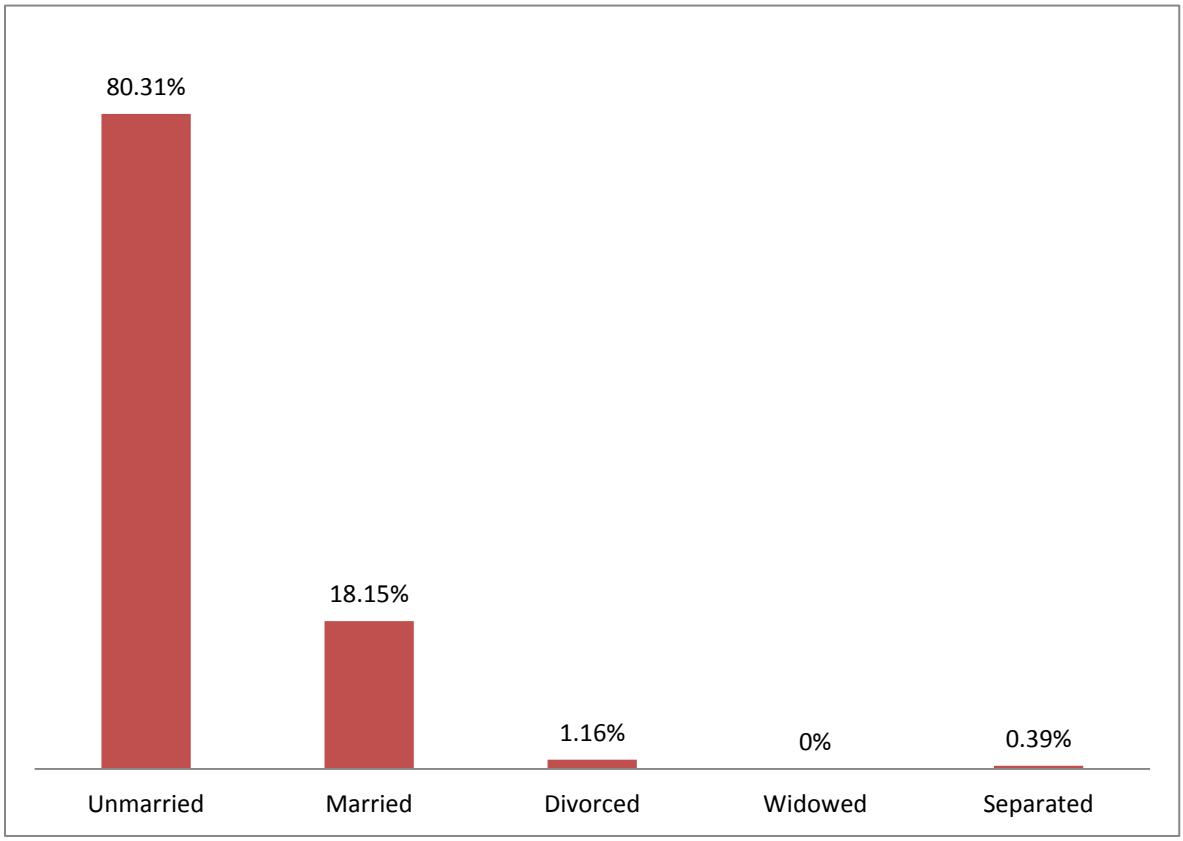

Fig 4.5: Marital status of female respondents

In the above figure it is seen that 80.31% of female respondents were unmarried as the age group was (16-23) and 18.15% were married. Most of the married persons were from slum area. Only 1.16% was found to be divorced.

4.6 Number of children of female respondents

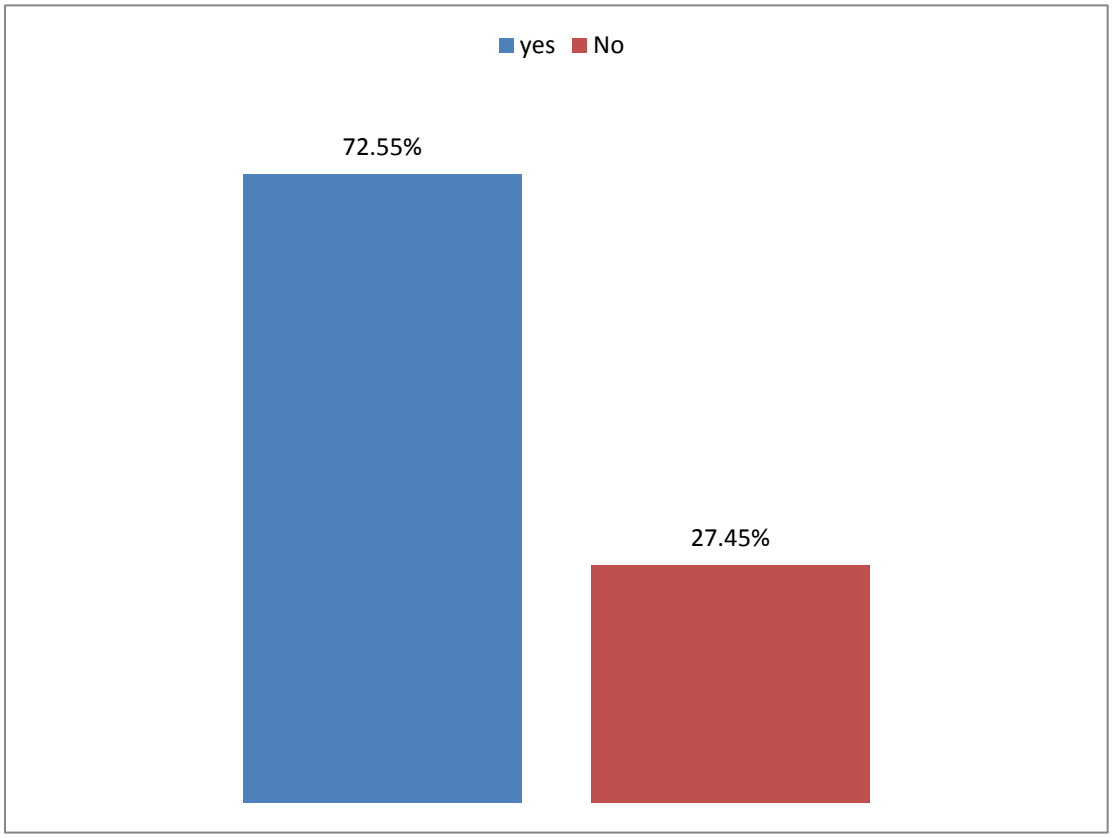

Fig 4.6: Number of children of female respondents

About 72.55%% female respondents had child and 27.45% had no child.

4.7 Residential option

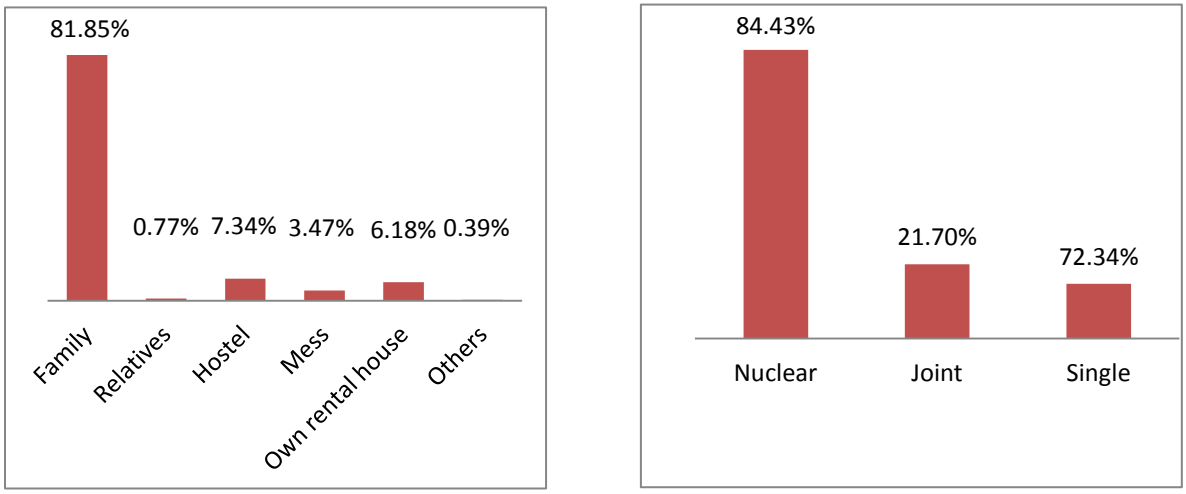

Fig 4.7: Residential Option and Types of Family

About 81.85% respondents used to live with family which was nuclear in type. And 6.18% lived in own rental house.

