***Introduction***

Pregnancy and childbirth are basic life events vital to the maintenance of mankind and thus are considered physiological processes (***Balikova, &Buzgova, 2014).*** Pregnancy, however, represents a burden on the female organism, resulting from the need to provide nourishment to the rapidly developing foetus. During pregnancy, numerous changes in physiological functions occur, triggered by both hormonal stimuli from the hypothalamus and stimuli from the fetoplacental unit. If these changes are qualitatively or quantitatively escalated, they may result in a pathology in the maternal organism ***(Chan, Sahota, Leug, et al., 2010).***

Nausea and vomiting of pregnancy (NVP) is the most common complication of pregnancy which occurs up to 85% of mothers (***Madjunkova, Maltepe, &Koren, 2013)***. This problem starts about the 4th week of pregnancy, and usually continues to the 16th week in a few mothers (***Rad, Lamyian, Heshmat, et al., 2013)***. The etiology of NVP is unknown. It oc­curs due to hormonal, immunological, and anatomical changes. ***(Ebrahimi, Maltepe, &Einarson, 2010)***.

The extreme form of NVP, hyperemesis gravidarum, occurs in 0.5–3% of pregnancies leading to dehydration, electrolyte imbalance, and hospitalization. HG tend to recur in up to 80% in the same women, leading to anxiety about starting another pregnancy. Severe NVP has been associated with women’s request to terminate otherwise—wanted pregnancies due to symptom severity. ***(Clark, Costantine, & Hankins, 2012).***

Of the various techniques available for the prophylaxis and treatment of nausea and vomiting, those involving non-pharmacological methods have been increasing in popularity due to their low cost, simplicity, lack of side effects, confirmed efficacy and furthermore, they involve a characteristic that is extremely important in obstetrics: they are not transferred through the placenta and are not secreted in breast milk . (***Allen, &Habib, 2008)***. Despite the proven benefits of pharmacological treatment of NVP, many women seek out information on alternative therapy because of the fear of teratogenicity associated with pharmacological treatment. ***(Amalia, Jamie, Catherine, et al ., 2013)***

Treatment of gestational nausea and vomiting is rarely so successful that the pregnant women could reach to a full recovery. The problem is somehow alleviated by measures such as trying to eat less in more servings, stop eating before satiety, and Nonetheless, vomiting is sometimes so severe that does not respond to treatments; in these cases, drugs such as vitamin B6 and promethazine are used. (***Cunningham, Leveno, Bloom, et al., 2010)***. The goal of treating NVP is to prevent the progression to severe cases. The management of NVP depends on severity of symptoms, impact of symptoms on a woman’s quality of life, and safety of the fetus.***(Maltepe, & Koren, 2013).***

Complementary and alternative medicine ( CAM ) are gaining popularity and finding a more substantial place in health care. Increasing interest amongst the public and health care professionals seems to have created an assumption that complementary therapies are widely integrated into nursing and midwifery. The most important reason , which disturbs and agitates the mind of the people in general and patients in particular , causing interest in alternative therapy , has been the increased side effects of traditional medicine and moreover people are getting afraid of such other effects . (***Sacks, Haim, &Abenhaim, 2013)***

Out of CAM, acupressure is a kind of stimulation to the acupuncture points with finger pressure or use hand. This pressure cause different effects according to different parts stimulation (***Ezzo, Streitberger, &Schneider, 2006)*** .According to possible mechanism theory, acupressure by creating pressure on specific points are activated the small myelin nerves in the muscles and pass stimulations to the higher nerve centers, including spinal cord, midbrain, hypothalamus and pituitary axis. Thus, different effects are demonstrated depending on the location of stimulation (***Branco, Lima, Costa, et al., 2013)***.

Acupressure works on the precardi­um 6 (P6 or Neiguan) as acupressure point on the wrist. This point is found by measuring, with the mother´s own fingers, three fingers width up from the inner wrist crease where the hand joins the arm, approximately where the buckle of watchstrap might rest. ***(Saberi, Sadat , Abedzadeh, et al., 2013)***

A large number of antiemetics have been proven effective for the treatment of nausea and vomiting associated with conditions such as nausea and vomiting during pregnancy, motion sickness, GI conditions or cyclic vomiting. ***(Madjunkov, Maltep., &Koren, 2014).*** However, their use in pregnancy is marred by lack of sufficient data on effectiveness and fetal safety (***Gill, &Einarson, 2007)***. The only drug approved and indicated for the treatment of NVP is the delayed-release formulation of 10 mg doxylamine succinate and 10 mg pyridoxine hydrochloride (HCl), as it has been shown to be both effective and safe (***Koren, Clark, Hankins, et al., 2010)***

