

## INTRODUCTION

Thousands of women could be saved each year if they have access to skilled-care during pregnancy and childbirth, and access to emergency obstetric care. Most of the interventions need simple, affordable and highly effective measures (*Thomas, 2010*).

Pregnancy is a normal life event that involves many physiological changes that take place in all the pregnant women's body systems (endocrine, reproductive, gastrointestinal, respiratory, cardiovascular, urinary and musculoskeletal system) and the skin due to the effect of hormones and the growth of the fetus (*Ricci, 2013*).

Those hormonal changes lead to minor discomforts in all the women's body systems like nausea, vomiting, constipation, excessive urination and fatigue. These minor discomforts are the signs that the body is naturally preparing itself for new life (*Thomas, 2010*).

Most of these discomforts don't require medical therapy. However, they are requiring explanation and reassurance because most women can't assess the seriousness of a particular system. They can be avoided by preventive measures or healthful practices once they occur. There are many traditional practices to relieve the minor discomforts (*Hayam, 2006*).

Traditional medicine practices are the sum total of the knowledge, skills, and practices based on the theories,

beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health. The terms "complementary medicine" or "alternative medicine" are used inter-changeably with traditional medicine in some countries. They are referred to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system (*WHO, 2013*).

Traditional medicine practices cover a wide variety of therapies and practices which vary from region to region. There are many different traditional practices such as the use of (herbal medicine, acupressure, yoga, acupuncture, aromatherapy, chiropractic medicine, homeopathic medicine, massage, hydrotherapy, nutritional therapy and osteopathy) (*NCCAM, 2009*).

Many people believe that because medicines are herbal (natural) or traditional they are safe (or carry no risk for harm); however, traditional medicines and practices can cause harmful, adverse reactions if the product or therapy is of poor quality, or it is taken inappropriately or in conjunction with other medicines. Increased pregnant mothers' awareness about safe usage is important, as well as more training, collaboration and communication among providers of traditional and other medicines (*WHO, 2013*).

The ultimate goal of any pregnancy is the birth of a healthy newborn. Many pregnant women rely on nurses to

provide accurate information and compassionate guidance throughout their pregnancy. To respond effectively; nurses must understand not only the minor discomforts but also the traditional practices to relieve them (*Murray, McKinney, 2010*).

Nurses can play a major role in providing anticipatory guidance and teaching to foster the woman's responsibility for traditional practices, helping to clarify misconceptions and correct any misinformation. Educating the pregnant mother to identify threats to safety posed by her lifestyle or environment and proposing ways to modify them to avoid a negative outcome are important (*Ricci, 2009*).

Nurses must be aware of the types of health related activities in which their pregnant mothers may be engaged. This awareness is important for the assessment of safety and the interaction of these activities with biomedical care. If the nurse is knowledgeable about traditional practices, appropriate referrals may be made that can help pregnant mothers augment their treatments, cope with symptoms and unpleased side effects from treatments, maintain and promote their health (*Dochterman & Bulechek, 2006*).

### **Justification of the study:**

An investigating of traditional practices among mothers regarding pregnancy is important in ensuring the quality of care and positive health outcomes for both the

pregnant mothers and the service provider (*Ngomane & Mulaudzi, 2010*).

Nurses must always keep in mind that adherence to any of the highlighted traditions is not constant throughout a culture. Nurses need to question each patient carefully, but indirectly, about her personal beliefs and practices before offering education or advice (*American college of obstetricians and gynecologists, 2006*).

In Ain Shams Faculty of Nursing Maternal & Neonatal department, no previous study was investigating the effect of traditional practices by mothers to relieve minor discomforts during the first trimester of pregnancy. So this study was conducted to evaluate the effect of traditional practices by mothers on relieving first trimester minor discomforts.

## **AIM OF THE WORK**

To evaluate the effect of traditional practices by mothers on relieving first trimester minor discomforts through:

- Assessing mothers' knowledge about traditional practices by mothers on relieving first trimester minor discomforts.
- Assessing mothers' attitude towards traditional practices by mothers on relieving first trimester minor discomforts.