4.8 Knowledge of legal age of marriage for female

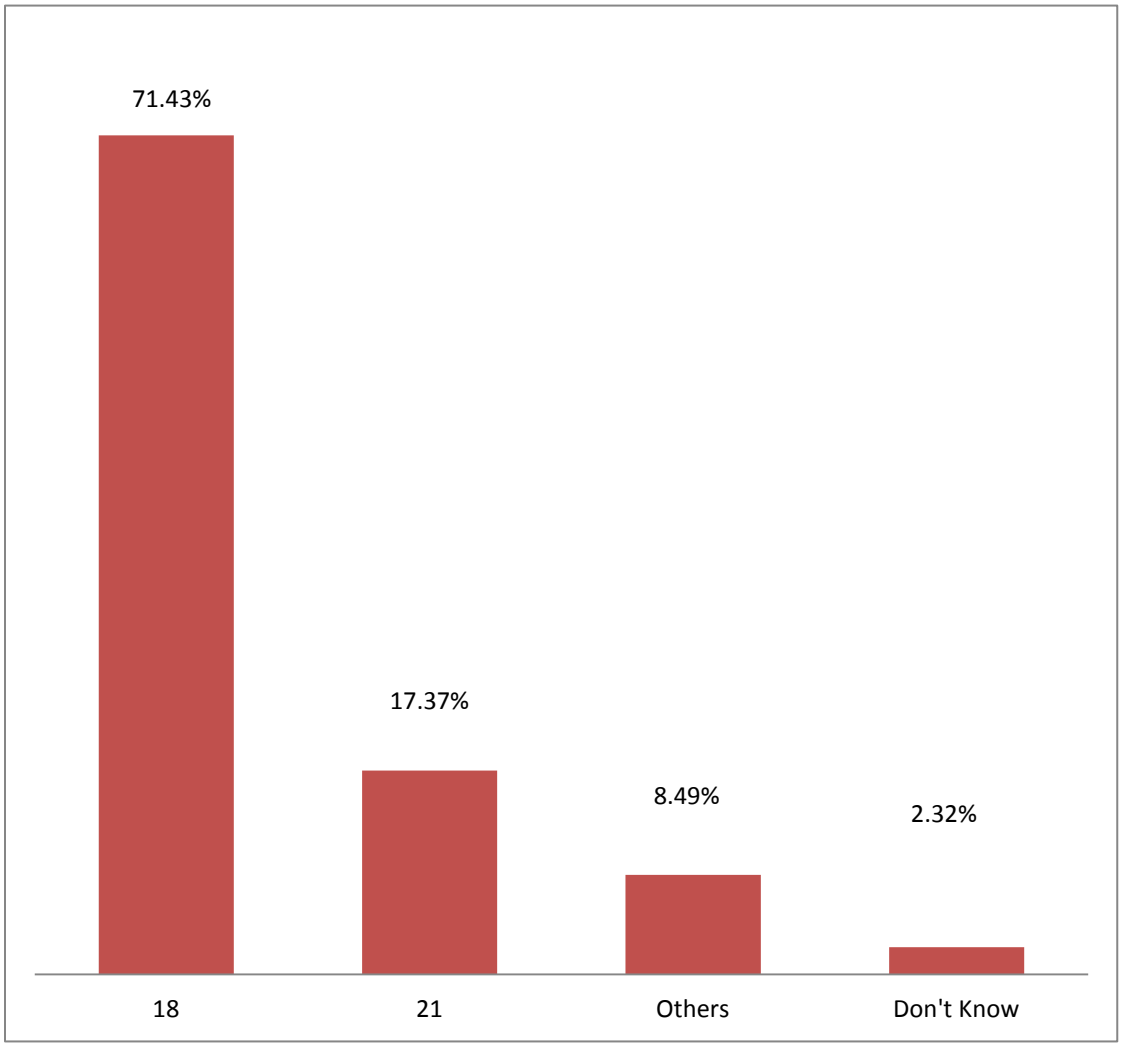

Fig 4.8: Knowledge of legal age of marriage for female

During the study it was seen that 71.43% people answered that 18 is the legal age of marriage for female by the law of Bangladesh. Only 17.37% people answered that legal age should be 21 which is very small in number.

4.9 Knowledge on reproductive health topic (Love and Marriage)

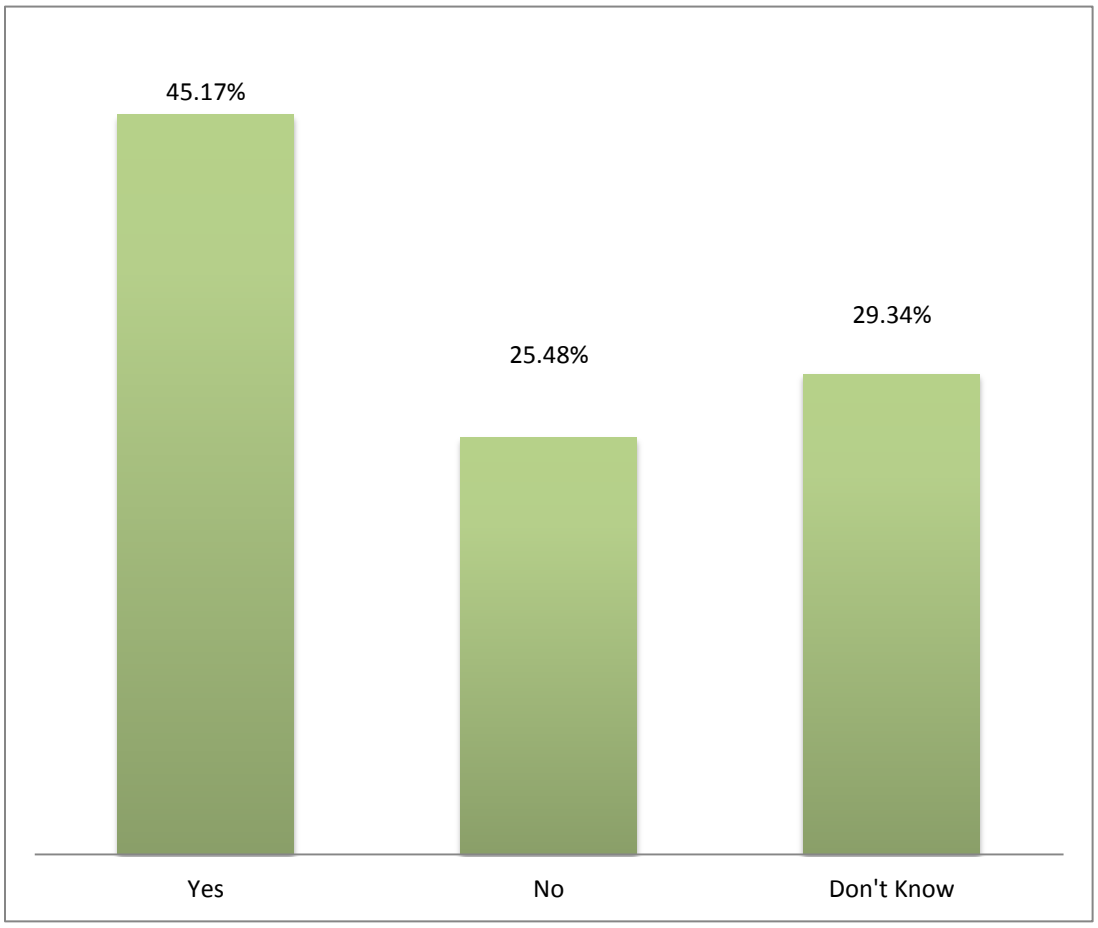

Fig 4.9: Knowledge on reproductive health topic (Love and Marriage)

Here during asking the question 45.17% people agreed that love and marriage should be discussed in reproductive health topic whereas 29.34% people had no idea about the reproductive health topic.

4.10 Knowledge on reproductive health topic (Gender and sexual relationship)

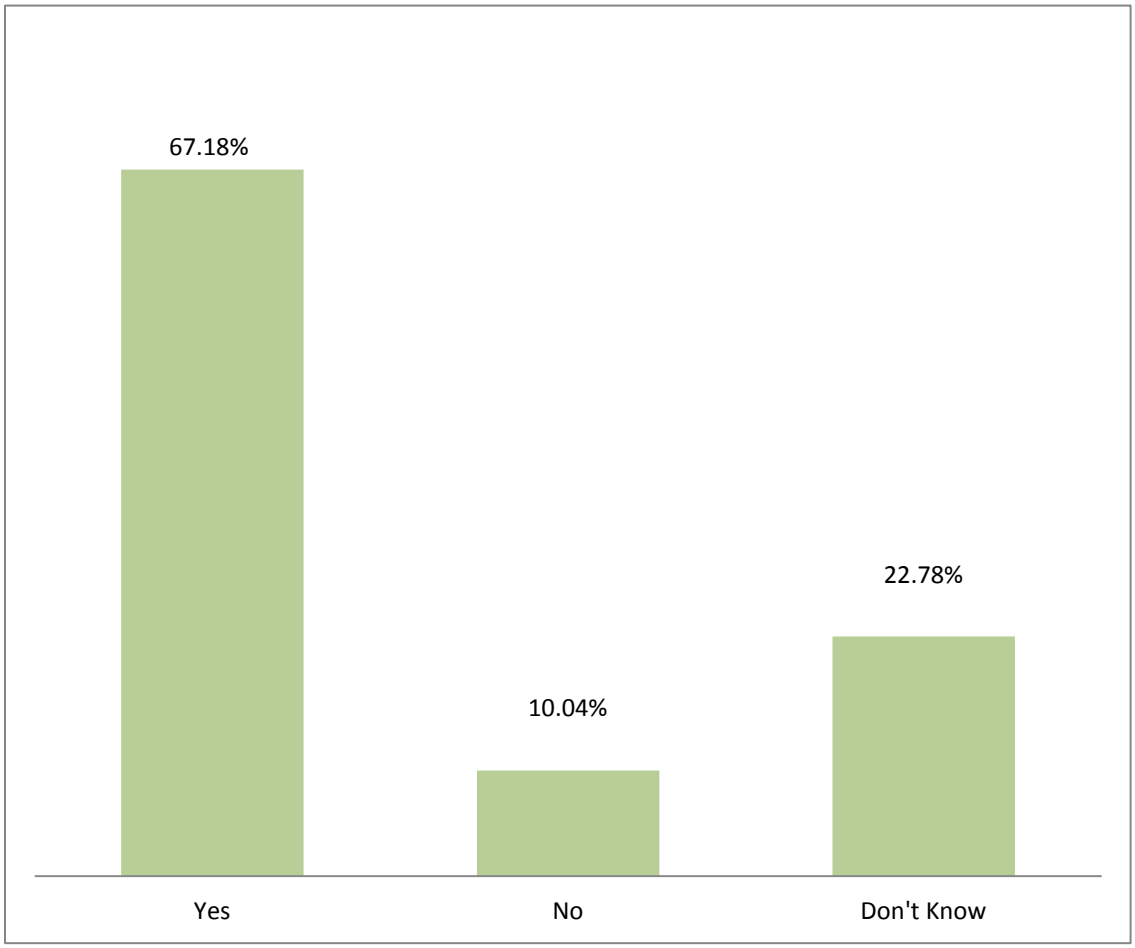

Fig 4.10: Knowledge on reproductive health topic (Gender and sexual relationship)

About 67.18% people responded 'Yes' that gender and sexual relationship should be discussed in reproductive health topic and only a few 22.78% people had no idea about this. But according to ARHP (Association of Reproductive Health Professional) sex or sexuality must be included in reproductive health topic.