Caregivers should recognize and validate the need for pregnant women to make their lifestyle changes that will enable them to achieve comfort. Dietary and lifestyle changes should be discussed, and women counseled to eat whatever appeals to them. Alternative therapies, such as mint or chamomile tea, ginger supplementation, acupuncture and acupressure, may be beneficial. Prescribed medication supported by evidence of efficacy and safety should be the standard of care ***(Reham, 2009)***

Nurses are in a unique position to bridge the gap between conventional biomedical therapies and complementary therapies. The principle goals of prenatal care are to monitor both the pregnant woman and the fetus through out pregnancy, and to identify any factors that could change the outlook for pregnancy from normal to risky. ***(McParlin, Graham, &Robson, 2008).*** Prenatal care also focuses on providing accurate information regarding nutritional requirements throughout pregnancy, activity recommendation or restrictions; common complaints that may arise during pregnancy, and hope to mange them, preferably without medications. (***Pasha, Behmanesh, &Mohsenzadeh, et al., 2012).***

***Materials and Methods***

This study aimed at evaluating the effect of using acupressure versus vitamin B6 in alleviating morning sickness during first trimester of pregnant women.

***Materials***

**Research design:**

Quasi experimental,Interventional, Case-control, Non randomized design was utilized to fulfill the aim of this study.

**Setting:**

The study was conducted at antenatal out patient clinic at Benha university hospitals. This clinic is located at the ground floor of the out patient building which include only one room women attend for ante-natal care and follow up, family planning counseling or for any out patient procedures. It starts from 9Am to 12Pm.

**Sample:**

A Purposive sample including 300 pregnant women suffering from nausea and vomiting were chosen among those attending the ante-natal care clinic. The sample was divided into three groups:

* First group (acupressure group) comprising 100 pregnant women who used a manual technique of acupressure twice daily for one week, each time lasting for 15-30 minutes.
* Second group (Vitamin B6 group) comprising 100 pregnant women who used vitamin B6 capsule three times daily before meals for one week.
* Third group (control group) comprising 100 pregnant women who received no treatment.

The studied sample was selected according to the **inclusion Criteria:**

1. Pregnant women at first trimester with single fetus.
2. Suffer from morning sickness.
3. Gravidity: from primigravida to 3 gravida
4. Free from medical, psychological and obstetrical problems. .
5. Not receiving any drugs.
6. Age from ( 20 – 35 years ).
7. Can read and write.
8. Accepted to participate in the study.

***Tools of data collection:***

1. **A structured interviewing questionnaire sheet:(appendix I)**

It was designed by the researcher after reviewing related literature ***(Chou et al., 2005; Lacasse and Berared, 2008)*** and under guidance of the supervisors. It is written in simple Arabic language in the form of close and open ended questions. It consisted of four parts:

**Part (1):** This part is concerned withpersonal characteristics of pregnant woman e.g. : age, level of education, occupation, residence, income, weight, height, body mass index, duration of marriage and age at marriage ).Questions from (1-10).

**Part (2):** This part is concerned with past and current obstetrics history e.g.: gestational age, gravidity, parity, previous abortion, first day of last menstrual period, expected delivery date and usage of contraceptive methods.Questions from ( 11-17).

**Part (3):** This part is concerned with nutritional habits including number of meals per day, preferred type of foods, type of foods that were avoided during pregnancy and the necessity of taking certain types and amount of foods during pregnancy. Questions from (18-21).

**Part (4):** This part is concerned with occurrence of nausea and vomiting in past pregnancies, practices done to overcome this problem. Questions from (22-23).

**2. A visual analogue scale (VAS): (appendix II)**

It was adopted from **Salem, (2009)** and conducted to assess morning sickness pattern described in terms of time and symptomatology of nausea and vomiting. Questions (24).

|  |  |  |
| --- | --- | --- |
| **Items** | **Symptoms** | **score** |
| - No problems | Neither nausea nor vomiting | 1 |
| - Slight | Morning nausea without vomiting | 2 |
| - Moderate | Day and night nausea without vomiting | 3 |
| -Trouble some | Morning nausea with vomiting | 4 |
| -Severe | Day and night nausea with vomiting | 5 |

**3- Follow up sheet: (appendix III)**

* It was constructed for pregnant women to record symptoms according to time, nature of nausea and vomiting per day for long 7 daysusing VAS.
* At follow up visit, a five point Likert scale (much worse, worse, same, better, much better) was used to assess woman’s subjective responses to treatment. Questions (25).