### **Research Question:**

What is the effect of traditional practices by mothers on relieving minor discomforts during the first trimester of pregnancy?

**Review of Literature included three chapters as follow:**

**Chapter one: Minor Discomforts During the First Trimester of Pregnancy.**

- 1-Definition of pregnancy.**
- 2-Physiological changes during pregnancy.**
- 3-Minor Discomforts During The First Trimester of Pregnancy.**

**Chapter two: Traditional Practices to relieve Minor Discomforts during the First Trimester of Pregnancy.**

- 1- Definition of traditional practices.**
- 2- Traditional practices to relieve minor discomforts during the first trimester of pregnancy.**

**Chapter three: Nursing Role to relieve minor discomforts During the First Trimester of Pregnancy.**

- 1-Nursing role in Traditional practices as:**
  - Direct care giver.**
  - Educator and counseller.**
  - Administrator.**
  - Researcher.**

## **Chapter (1)**

# **Minor Discomforts during the First Trimester of Pregnancy**

Pregnancy is both an exciting and anxiety-provoking experience for a couple. Once pregnancy occurred, a woman goes through dramatic physical and emotional changes. By understanding and preparing her body for the changes and acquiring the know-how in maximizing her own health and that of the fetus, a woman can experience her pregnancy in a meaningful and enjoyable way (*Evans, Aronson, 2005*).

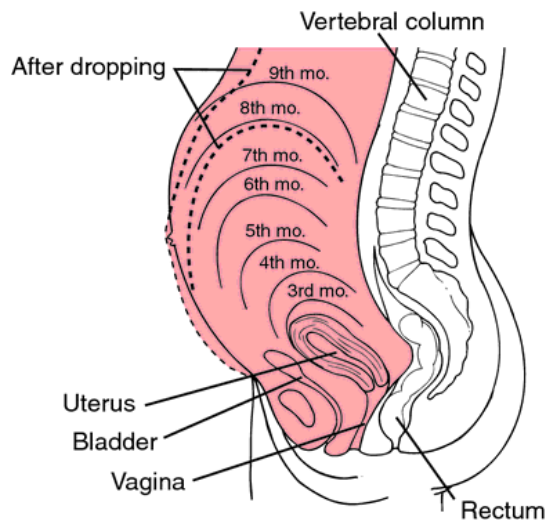
Pregnancy brings with it a menu of discomforts that can come and go throughout the nine months. Hormonal changes and pressure from the expanding uterus can have many effects on a woman's body. Some of the most common discomforts are morning sickness, urinary frequency, headache, back pain, fatigue, digestive problems, and mood swings (*Hughes, 2011*).

In fact, some women have a relatively smooth pregnancy with minimal symptoms and discomfort, but then, there are some who cannot wait to get the pregnancy over. There are various reasons that determine whether or one is going to have an easy or difficult pregnancy. It begins with genetics. By looking back at one's mother's pregnancy experience and history, we can get some ideas of how it will

be for the mother-to-be. Life-style and diet factors can also play a role. Stressful and unhealthy living habits such as abuse of alcohol, smoking, caffeine and sugar may also affect the pregnancy experience. A difficult first pregnancy, especially with nausea and vomiting, will most likely result in a difficult subsequent pregnancy (*Hughes, 2011*).

### 1-1 Definition of Pregnancy

Pregnancy is a gestational process comprising the growth and development within a women uterus of a new individual from conception through the embryonic and fetal period to birth. Pregnancy lasts approximately for 38 weeks from the day of fertilization. But it is clinically considered to last for 40 weeks from the first day of the last menstrual period (*Anderson Elliot, 2006*).



**Figure (1):** Uterine levels in pregnancy (*October 2013*). [http:// en.wikipedia.org/wiki/Pregnancy](http://en.wikipedia.org/wiki/Pregnancy).[www.google.com](http://www.google.com).



Pregnancy is the period from conception to birth. After the ovum is fertilized by a sperm and then implanted in the lining of the uterus, it develops into the placenta and embryo, and later into a fetus. Pregnancy usually lasts 40 weeks, beginning from the first day of the woman's last menstrual period, and is divided into three trimesters, each lasting three months (*Orshan, 2008*).