4.11 Knowledge on reproductive health topic (Pregnancy/ menstruation)

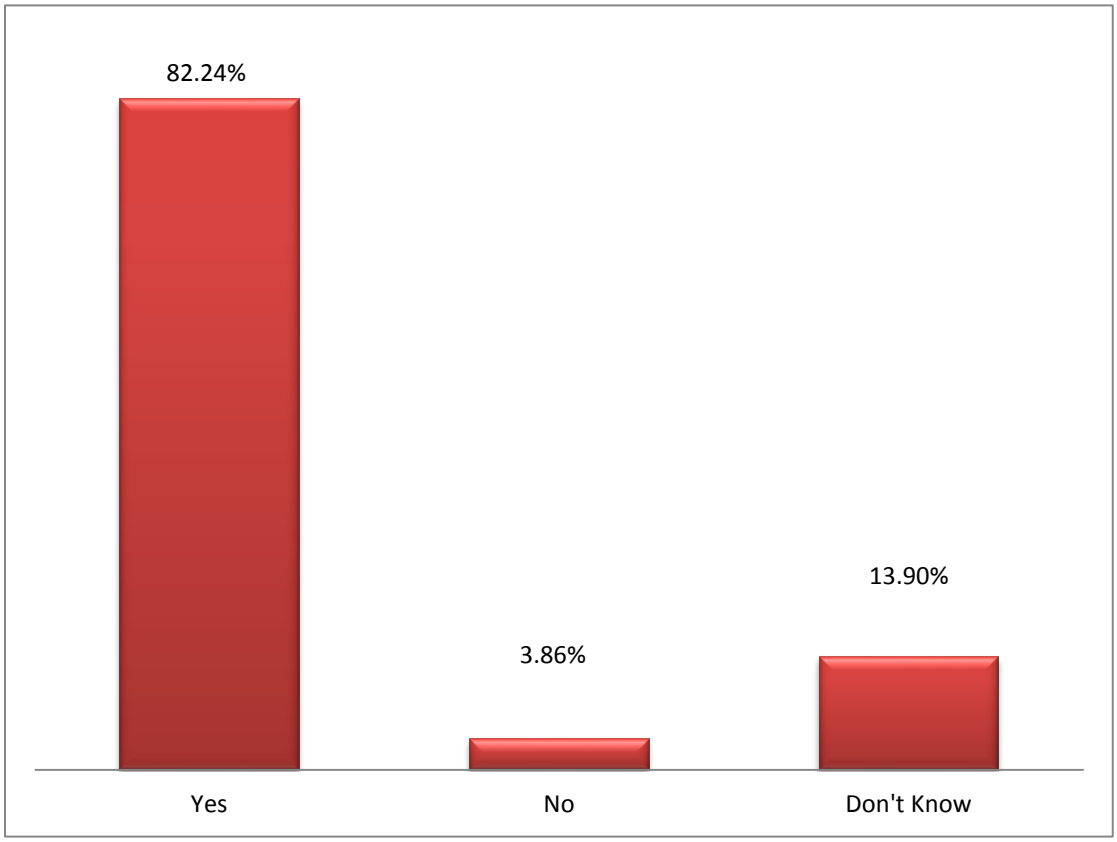

Fig 4.11: Knowledge on reproductive health topic (Pregnancy/ menstruation)

A huge number of population about 82.24% said pregnancy should be included in reproductive health topic and it is also said by ARHP (Association of Reproductive Health Professional) that pregnancy is a reproductive health topic. Only 13.90% people said that they didn't know whether it should be included or not.

4.12 Knowledge on reproductive health topic (Family Planning)

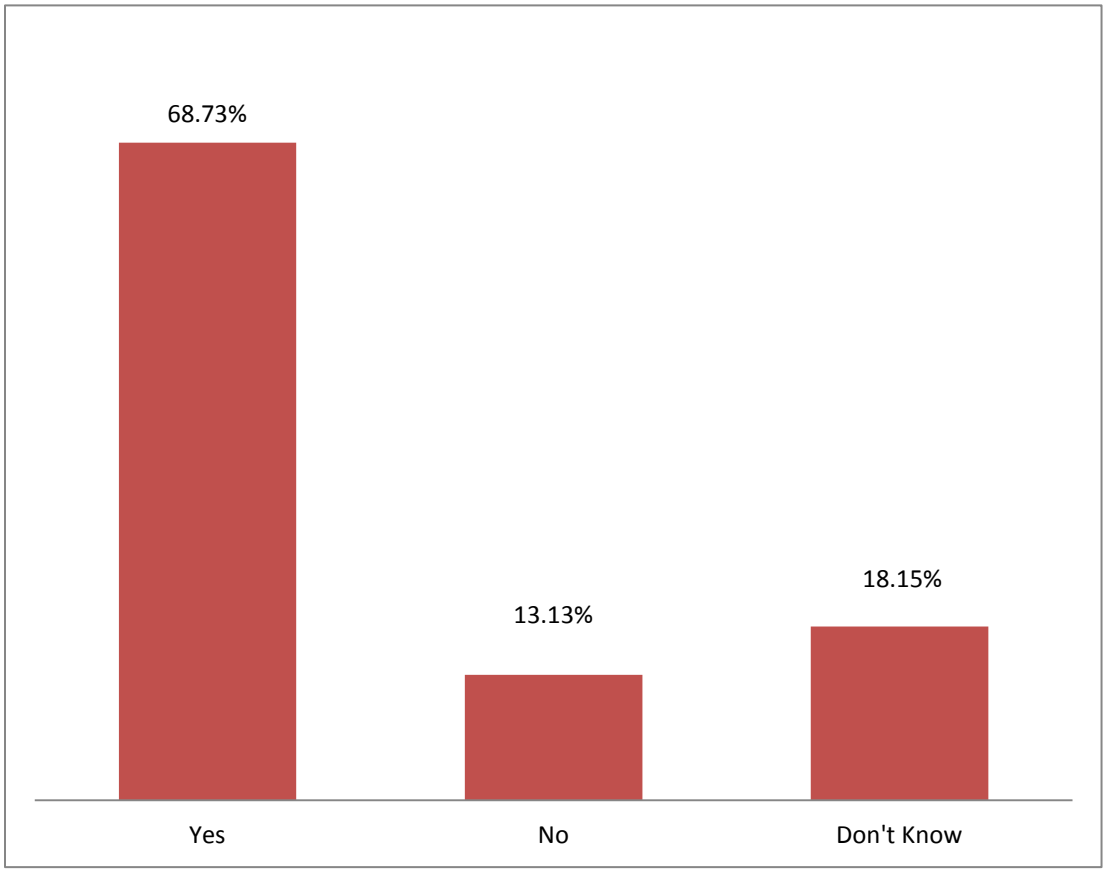

Fig 4.12: Knowledge on reproductive health topic (Family Planning)

About 68.73% people said that family planning can be a topic of reproductive health and 18.15% people said that they had no idea about this.

4.13 Knowledge about the age at when reproductive health topic should be discussed

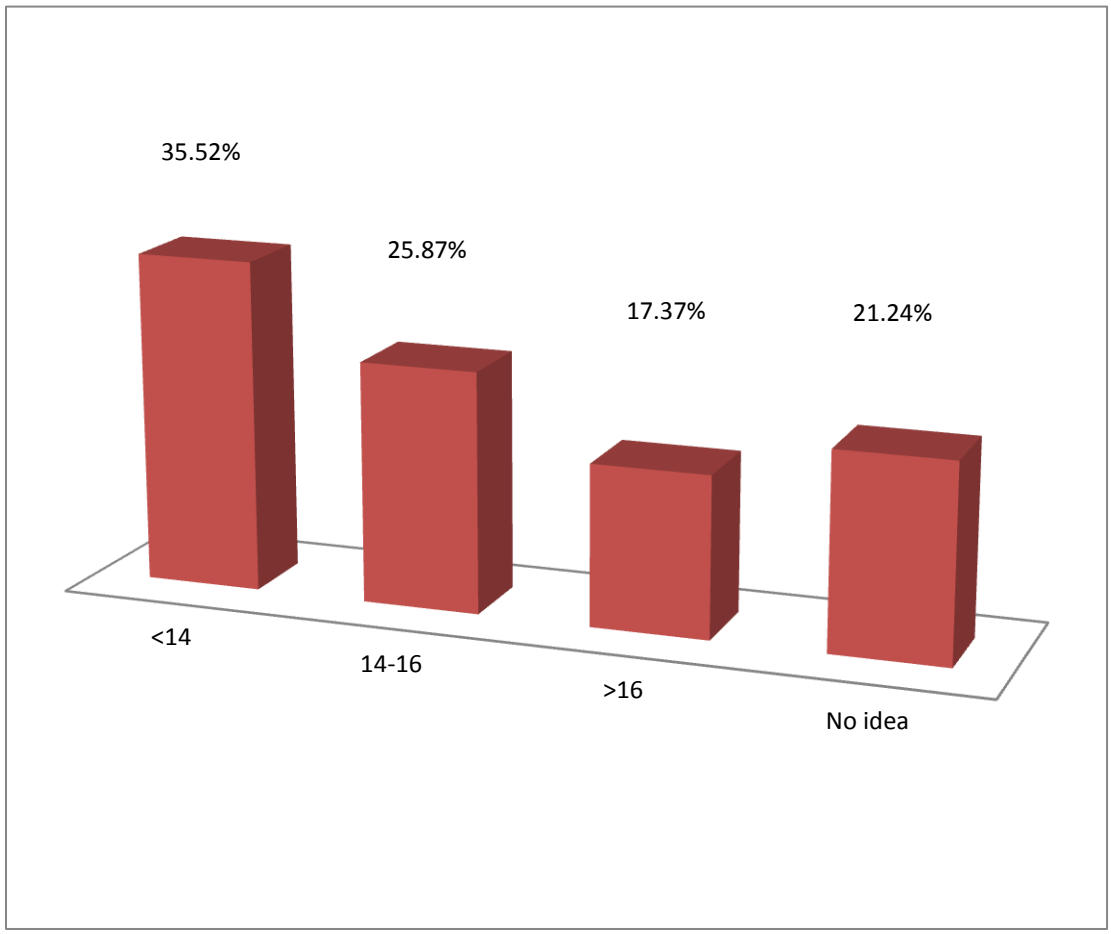

Fig 4.13: Knowledge about the age at when reproductive health topic should be discussed

Most people about 35.52% said that the age for discussing about reproductive health should be less than 14 and 25.87% said that the appropriate age would be 14-16 whereas 21.24% had no idea about it.

