

# **Nursing Intervention for Women Suffering from Common Sexually Transmitted Diseases by Applying an Epidemiological Model**

*Thesis*

**Submitted in Partial Fulfillment of  
the Requirement of the Doctorate Degree  
In  
Nursing Science  
Community Health Nursing**

*By*

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**2014**

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**بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ**

(... رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ  
الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَى وَالِدَيَّ  
وَأَنْ أَعْمَلَ صَالِحاً تَرْضَاهُ وَأَدْخِلْنِي  
بِرَحْمَتِكَ فِي عِبَادِكَ الصَّالِحِينَ )

**صدق الله العظيم**

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✍ *Mona Abo Baker Abd Ellatef*

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## **List of Abbreviations**

<b>STDs</b>	: Sexual Transmitted Diseases
<b>WHO</b>	: World Health Organization
<b>ASHA</b>	: American Social Health Association
<b>H IV</b>	: Human Immunodeficiency Virus
<b>AIDS</b>	: Acquired Immunodeficiency syndrome
<b>HSV</b>	: Herpes Simplex Virus
<b>CDC</b>	: Center for Diseases Control
<b>PID</b>	: Pelvic Inflammatory Diseases
<b>DNA</b>	: Deoxyribo Nucleic Acid
<b>HPV</b>	: Human Papilloma Virus
<b>ELISA</b>	: Enzyme-Linked Immune Adsorbent Assay
<b>NIAID</b>	: National Institute of Allergy and Infection Diseases
<b>NIH</b>	: National Institution of Health
<b>UNPF</b>	: United Nation of Population Fund
<b>ACOG</b>	: American College of Obstetricians and Gynecologists
<b>NAS</b>	: National Academy of Science

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# ABSTRACT

## Nursing Intervention for Women Suffering from Common Sexually Transmitted Diseases by Applying an Epidemiological Model

By

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Sexual transmitted diseases have a significant probability of transmission between humans by sexual behavior, which can cause serious illness or lifelong disability. **Aim of this study:** This study was aimed to evaluate the effect of nursing intervention for women suffering from common sexually transmitted diseases by an applying epidemiological model. **Design:** Quasi-experimental was applied to achieve the aim of the study. **Setting:** The study was conducted at Outpatient Maternity Clinic in Maternity Hospital Ain Shams University. **Sample:** Included 83 women were chosen randomly according to certain criteria. **Tools:** Data were collected through three tools: **First tool:** A structured interviewing questionnaire, it was developed to assess the socio-demographic characteristic of the women, their knowledge, their practices and assess the change of vaginal discharge: **Second tool:** Medical record to assess women medical and obstetric history. **Third tool:** Observational check list to assess hand washing women practice regarding hand washing. **Result:** After applying the nursing intervention program the study showed that significant improvement in women's knowledge and practice regarding of STDs. **Conclusion:** According to the finding and research hypothesis, the women's knowledge and practices improved post applying nursing intervention and there were significant correlation differences pre, post and follow-up nursing intervention program. **Recommendation:** The study recommended that increase couple and public knowledge and practice throughout mass media, pre-marital investigations and counseling to emphasis early detection and decrease dangers effect of sexual transmitted diseases.

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**Key words:** sexual transmitted diseases, Disorder, Knowledge, Practice, Epidemiological Model

# Introduction

**S**exually transmitted diseases (STDs) are infections that can be transferred from one person to another through any type of sexual contact; STDs are sometimes referred to as sexually transmitted infections since they involve the transmission of a disease-causing organism from one person to another during sexual activity (*Haney & Nygaard, 2011*).

Sexually transmitted diseases (STDs) are a public health issue according to World Health Organization (WHO) estimates, 448 million new cases of curable STDs Syphilis, Gonorrhea, Chlamydia and Trichomoniasis occur annually throughout the world in adults aged 15-49 years, in developing countries, STDs and their complications rank in the top five disease categories for which adults seek health care (*WHO, 2013*).

Worldwide more than one million people acquire a sexually transmitted infection (STDs) every day, each year, an estimated 500 million people become ill with one of four STDs Chlamydia, Gonorrhea, Syphilis and Trichomoniasis, more than 530 million people have the virus that causes Genital Herpes (HSV2), more than 290 million women have a Human Papilloma Virus (HPV) infection (*WHO, 2013*).

Worldwide untreated STDs can have critical implications for reproductive, maternal and newborn health, STDs are the main preventable cause of infertility, particularly in women,

and 10-40% of women with untreated Chlamydia infection develop symptomatic pelvic inflammatory disease, Post-infection tubal damage is responsible for 30-40% of cases of female infertility furthermore, women who have had pelvic inflammatory disease are 6 - 10 times more likely to develop an ectopic (tubal) pregnancy than those who have not, and 40 - 50% of ectopic pregnancies can be attributed to previous pelvic inflammatory disease (*Whittington et al., 2010*).

Worldwide, the disease burden of STDs in women is more than five times that of men, the presence of one or more STDs increases the risk of becoming infected with HIV by two to nine times, despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the world (*UNPF, 2013*).

Worldwide, pregnant women with untreated early syphilis, 25% of pregnancies result in stillbirth and 14% in neonatal death an overall prenatal mortality of about 40% to 35% of pregnancies among women with untreated gonococcal infection result in spontaneous abortions and premature deliveries and up to 10% in prenatal deaths (*CDC, 2011*).

Infants born to mothers with untreated Chlamydial infection will develop a serious eye infection ophthalmic neonatorum, which can lead to blindness if not treated early, worldwide, 1000 - 4000 newborn babies become blind every year because of this condition (*WHO, 2011*).

The community health nurse provides information that support educational and service support programming in the area of STDs prevention and control and application of the triangle epidemiological model to the women suffering from STDs providing understanding its nature which takes into accounts the relation between the disease agent, the host, and the environment (*Miquel, 2008*).

### **Significance of the Study:**

In Egypt, the Egyptian Ministry of Health conducted a study to evaluate selected curable STDs among various Egyptian population groups in Greater Cairo, the STDs prevalence was found to be high, prevalence of female attending family planning clinics total client number 108 was 2.8% for Gonorrhea, Chlamydia 2.8%, Trichomonas 2.8%, at least one of STDs 8.3% (*MOH, 2013*).

In Egypt, another study in June 2006 to December 2009, a total of 1,746 clients and their sexual partners visited the STDs clinic 44.9% males and 55.1% females and venereal warts was the most common presenting condition, due to the fact that they are not perceived as an STDs 76.3% of females versus 33.2% of males (*Soliman et al., 2013*).

Application of triangle epidemiological model which concerning with environment which help the agent to be infect the host can strongly interrupted the chain of sexual infection and can change of women sexual risk behavior (*Miquel, 2008*).

## **Aim of the Study**

The study aims to evaluate the effect of nursing intervention for women suffering from common sexually transmitted diseases by applying epidemiological model through:

1. Assessing health needs of women suffering from STDs according to their knowledge and practices.
2. Developing and implementing nursing intervention program according to their needs and epidemiological model.
3. Evaluating the effect of the nursing intervention program on women's knowledge and practices.

### **Research Hypothesis:**

The nursing intervention program by applying the triangle epidemiological model for women suffering from common STDs will improve their knowledge and practices toward STDS.

### **Research Questions**

1. What are the effects of applying triangle epidemiological model on women practices?
2. Are there relation between women socio demographic characteristics and their practices?
3. Are there relation between women knowledge and their practices?