Pregnancy is the fertilization and development of one or more offspring, known as an embryo or fetus, in a woman's uterus. A multiple pregnancy involves more than one embryo or fetus in a single pregnancy, such as with twins. Childbirth usually occurs about 38 weeks after conception; in women who have a menstrual cycle length of four weeks, this is approximately 40 weeks from the start of the last normal menstrual period (LNMP). Conception can be achieved through sexual intercourse or assisted reproductive technology (<http://en.wikipedia.org/wiki/Pregnancy>).

## **1-2 Physiological changes during pregnancy**

Every system of a women's body changes during pregnancy to accommodate the needs of the growing fetus, and these changes occur with startling rapidity. The physical changes of pregnancy can be uncomfortable, although every woman reacts uniquely (*Ricci, 2013*).

## **Reproductive system changes**

Significant changes occur throughout the women's body during pregnancy to accommodate the growing human being within her. Many have a protective role for maternal homeostasis and are essential to meet the demands of both the mother and the fetus. Many adaptations are reversible after the woman gives birth but some persist for life (*Ricci, 2013*).

### **Uterus:**

During the first few months of pregnancy, estrogen stimulates uterine growth, and the uterus undergoes a tremendous increase in size, weight length, width, depth, volume, and overall capacity throughout pregnancy. The weight of the uterus increases from 70 g to about 1,100 to 1,200 g at term: its capacity increases from 10 to 5,000 ml or more at term the uterine walls thin to 1.5 cm or less; from a solid globe, the uterus becomes a hollow vessel (*Cunningham et al., 2010*).

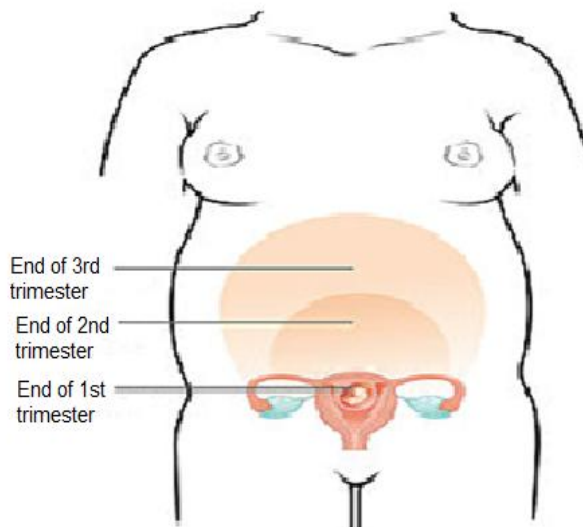
Blood vessels elongate, enlarge, and sprout new branches to support and nourish the growing muscle tissue, and the increase in uterine weight is accompanied by a large increase in uterine blood flow, which is necessary to perfuse the uterine muscle and accommodate the growing fetus. As pregnancy progresses, 80% to 90% of uterine blood flow goes to the placenta, with the remainder distributed between the endometrium and myometrium. During pregnancy, the

diameter of the main uterine artery approximately doubles in size to accommodate the increased blood volume needed to supply the placenta (**Blackburn, 2012**).

Uterine contractility is enhanced as well. Spontaneous, irregular, and painless contractions, called **Braxton Hicks** contractions, begin during the first trimester. These contractions continue throughout pregnancy, becoming especially noticeable during the last month, when they function to thin out or efface the cervix before birth (**Ricci, 2013**).

Changes in the lower uterus occurring during the first 6 to 8 weeks of gestation produce some of the typical findings, including a positive *Hegar's* sign. This softening and compressibility of the lower uterine segment results in exaggerated uterine ante flexion during the early months of pregnancy, which adds to urinary frequency (**Brosens et al., 2010**).

The uterus remains in the pelvic cavity for the first 3 months of pregnancy, after which it progressively ascends into the abdomen. As the uterus grows, it presses on the urinary bladder and causes the increased frequency of urination experienced during early pregnancy (**Ricci, 2013**).