4.14 Level of discussion about reproductive health

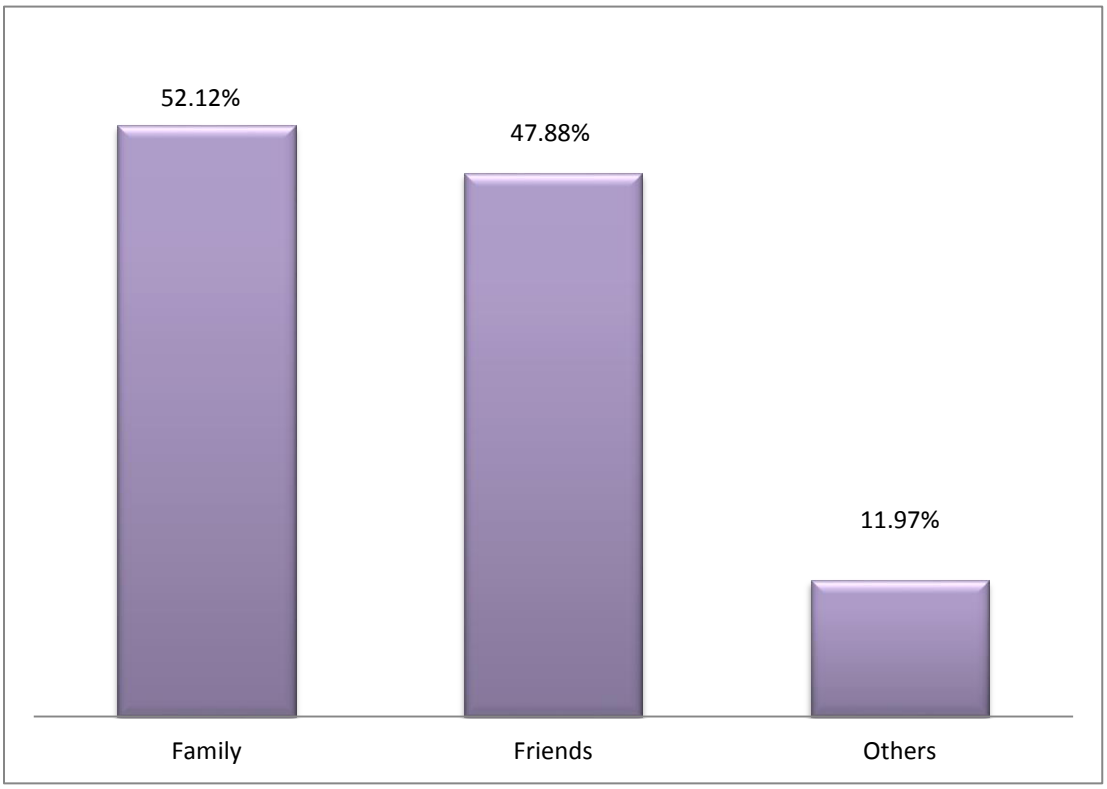

Fig 4.14: Level of discussion about reproductive health

It has seen that 52.12% people discussed with their family member about reproductive health rather than friends. And only 11.97% people talked to others about reproductive health.

4.15 Knowledge of STI/STD

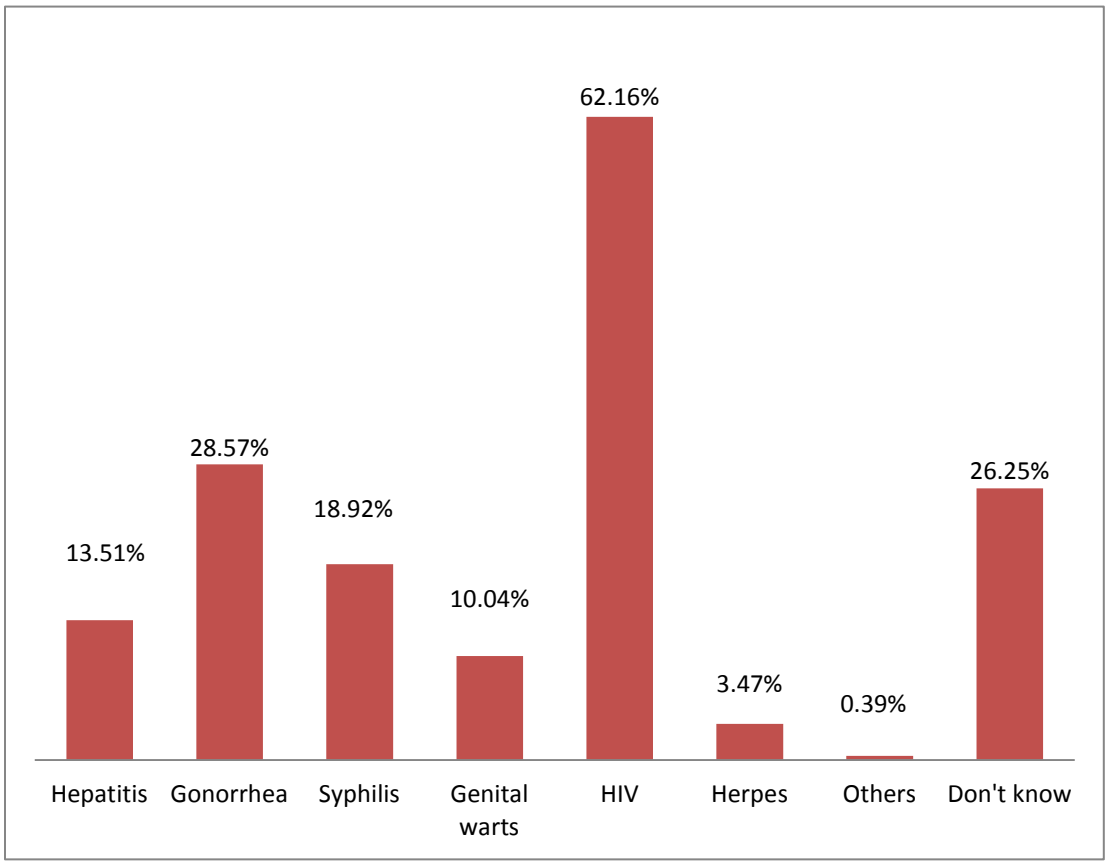

Fig 4.15: Knowledge of STI/STD

Approximately 62.16% people knew that HIV is a sexually transmitted disease and 28.57% people heard about Gonorrhea as sexually transmitted disease. But 26.25% said that they didn't know about sexually transmitted disease.

4.16 Knowledge of prevention of STIs

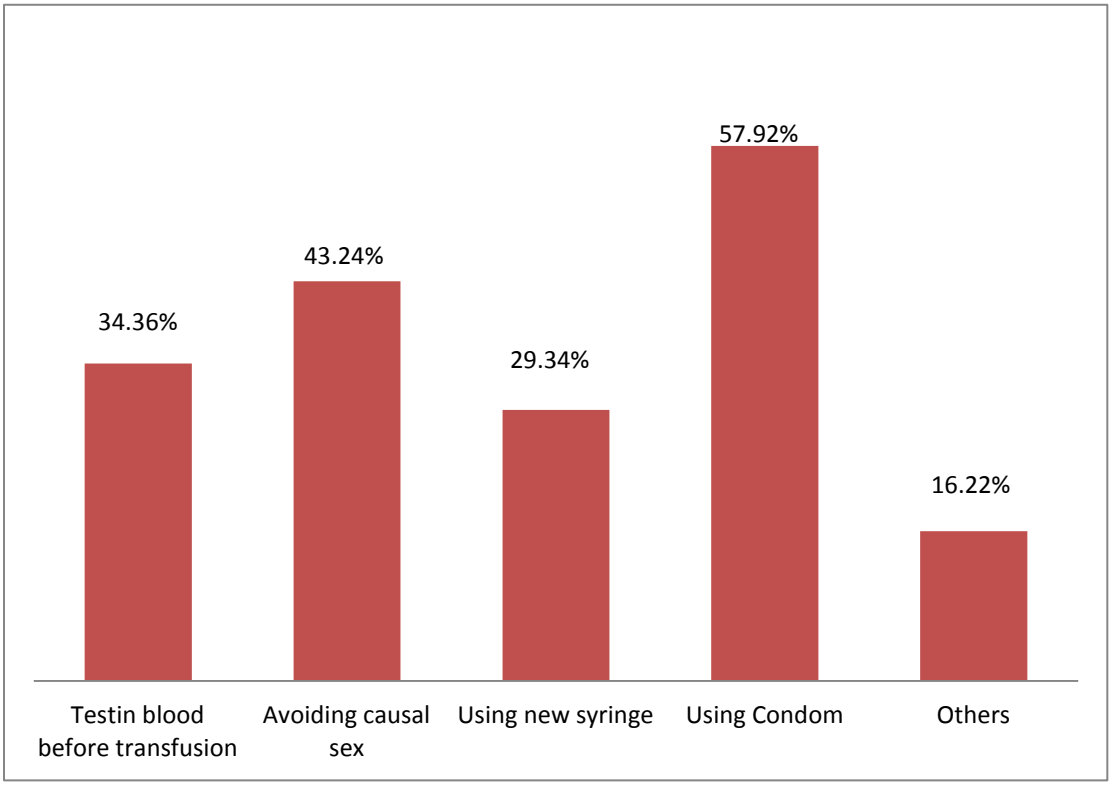

Fig 4.16: Knowledge of prevention of STIs

In the study 57.92% people answered that STIs can be prevented by using condom. Only a few 16.22% had no idea of prevention of STIs.

4.17 Knowledge of highest chances of getting pregnant

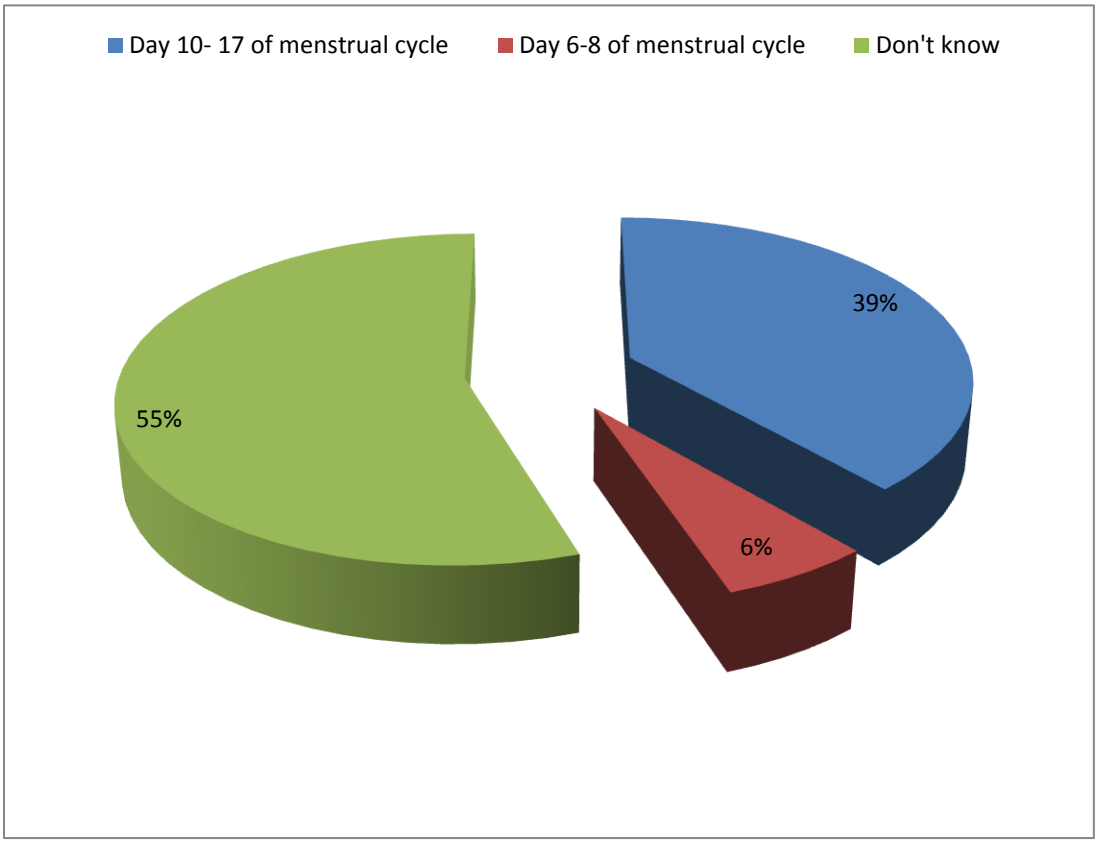

Fig 4.17: Knowledge of highest chances of getting pregnant

A majority of portion of about 55% didn't know about it. Only 39% people gave the correct answer which is day 10-17 of menstrual cycle.

4.18 Knowledge of duration of pregnancy

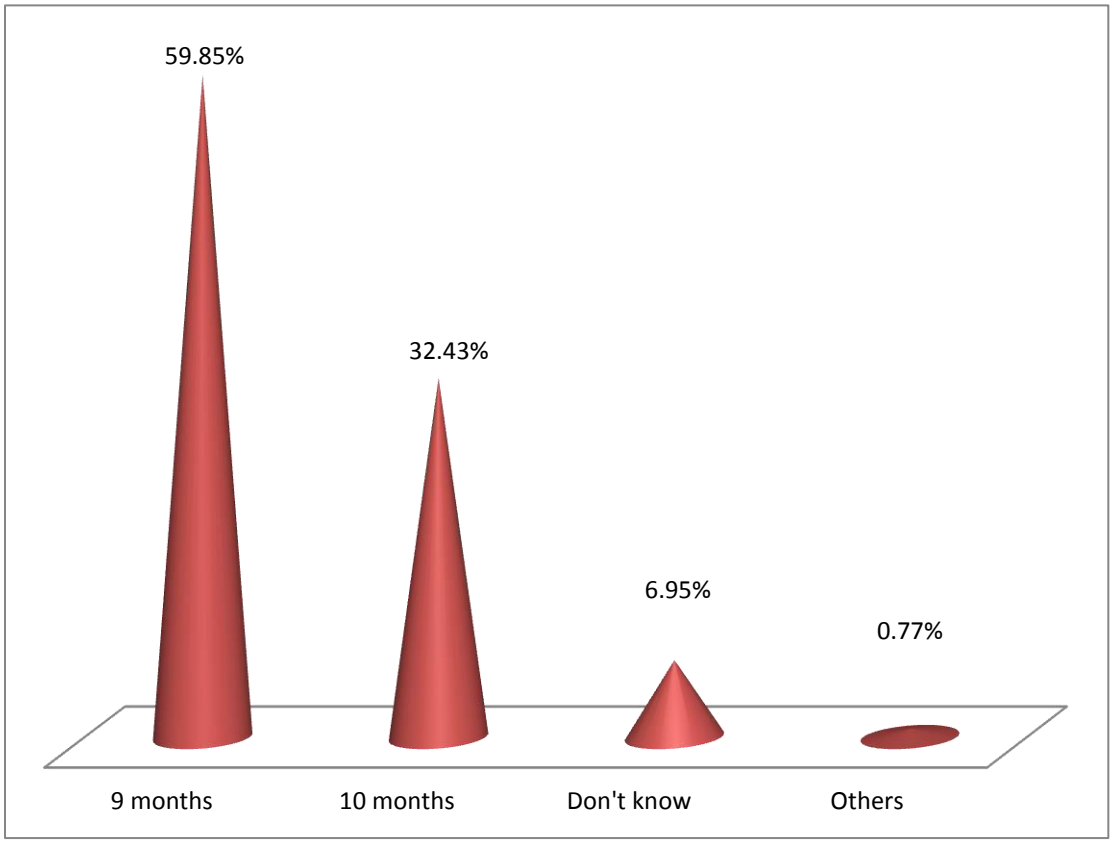

Fig 4.18: Knowledge of duration of pregnancy

While asking this question 59.85% people said that normal duration of pregnancy is 9 months and a very few 0.77% had no idea about it.

4.19 Knowledge of minimum interval of pregnancy

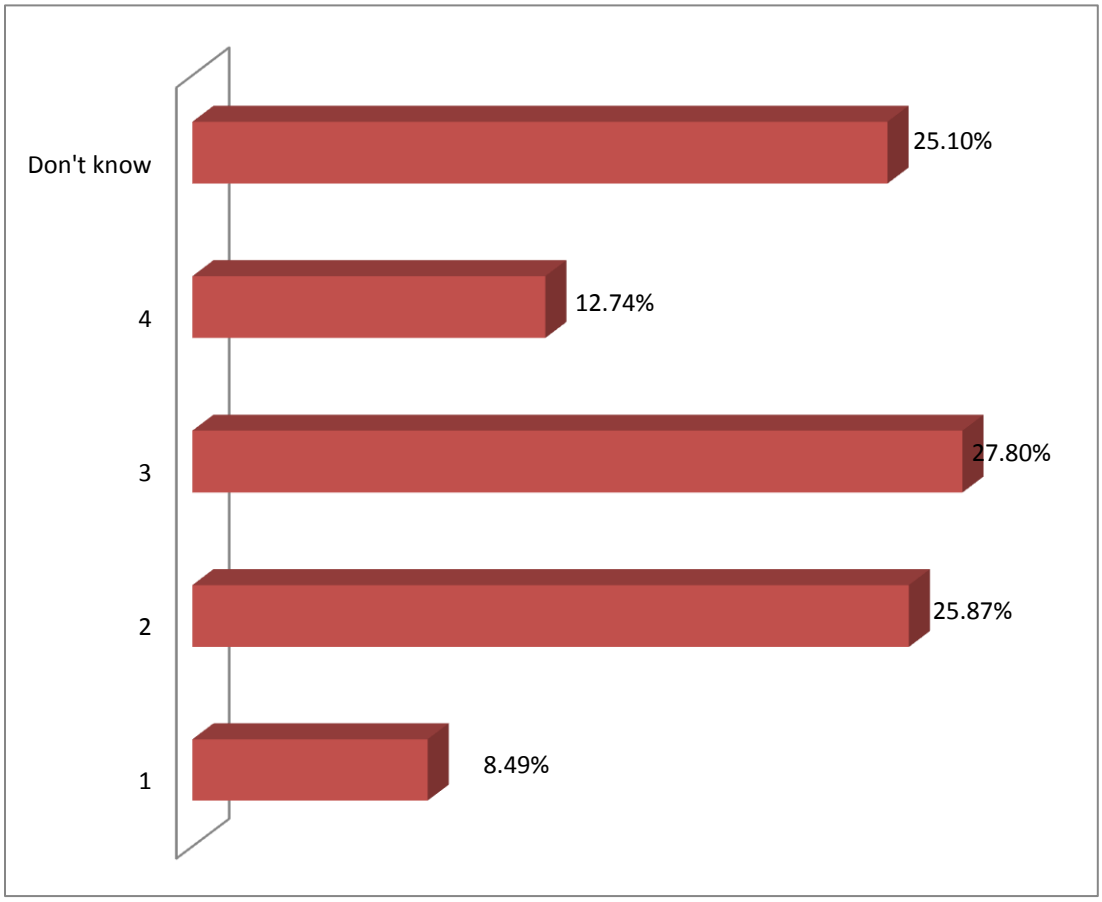

Fig 4.19: Knowledge of minimum interval of pregnancy

In the study 27.80% people said that 3 years should be the minimum interval of pregnancy whereas 25.10% didn't know about it.