**Figure (2):** The uterus as it changes in size over the duration of the trimester. <http://en.wikipedia.org/wiki/> [www.google.com](http://www.google.com). (Maternal physiological changes in pregnancy picture 2013)

### **Cervix:**

Between weeks 6 and 8 of pregnancy, the cervix begins to soften (Goodell's sign) due to vasocongestion. Along with the softening, the endocervical glands increase in size and number and produce more cervical mucus. Under the influence of progesterone, a thick mucus plug is formed that blocks the cervical os and protects the opening from bacterial

invasion. At about the same time, increased vascularization of the cervix causes Chadwick's sign (*Dubicke et al., 2010*).

### **Vagina:**

During pregnancy, vascularity increases because of the increase of estrogen, resulting in pelvic congestion and hypertrophy of the vagina in preparation for the distention needed for birth. The vaginal mucosa thickens, the connective tissue begins to loosen, the smooth muscle begins to hypertrophy, and the vaginal vault begins to lengthen (*Bope & Kellerman, 2012*).

Vaginal secretions become more acidic, white, and most women experience an increase in a whitish vaginal discharge, called leukorrhea, during pregnancy. This is normal except when it is accompanied by itching and irritation, possibly suggesting *Candida albicans*, a monilial vaginitis, which is a very common occurrence in this glycogen-rich environment (*Gor, 2011*). Symptomatic vulvo-vaginal candidiasis affects 15% of pregnant women. It is a benign fungal condition that is uncomfortable for the women and can be transmitted from an infected mother to her newborn at birth (*Babic & Hukic, 2010*).

### **Ovaries:**

The increased blood supply to the ovaries causes them to enlarge until approximately the 12<sup>th</sup> to 14<sup>th</sup> week of gestation.

The ovaries are not palpable after that time because the uterus fills the pelvic cavity. Ovulation ceases during pregnancy because of the elevated levels of estrogen and progesterone, which block secretion of follicle-stimulating hormone (FSH) and luteinizing hormone (LH) from the anterior pituitary. The ovaries are very active in hormone production to support the pregnancy until about weeks 6 to 7, when the corpus luteum regresses and the placenta takes over the major production of progesterone (*Ricci, 2013*).

### **Breasts:**

The breasts increase in fullness, become tender, and grow larger throughout pregnancy under the influence of estrogen and progesterone.

The breasts become highly vascular, and veins become visible under the skin. The nipples become larger and more erect. Both the nipples and the areola become deeply pigmented, and tubercles of Montgomery (sebaceous glands) become prominent. These sebaceous glands keep the nipples lubricated for breast-feeding (*Ricci, 2013*).

Changes that occur in the connective tissue of the breasts, along with the tremendous growth lead to striae (stretch marks) in approximately half of all pregnant women. Initially they appear as pink to purple lines on the skin, but they eventually fade to a silver color. Although they become less conspicuous in time, they never completely disappear (*Tharpe et al., 2013*).

## **General Body System Adaptations:**

In addition to the changes in the reproductive system, the pregnant women also experiences changes in virtually every other body system in response to the growing fetus (**Ricci, 2013**).

## **Gastrointestinal system:**

The gastrointestinal (GI) system begins in the oral cavity and ends at the rectum. During pregnancy, the gums become hyperemic, swollen, and friable and tend to bleed easily. This change is influenced by estrogen and increased proliferation of blood vessels and circulation to the mouth. In addition, the saliva produced in the mouth becomes more acidic. Some women complain about excessive salivation, termed Ptyalism, which may be caused by the decrease in unconscious swallowing by the women when nauseated (*Cunningham et al., 2012*).

Dental plaque, calculus and debris deposits increase during pregnancy and are all associated with gingivitis. An increased production of female hormones during pregnancy contributes to the development of gingivitis and periodontitis because vascular permeability and possible tissue edema are both increased. It is reported that as many as 50% to 70% of pregnant women will have some level of gingivitis during pregnancy as a result of hormonal changes that promote inflammation (*Straka, 2011*).