4.20 Knowledge of harmfulness of inadequate gap between two children

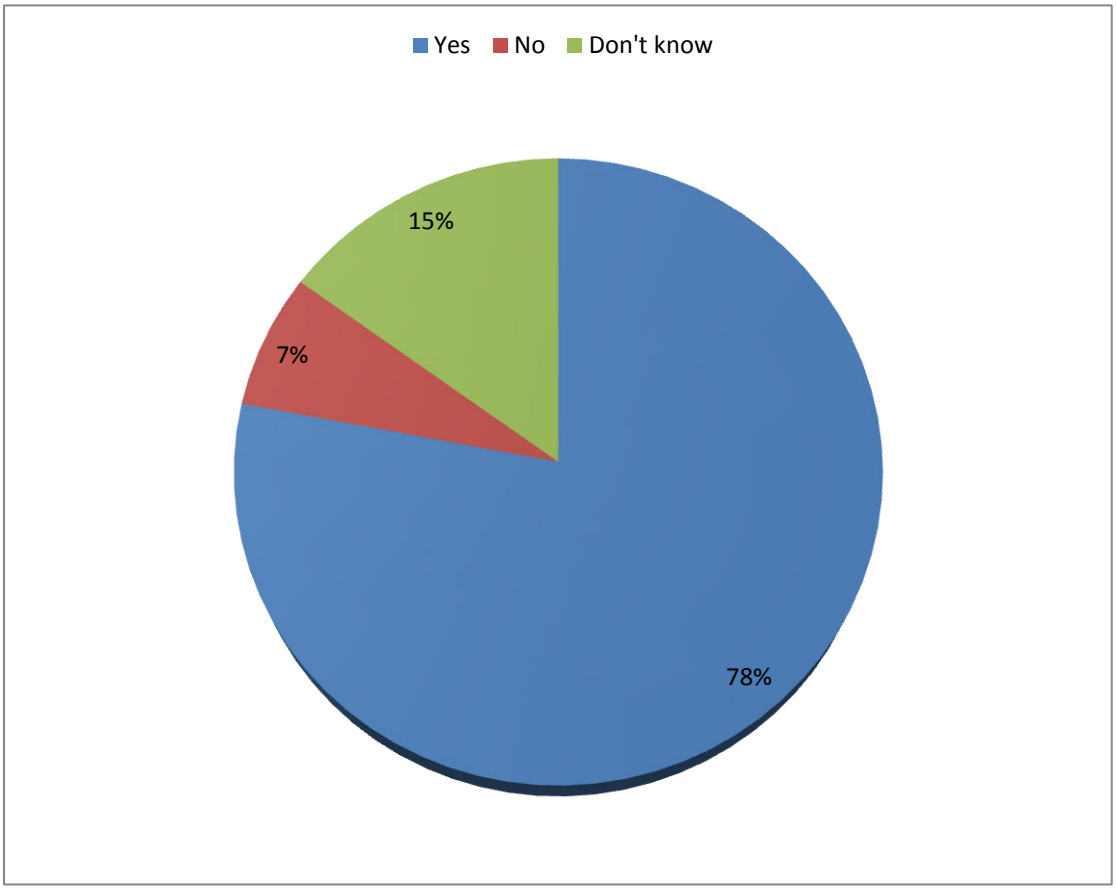

Fig 4.20: Knowledge of harmfulness of inadequate gap between two children

A huge population of about 78% had no idea about inadequate gap between two children. And only 15% knew about it.

4.21 Knowledge of minimum 3 medical checkups required during pregnancy

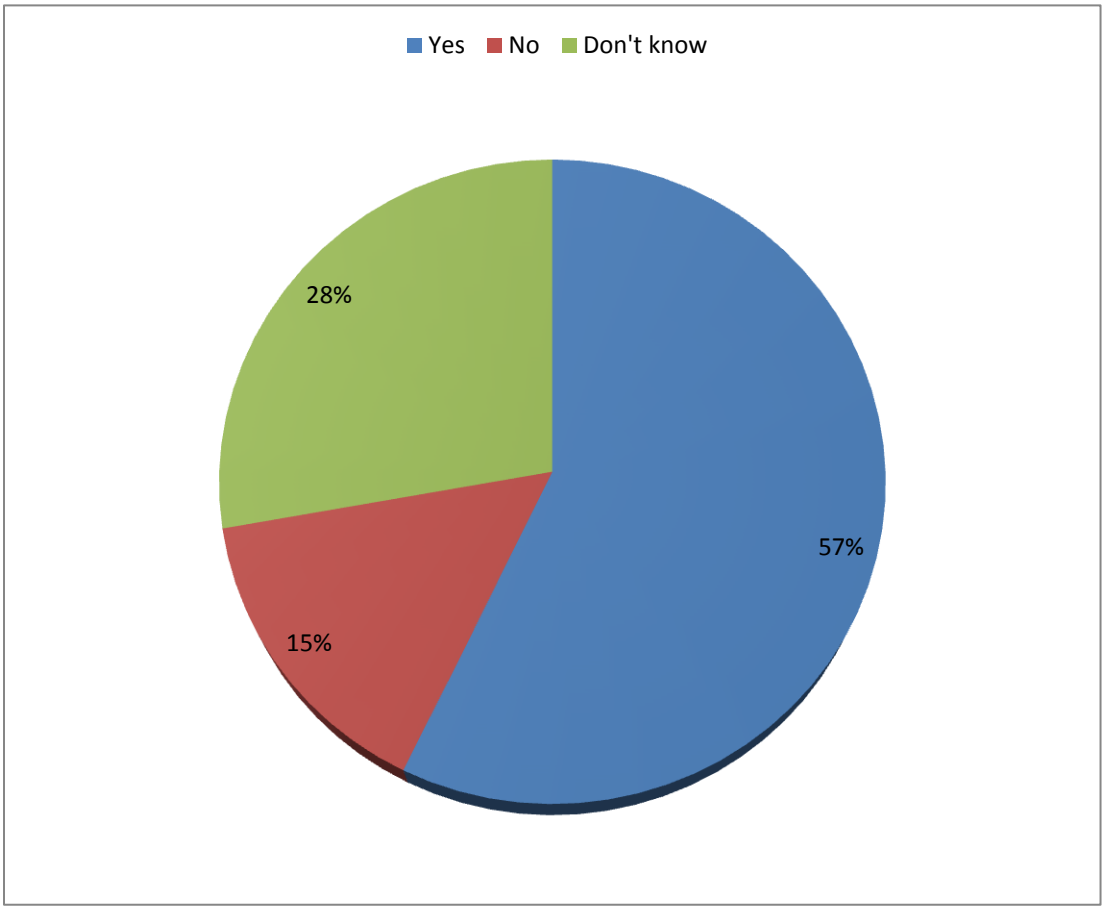

Fig 4.21: Knowledge of minimum 3 medical checkups required during pregnancy

About 57% people had no idea about it but 28% said that at least 3 medical checkups are required during pregnancy.

4.22 Knowledge of desired number of children in a family

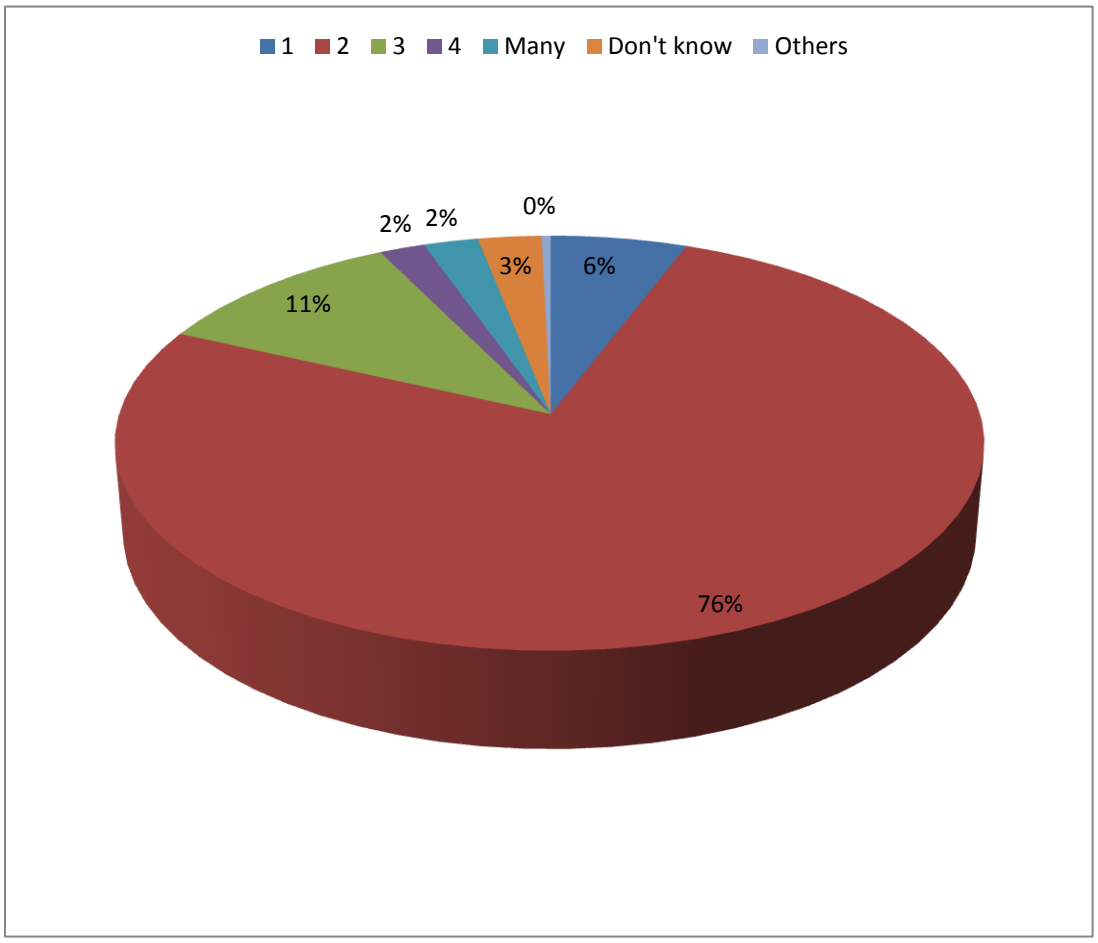

Fig 4.22: Knowledge of desired number of children in a family

About 76% people said that average number of children in a family should be 2 and only 3% said they didn't know about it.

4.23 Preference of male over female

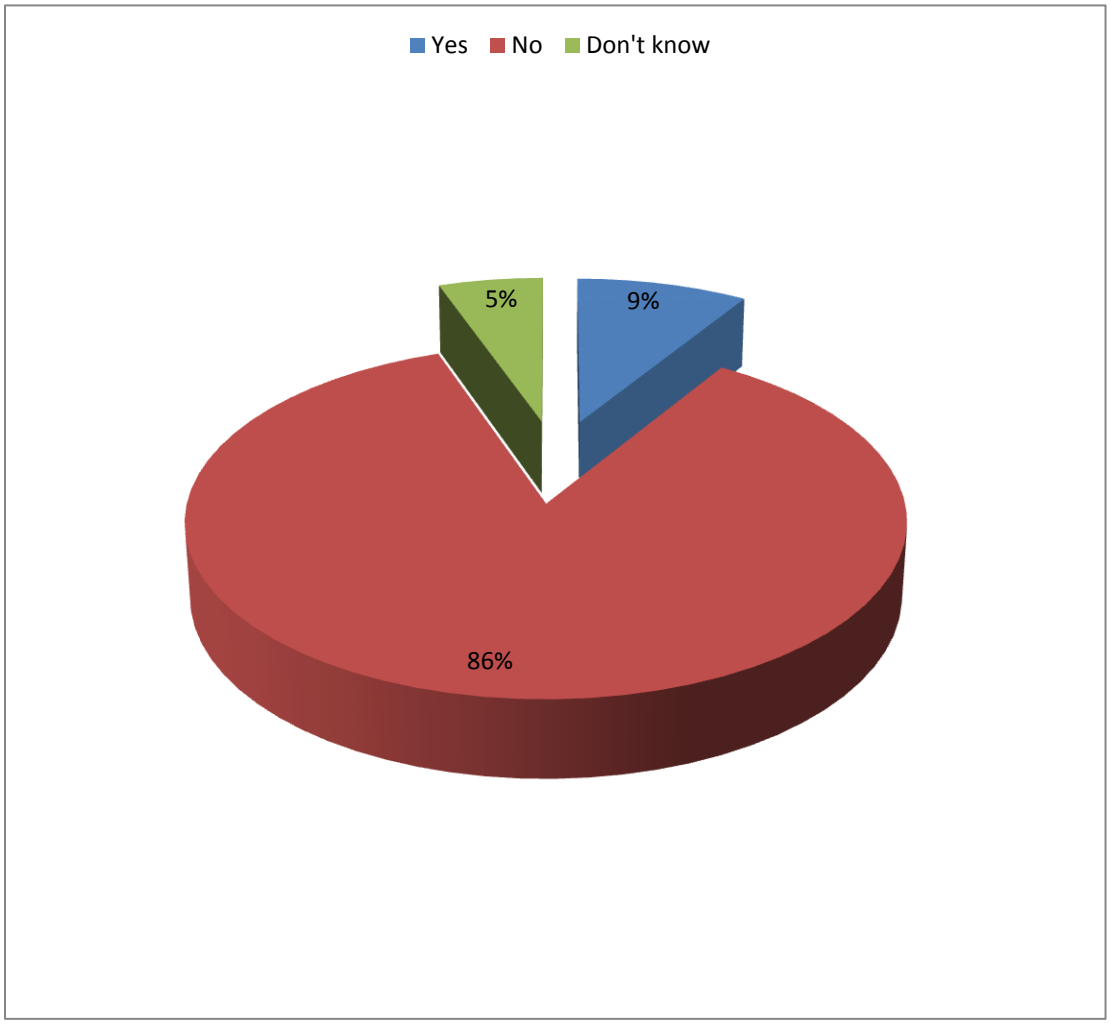

Fig 4.23: Preference of male over female

Almost 86% people said that preference of male over female should not be given as male and female are equal.

4.24 Knowledge of method of contraception

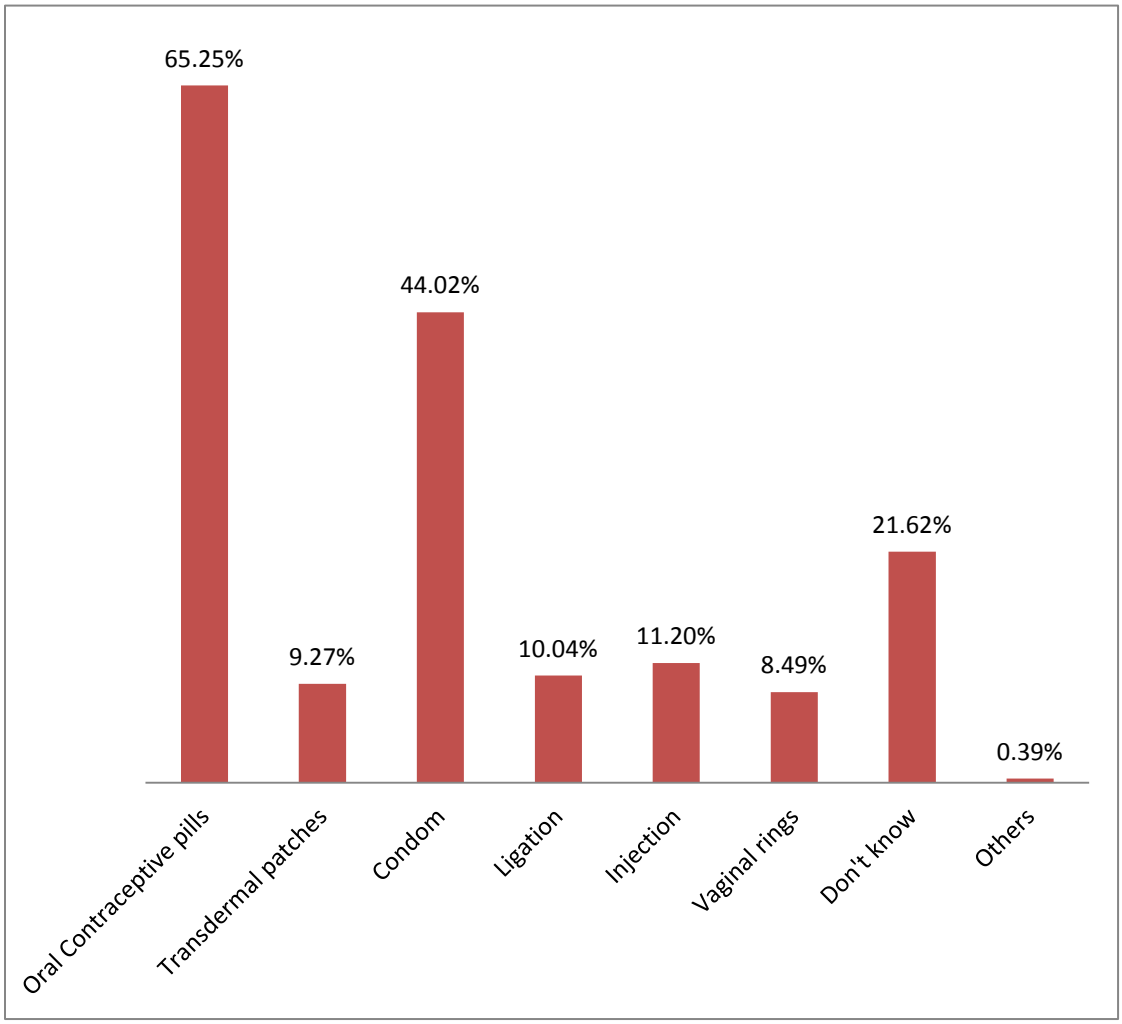

Fig 4.24: Knowledge of method of contraception

About 65.25% people are aware of oral contraceptive pills as a method of contraception. More or less people are aware of different method of contraception only 0.39% had no idea which is very less in number.

4.25 Knowledge of infertility caused by contraceptive pills

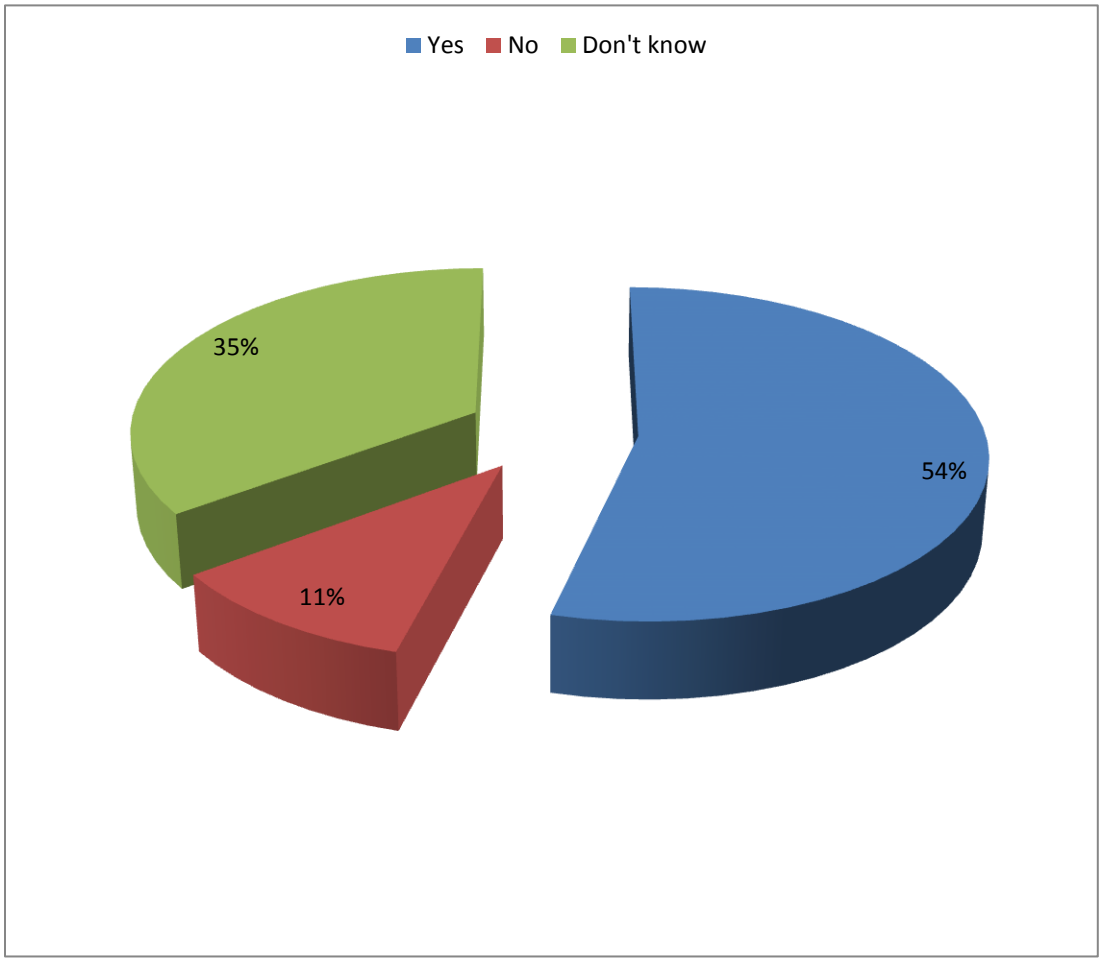

Fig 4.25: Knowledge of infertility caused by contraceptive pills

In the study 54% people said that contraceptive pills cause infertility and 35% people said they didn't know about it.

4.26 Knowledge of extra food needed for pregnant mother

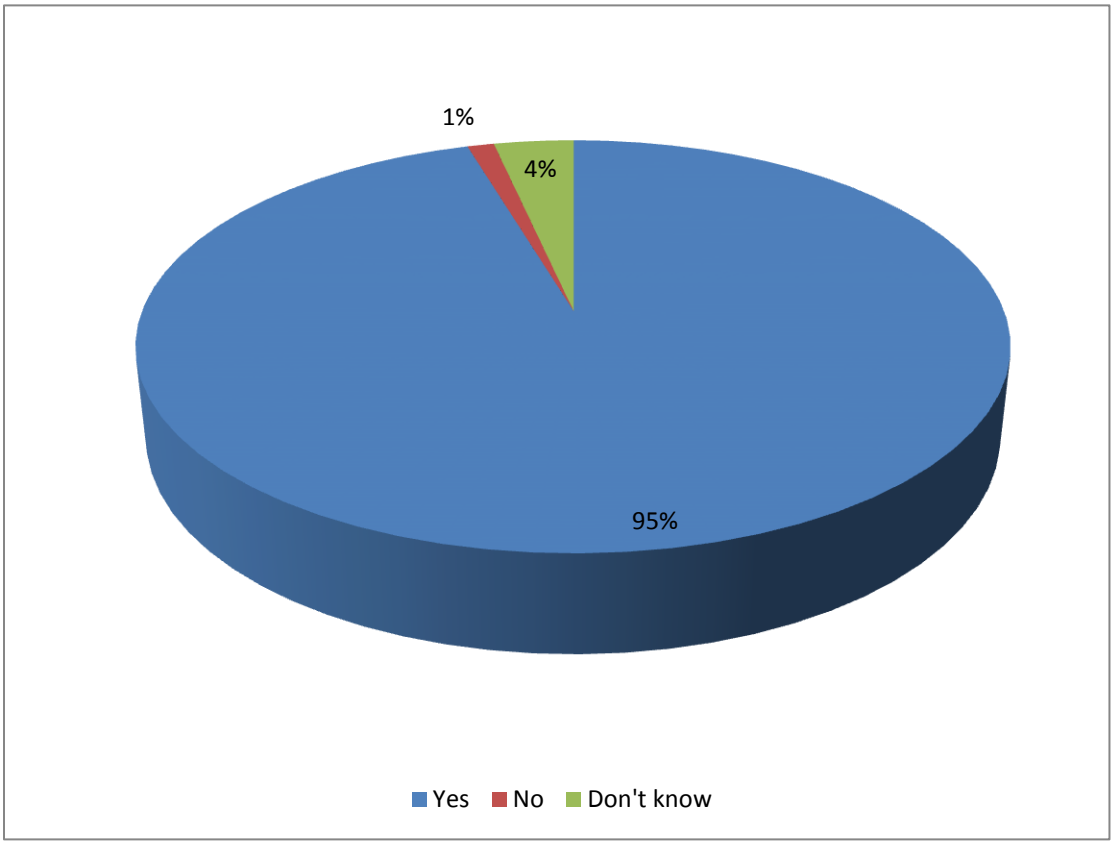

Fig 4.26: Knowledge of extra food needed for pregnant mother

About 95% people said “Yes” that pregnant women need extra food than normal requirements. Only 1% people said “No”.

Chapter V

Discussion and Conclusion

Reproductive health is not just the absence of disease or infirmity of the reproductive system or of its processes. It is usually used to describe a spectrum of conditions, events and processes throughout life, ranging from healthy sexual development, comfort and closeness, and the joys of childbearing, to abuse, disease and death. Perhaps more than with any other health condition, the social, psychological and physiological factors are interrelated in reproductive health (M. Tavakol *et al.* 2010).

Reproductive health of female is crucial for the continuation of generation. And this is in hazardous condition in may under developed and developing countries. There are many precautions and awareness which are essential to know to protect ones reproductive health. Lack of minimum knowledge and information may lead to serious fatal Sexually transmitted disease or infection as well as sever problem in pregnancy. So the main objective of this study is to identify the present condition of knowledge and awareness regarding female reproductive health.

The study was conducted over a total population of 259 from non slum (university and college going female students) and slum area. Non slum were from different discipline of subjects, the majority was form department of pharmacy 52.90% and from science group for college level 20.08%.

The sample was aged between 16 to 23 years and most of them (79.92%) belonged to higher middle class family and 20.08% were from slum.

Having heard of reproductive health issues in question were defined as ‘awareness’ and having understanding of the female reproductive health was defined as ‘knowledge’.

During the study it was observed that 71.43% female respondents said that legal age of marriage for female should be 18. The study of other researchers Tavakol *et al.* (2003), Ajayi *et al.* (2015), Egmond *et al.* (2004) found the same result. Majority of their study told that 18-23 was the age of marriage for girls.

Majority of the respondents said that sexual relationship, pregnancy and family planning should be discussed in reproductive health topic. And in different studies of Tavakol *et al.* (2003), Ajayi *et al.* (2015), Egmond *et al.* (2004) it was found that they also discussed about all these topics.

Majority 35.52% said that reproductive health topic should be discussed at age <14. But the study of Tavakol *et al.* (2003) found that the age should be >19 that is indicating the University student.

A good many number of people (62.16%) heard about Sexually transmitted disease and among many disease they are much familiar to HIV. In the study of Egmond *et al.* (2004) it was observed that 72% knew about HIV. 57% girls had knowledge about sexually transmitted disease.

There are many ways to prevent sexually transmitted diseases. But in this study 57.92% said about condom, 43.24% said avoiding casual sex, 34.36% said testing blood before transfusion. In the study of Lassi *et al.* (2014) also mentioned that avoiding sexual intercourse, needle sharing blood transfusion could prevent sexually transmitted disease.

Only 39% female knew about the exact fertile period but 55% did not know about it. In the study of Korra and Haile (1997) it was found that 58% of females had stated that the exact fertile period of a woman is during ovulation. About 15% of females said the fertile period is right after her menses. About 15.4% of females did not know the exact fertile period of a woman.

Inter pregnancy interval is an important concern for having a healthy reproductive health. In this study 27.80% respondents said minimum interval should be 3 years. In the study of Lassi *et al.* (2014) it was observed that interval of 6 month was very dangerous whereas 18-23 month was appropriate.

In this study the mean number of children in a family was 2 but in the study of Ajayi *et al.* (2015) it was found that mean number of children must be 4.

In this study the most familiar method of contraception that female aware of was oral contraceptive pills (62.25%) and condom (44.02%). On the other hand the study of Tavakol *et al.* (2003) found that only 22% were aware of contraceptive method. And in the study of Egmond *et al.* (2004) it was found that 21% were aware of contraceptive pills and 54% of condom.

Conclusion

Based on all the facts, it can be concluded that knowledge and awareness about Reproductive Health are not at good at all. Both in slum and non slum area the knowledge level is not satisfactory though the practices differ in both the areas. However due to lack of source of information and education, they don't get as much knowledge as they were supposed to be. Consequently they will suffer from different complications. At this point, the only way to remedy is to promote health awareness programs and much other awareness related things. It is however need to mention that this research was conducted on randomly chosen female respondents from both slum and non slum area and in a very small scale so it doesn't reflect the whole idea. Therefore it is suggested that if a conclusive result about the awareness of Reproductive Health is desired, further large scale researches should be conducted.

Chapter VI

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